2020 RESEARCH ANNUAL

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Part I –Department of Internal Medicine

- **Allergy and Immunology**
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- **Gastroenterology**
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- **Infectious Disease**
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- **General Internal Medicine**
- **Hematology/Oncology**

Allergy and Immunology

Principal Investigator: Edward Zoratti, M.D.
ICAC 3 - Inner City Asthma Consortium Infrastructure (UM1AI114271) Subcontract

The objectives of the Inner-City Asthma Consortium are to implement a long-range scientific plan to reduce asthma severity and prevent asthma among inner city children and to identify the mechanisms involved in the immunopathogenesis of asthma in these populations. The specific objectives are to: 1) conduct clinical trials to evaluate the safety and efficacy of promising immune based therapies in reducing asthma severity and preventing disease onset in minority children residing in inner cities in the United States; 2) conduct research to delineate the underlying mechanisms of such therapies as an integral part of the clinical trials undertaken by the Consortium; 3) conduct clinical studies on the immunopathogenesis of asthma onset, progression and severity; and 4) develop and validate surrogate/biomarkers to measure disease stage, progression and therapeutic effect.

Principal Investigator: Edward Zoratti, M.D.
Project 2-Maternal Factors and their Effect on a Child's Gut Microbiota and IgE Production (P01AI089473-06)

This application builds on the findings of our initial P01 designed to examine relationships between environmental factors, especially pets, the infant gut microbiota and pediatric allergic asthma. We have shown that: 1) dogs alter the microbial composition of dust in homes, 2) children born into homes with dogs have different developmental patterns of gut microbiota and of IgE, 3) a distinct pattern of gut microbial composition at 1 month of age is related to heightened risk of sensitization to multiple allergens at 2 years and of asthma at 4 years, and this pattern is influenced by numerous maternal characteristics, 4) sensitization to multiple food and inhalant allergens at 2 years is strongly related to asthma at 10 years, 5) the metabolic profiles of stools are related to later allergic sensitization 6) 12,13-DiHOME, a metabolite in stool, promotes development of Th2lymphocytes and lowers development of Treg lymphocytes in an in vitro assay, and 7) in another study, theme conial microbiota is distinct in neonates born to mothers with asthma. Our complementary mouse studies have shown that: 1) gavaging with dust from homes with dogs reduces lung inflammation from allergen sensitization and from respiratory syncytial virus (RSV) infection, 2) dog dust gavaged mice have increases *Lactobacillus johnsonii* in their ceca 3) oral administration of live *L. johnsonii* confers protection against pulmonary inflammation induced by allergen and RSV, 4) *L. johnsonii* alters the function of bone marrow derived dendritic cells, 5) mice orally supplemented with *L. johnsoni*i have altered serum metabolic profiles, and 6) mouse pups born to *L. johnsonii*-supplemented mothers are protected against allergen challenge and RSV infection. Collectively

these findings showing the influence of maternal factors provide the basis for this application's focus on the maternal gut and vaginal microbiotas during pregnancy, and how these relate to infant gut microbial development and risk of allergic asthma. Project 1 focuses on the relationship of maternal environmental and dietary factors, including maternal and infant gut microbiotas, to the child's developing a high-risk for asthma phenotype by age 2 years. Project 2 proposes a detailed examination of relationships between maternal and child microbiota, breast milk composition and IgE development amongst a cohort of pregnancies in which the mother has current allergic asthma. Project 3 synergistically interacts with Projects 1 & 2 and also uses specimens from 10-year-old allergic asthma cases and controls in the initial P01 birth cohort to examine gut microbes producing metabolites associated with a lowered risk of allergic inflammation and how they are transferred from mother and established in offspring. Project 4 will use mouse models to examine the relationships between manipulation of maternal microbiota and immune development in offspring. We anticipate that together these studies will show that interventions directed at the gut microbiota of mothers during pregnancy and of high-risk neonates after birth could reduce the risk of allergic asthma in childhood. Such findings would provide the foundations of a rational strategy to prevent allergic asthma.

Cardiology/Cardiovascular Research

Principal Investigator: Dennis Kerrigan, Ph.D.
The Effect of High Intensity Interval Training and Surgical Weight Loss on Distal Symmetric Polyneuropathy Outcomes (R01DK115687-02) Subcontract

Subrecipient will collaborate with the PTE to recruit and train subjects for a bariatric surgery high intensity interval training (HIIT) study. As the Sub recipient PI, Dr. Kerrigan has experience in HIIT studies for both patients with cardiovascular disease and cancer. Additionally, he oversees a weekly exercise class of 10-15 new patients prior to bariatric surgery who could be eligible for study. Dr. Kerrigan would oversee day-to-day operations of the project, be responsible for the protocol adherence, and supervise the research exercise physiologist. The research exercise physiologist would recruit potential subjects, communicate with the PTE project manager, and perform exercise training to those randomized into the HIIT group. Training will be conducted at one of Henry Ford Health System exercise facilities located in Detroit, West Bloomfield and Livonia.

Aims Include:

1. Identify and recruit subjects who will undergo bariatric surgery.
2. Identify and recruit subjects who are candidates for bariatric surgery but do not undergo surgery.
3. Perform the supervised HIIT training protocol.

Principal Investigator: Steven Keteyian, Ph.D.
The Improving ATTENDance to Cardiac Rehabilitation (iATTEND) Trial (R33HL143099)

The numbers of U.S. adults with either diabetes or pre-diabetes is staggering with nearly 40% of the population affected. In U.S. minority populations, such as African Americans, the diabetes rates are nearly twice as high as those of non-Hispanic white Americans. Skeletal muscle insulin resistance appears to be a nearly universal precursor to overt type 2 diabetes (T2D), and both insulin resistance and T2DM are often accompanied by mitochondrial dysfunction. With 16,569 base pairs and 13 protein-encoding genes, the mitochondrial genome is diminutive when compared with the ~6 billion base pairs in the diploid nuclear genome. To date, genomewide association studies of the nuclear variants have failed to explain a large proportion of the heritability of T2D, but rare mitochondrial mutations have been clearly implicated in T2D syndromes. Mitochondrial genetics has a number of complexities that haven't been collectively considered in existing studies. First, cells possess hundreds to thousands of mitochondria, so the effect of a given variant may depend on mitochondrial number, as reflected in the DNA copy number. Second, there can be subpopulations of mitochondria within cells such that only portion of mitochondria carry a particular variant – a situation known as heteroplasmy. Moreover, copy number and heteroplasmy can differ between tissue types. Third, a number of genes encoding mitochondrial proteins are located in the nuclear genome. This implies that crosstalk between genomes is required to coordinate gene expression and the efficient production of essential mitochondrial

complexes, such as those involved in electron transport. Therefore, epistatic interactions between genes on both genomes (i.e., mitonuclear interactions) may influence risk of T2D. We have two large study populations that will help us devolve these complexities and their role in T2D – the Study of Asthma Phenotypes and Pharmacogenomic Interactions by Race-ethnicity (SAPPHIRE) and the Diabetes Multi-omic Investigation of Drug Response (DIAMOND). Through the TOPMed program, we will have whole genome sequence data on 3,596 African American adults in SAPPHIRE. African Americans are a particularly interesting population to study because limited numbers of mitochondrial haplogroups and large-sized chromosomal ancestral blocks minimize the numbers of comparisons needed to identify potentially important mitochondrial variants and mitonuclear interactions associated with T2D (Aim 1). The ongoing DIAMOND study will provide a population of T2D patients and controls in which to replicate the findings from Aim 1 using DNA isolated from skeletal muscle. Given the primacy of skeletal muscle in the pathogenesis of T2D, it is important to replicate mitochondrial findings from Aim 1 in this tissue (Aim 2a), as well as use it to identify unique variants associated with T2D and insulin resistance (Aim 2b). Lastly, given the described effect of exercise training on reversing skeletal muscle insulin resistance, we will investigate how exercise affects the heteroplasmy and copy number of variants identified in the earlier aims and how these changes relate to changes in insulin resistance (Aim 3).

Principal Investigator: David Lanfear, M.D., and Hani Sabbah, Ph.D.
Plasma Metabolomics and Myocardial Energetics in Heart Failure (R01HL132154)

Heart failure (HF) remains an enormous public health problem despite advances in treatment. Disease progression and response to therapy in HF varies widely between individuals, but breakthrough technologies such as genomics and metabolomics are helping to unravel the disease heterogeneity that confounds patient management. Perturbed energy metabolism may be a key contributor to cardiac dysfunction and the development of clinical HF. Evidence from a variety of sources indicates that impaired structure and function of the energetic apparatus in the myocardium contributes to disease severity, progression, and may influence response to treatment. However, in order to advance these observations toward meaningful interventions for HF patients, several key steps are still needed: 1) confirming the importance of metabolic variation in human HF, 2) developing noninvasive markers of myocardial energetic status, and 3) identifying promising targets for intervention. Our proposed project is a series of interwoven translational investigations in humans and dogs with HF to define the association of plasma metabolite levels with disease severity, myocardial energetics, and disease progression. This project leverages substantial infrastructure already in place, a large existing genetic cohort study, available plasma samples suitable for metabolomic profiling, comprehensive translational laboratory capabilities, and a cohesive multidisciplinary research group focused on HF. Together the planned studies will address the overarching hypothesis that the peripheral metabolomic signature can indicate disease progression/treatment responsiveness in HF patients and that this is driven by altered myocardial energy metabolism. If true, then these data will help advance personalized therapy and identify novel targets for HF intervention, leading to improved outcomes for HF patients.

Endocrinology and Metabolism

Principal Investigator, Arti Bhan, M.D.
Epidemiology of Diabetes Interventions and Complications (U01DK094157) Subcontract

The Diabetes Control and Complications Trial (DCCT, 1983-1993) compared intensive therapy aimed at near normal glycemia versus conventional therapy with no specific glucose targets in 1441 subjects with type 1 diabetes (T1DM). In 1993, after a mean follow-up of 6.5 yrs, the study showed conclusively that intensive therapy reduced the risks of retinopathy, nephropathy, and neuropathy by 35-76%, and that hyperglycemia was a primary determinant of complications. We also described potential adverse effects of intensive therapy; assessed its effects on cardiovascular disease (CVD) risk factors, neurocognition and quality of life; and projected the lifetime health-economic impact. DCCT intensive therapy was then adopted world- wide as standard-of-care for T1DM. The Epidemiology of Diabetes Interventions and its Complications (EDIC, 1994-present) is the observational follow-up study of the DCCT cohort, with 95% of those surviving actively participating. Most outcomes are evaluated annually. CVD events and deaths are carefully documented and adjudicated. EDIC has notably discovered that the early beneficial effects of intensive treatment on complications have persisted for over 10 years despite the similar HbA1c levels during EDIC in the two groups, termed metabolic memory. Remarkably, former intensive therapy also

greatly reduced the risk of CVD events. DCCT/EDIC collaborators have also conducted numerous ancillary studies, with separate funding, most recently including measurement of cardiac function on cardiac MRI and measurement of biomarkers of oxidative stress and inflammation as determinants of complications. The overarching goals for the next 5 years are to follow at least 90% of the surviving cohort; to describe accurately the study-long effects of glycemia (HbA1c) and other established and putative risk factors on diabetes complications and the metabolic memory effects of prior DCCT intensive therapy; and to expand knowledge regarding T1DM and its complications by supporting collaborations for new research funding applications to maximally utilize the cohort, phenotypic data set, and collected biologic and genetic samples. The specific scientific aims are to 1) evaluate effects of risk factors, biomarkers and glycemia on risk of clinical CVD; 2) assess the long-term changes in CVD risk factors; 3) describe effects of DCCT intensive versus conventional therapy on mortality; 4) evaluate risk factors for severe retinopathy/nephropathy; 5) assess effects of diurnal glycemic variation on complications; and 6) conduct eight new research projects involving new measurements and analyses.

Principal Investigator: D. Sudhaker Rao, M.D.
Clinical Assessment of Vertebral Bone Quality Using Direct Biomechanical and Textural Analysis via Digital Tomosynthesis (W81XWH1910374)

This project relates to the Topic Area “Musculoskeletal Disorders”, and specifically to the encouragement area of research on measures to improve diagnosis, prediction and optimization of health outcomes. This is because the proposed project ultimately aims to improve the accuracy of assessment for spinal bone fragility and fracture risk. The bones of the spine (vertebrae) are the most frequently fractured ones due to osteoporosis. These fractures are economically costly and burden the patients with many downstream problems including back pain. Military personnel are known to be at greater risk for these fractures and complications. An accurate assessment of vertebral fracture risk is essential for appropriate and timely intervention for the prevention of fracture. This research also relates to the Topic Area “Diabetes”, because a diabetic cohort will be included in the study. Current standard techniques for fracture risk assessment rely on radiographic bone density scans. Additional information regarding the patient’s demographic status and medical history is also incorporated in tools predicting fracture risk. However, these techniques are not very sensitive in identifying who will have a fracture and who will not. This is not too surprising, considering the fact that the information used in the assessment is a crude indirect measure of bone strength not based on biomechanics. To address this concern, we developed a new method, in which two images of a patient’s vertebra are taken in the presence and absence of the patient’s body weight by having them stand and lay down for both images respectively. The images are obtained using digital tomosynthesis (DTS), a system that is similar to computed tomography (CT). The advantages of DTS over CT are that DTS allows for standing and lying images to be captured, offers high resolution and exposes patients to less radiation than CT. The two sets of images are compared using an advanced computational method and deformations in the vertebra caused by standing are measured. From the displacement measurements, vertebral stiffness and overall displacement are calculated as metrics of strength and factor of safety (factor safety is a measure of how strong the bone is relative to the loads it normally experiences). Information on bone microstructure, additional to bone density, is known to increase accuracy in predicting fractures. We can also derive properties related to bone microstructure from DTS images without the biomechanical test. These properties are determined by quantifying the texture in the bone image and called textural properties. We developed these methods in the laboratory in detail using cadaveric vertebrae and laboratory-standard imaging and strength testing. We also performed pilot human studies to establish feasibility of the methods in the clinic. What remains to be determined is how successful the methods will be in the clinical environment for identifying individuals who are at risk. Therefore, this study will be a clinical validation of the new biomechanical and textural DTS methods. In order to determine the ability of DTS methods to correctly identify at-risk patients, the approach will be to compare patients who have conditions or diseases that are known to increase their risk of fracture to normal patients. Therefore, a group of osteoporotic patients with an existing vertebral deformity, a group with primary hyperparathyroidism (pHPT) and a third group with diabetes will be compared to normal patients. These diseases are considered service-related and thus represent a greater risk for military families. Importantly, each of these diseases increase the risk of fracture but alter bone in different ways that are not always detectable by bone density scans. For example, osteoporosis primarily results in loss of bone mass, pHPT alters the organization of bone structure and affects the cortical bone (in the case of a vertebra, the dense bony shell surrounding the vertebra), and diabetes alters the quality of the bone material without reducing bone mass. By studying these groups using DTS and comparing the assessment of bone strength to standard bone density

results, we will; i) establish for which types of patients and to what extent the DTS methods might be useful, ii) identify in which way the method must be performed for best results, iii) better understand how differences in bone quality specific to each disease affect the biomechanical outcome, and iv) establish a group of patients that we can follow up for longer term results. In the long term, the method will be useful in other clinically significant issues such as low back pain associated with vertebral fractures, implant stability, degenerative and congenital diseases of the skeletal system resulting in deformities, skeletal response to drug, exercise and disuse.

Principal Investigator: Davida Kruger, N.P.
The Insulin-Only Bionic Pancreas Pivotal Trial: Testing the iLet in Adults and Children with Type 1 Diabetes the "Insulin-Only Bionic Pancreas Screening Protocol" (UC4DK108612)

This multi-center randomized control trial (RCT) will compare efficacy and safety endpoints using the insulin-only configuration of the iLet Bionic Pancreas (BP) System versus a control group using CGM during a 13-week study period. Participants may be enrolled initially into a screening protocol and then transfer into the RCT protocol, or they may enter directly into the RCT protocol. At the completion of use of the BP system (end of RCT for BP Group), participants will enter a 2–4 day Transition Phase and be randomly assigned to either transition back to their usual mode of therapy (MDI or pump therapy) based on therapeutic guidance from the iLet BP System or transition back to their usual mode of therapy based on what their own insulin regimens were prior to enrolling in the RCT.

Gastroenterology

Principal Investigator: Stuart Gordon, M.D.
Chronic Hepatitis Cohort Study II (CHeCS-II) (U18PS005154)

Hepatitis B (HBV) affects over 1.25 million Americans, and hepatitis C (HCV) over 3.2 million Americans. In the decades to come, more than 150,000 Americans are expected to die from these conditions unless steps are taken to increase awareness, diagnosis, and access to necessary care and treatment. Emerging interferon-free, direct-acting all-oral antiviral (DAA) treatments have changed the landscape of HCV treatment and care. These treatments appear to be safer than interferon-based treatments and provide exceptionally high rates of sustained virological response (SVR). Both HBV and HCV treatment guidelines have been updated to reflect evidence regarding initiation of new therapies; however, the evidence for those recommendations is largely based on clinical trials conducted under highly controlled conditions in restricted patient populations with limited data collection. Significant health disparities—across race, sex, age, and co-infection (with HIV or dual hepatitis)—may limit the generalizability of these populations. Data from longitudinal cohorts of “real world” hepatitis patients are needed to assess the population impact of rapidly evolving antiviral therapies, to understand the spectrum of disease and its natural history, and to evaluate the public health impact of chronic viral hepatitis. The Chronic Hepatitis Cohort Study (CHeCS) is the first comprehensive longitudinal cohort study of chronic viral hepatitis in the USC and has served as a model platform for observational data collection in this population. Since 2010, CHeCS has reported valuable information and expanded knowledge on many facets of hepatitis disease and policy. We propose to build upon CHeCS to develop “CHeCS-II,” in order to achieve the long-term goal of applying this rich data and infrastructure resource to inform public health planning, policy decisions, and clinical management of HBV and HCV. To achieve this, we will leverage the established CHeCS infrastructure, which has: (1) a diverse, real-world, non-veteran-based US cohort of >3,000 HBV, >11000 HCV, and >500 HIV co-infected patients receiving care through four U.S. health systems; (2) an experienced multidisciplinary team; (3) an efficient system for patient identification and data collection. We will provide scientific leadership to identify research findings and priorities by: (1) Offering seamless collaboration across study sites and with the Centers for Disease Control (Aim 1); (2) Expanding our HCV cohort to over 14,000 patients with >2 years’ follow-up; (3) Increasing follow-up of HBV patients to >5 years; (4) Collecting additional data regarding social determinants of health, including access to and uptake of care (Aim 2); (5) Applying rigorous analytical approaches to develop an in-depth understanding of health disparities and comorbidities, as well as investigating how these differences impact access to and uptake of antiviral therapy; (6) Advancing translation of this research to inform hepatitis-related policy and practice (Aim 3).

Hypertension and Vascular Research

Principal Investigator: Gustavo Ares-Sarmiento, Ph.D.
Role of Ubiquitin Ligase adaptor FBXL13 on Salt-sensitive hypertension (1K01DK123192)

Gustavo Ares, Ph.D., is a Research-Scientist Instructor training in the integrative renal physiology related to hypertension at Henry Ford Health system. In this revised application, Dr. Ares aims to determine whether a high salt diet stimulates the E3 ubiquitin-ligase FBXL13-NKCC2 interaction, enhancing NKCC2 degradation, favoring NaCl excretion thereby preventing an increase in blood pressure. Dr. Ares' immediate goal is to acquire the research training and professional skills necessary to transition to an independent extramurally funded investigator. His long-term goal is to establish his own research program with a focus on identifying novel targets of loops diuretics and pharmacological interventions to treat hypertension. Dr. Ares' Career Development Plan consists of improving his: 1) research skills; 2) Networking and collaborations; 3) professional development through attendance of presentations at weekly journal clubs, seminars, course and national scientific meetings; 4) mentoring skills; 5) writing manuscripts and grants. Dr. Ares' progress will be assessed thru bi-weekly to monthly meetings with each member of the mentoring team. Environment: Dr. Ares and his mentor, have assembled a strong team of co-mentors and advisors to guide him through the research project. Primary mentor: Dr. Pablo Ortiz a NIH-funded scientist with strong records of successful in renal physiology and hypertension. Secondary mentor: Dr. Jeffery L. Garvin is a professor of physiology at CWRU Cleveland, with extensive experience in regulation of salt and water transport along the renal nephron. Secondary mentor: Dr. Peter Kaiser, professor and Chair of Biological Chemistry at UC Irvine, has extensive experience in the ubiquitin-proteasome system, and the E3-ubiquitin ligases with special interest in the Skp1- Cullin-FBox family complex. The supportive research team includes T. Pavlov, Ph.D. and Mariela Mendez, Ph.D. working in renal physiology; Pamela Harding Ph.D., N-E. Rhaleb, Ph.D., Suresh Palaniyandi, Ph.D. working in cardiovascular physiology/pathophysiology. Research: Hypertension is a highly prevalent condition involving the kidney's inability to excrete excess salt. Abnormally enhanced NaCl reabsorption thru the apical Na+/K+/2Cl- cotransporter (NKCC2) by the thick ascending limb of the loop of Henle (TAL) is associated with salt-sensitive hypertension in humans. NKCC2 inhibitors has many side effects, therefore they are not used. This project study the role of a novel E3 ubiquitin ligase FBXL13 on NaCl reabsorption and blood pressure regulation under normal or high salt diet. In Aim I, we study the effect of high salt on NKCC2 ubiquitination, surface phosphor (Thr96-101 and Ser126) and total NKCC2 expression and activity. In Aim II, we will study the FBXL13-NKCC2 interaction. In Aim III We study the role of FBXL13 on NaCl reabsorption and blood pressure regulation. This application will advance our knowledge which may lead to new strategies for the treatment of hypertension and promote the development of novel and specific loop diuretics.

Principal Investigator: Pamela Harding, Ph.D.
Opposing Effects of Prostaglandin E2 EP3 and EP4 Receptors on Mitochondrial Function in the Failing Heart (1ROHL148090)

Heart disease and heart failure are important causes of morbidity and mortality, affecting approximately 300 million people, at an enormous cost. Although current treatments slow the progression of these diseases, there has been little progress in preventing the compensated heart transitioning to that of a failing one. The Prostaglandin E2 (PGE2) receptor subtypes EP3 and EP4 are most abundant in the heart and activate different signaling pathways (Gαi for EP3, Gαs for EP4). Compelling data from my laboratory shows that EP3 expression is increased in the pathologically diseased heart produced by myocardial infarction (MI) or Angiotensin II- dependent hypertension (Ang II-HTN), that stimulation of the EP3 receptor decreases cardiac contractility whereas EP4 increases it and that overexpression of EP4 in the failing heart improves cardiac function. The failing heart switches from fatty acid (FA) oxidation to reliance on glucose. Coupled with this are alterations in mitochondrial function. Thus, mitochondrial dysfunction is an important player in the pathogenesis of heart failure. Our previous gene array data showed dramatic down regulation of mitochondrial genes in mice in which the EP4 receptor was deleted in cardiomyocytes; allowing PGE2 to act via the EP3 receptor and new data shows that an EP3 agonist reduces Complex I activity and ATP levels in adult mouse cardiomyocytes. mRNAs for proteins that alter both FA oxidation and their transport into mitochondria; specifically, carnitine palmitoyl transferase (CPT) were also down regulated in EP4 KO hearts. In other tissues, CPT activity was reportedly regulated by

the transcription factor/orphan receptor NR4A2 (Nurr1) in a PGE2-dependent process but whether this occurs in the heart is unstudied. Since heart failure is characterized by reduced FA oxidation, we propose the novel overall hypothesis: EP3 is increased during cardiac injury and impairs mitochondrial function due to reduced fatty acid import via diminished CPT activity. This is mediated by decreased activity of the transcription factor, NR4A2. Ultimately these events contribute to heart failure. To test this hypothesis, we propose 3 aims that will use a new conditional and cardiomyocyte-specific EP3 KO mouse model coupled with an EP3 overexpressing transgenic mouse to determine whether upregulation of cardiomyocyte EP3 contributes to impaired contractile function and reduced mitochondrial function in heart failure caused by Ang II-HTN and MI. The study also examines whether PGE2 via its EP3 receptor reduces import of fatty acids into mitochondria via decreased activity of the transcription factor NR4A2 which subsequently reduces CPT activity; and whether these events reduce subsequent ATP levels. The proposal employs a multidisciplinary approach including physiological, biochemical and imaging studies that will impact the treatment of heart failure.

Principal Investigator: Emilio Mottillo, Ph.D.
Direct Analysis of Lipolysis-mediated Signaling Events (5R00DK114471)

Project Summary/Abstract Obesity has reached epidemic proportions and is tied to the greater prevalence of metabolic disorders such as diabetes and cardiovascular disease. While the precise mechanisms by which obesity causes diabetes are not entirely clear, mounting evidence suggests that the body's normal process of sensing lipids is disrupted. This inability to properly detect lipids can lead to lipotoxicity and cause detrimental effects in key insulin sensitive tissues. Thus, an important scientific goal, and that of this NIH Pathway to Independence Award, is to understand the mechanisms by which cells sense lipids and thereby maintain lipid homeostasis. The training component of this application builds upon the candidate's interest and background in imaging metabolism and metabolic signaling/energy sensing, while providing a unique environment to train in career development activities related to a team science approach of doing research. The research training component will utilize a unique set of tools that will allow the candidate to probe the direct effects of lipolysis independent of transmembrane-protein kinase A (PKA) signaling and image fatty acid metabolism. The candidate will gain experience in global analysis techniques of phosphoproteomics and lipidomics, and super-resolution imaging. Utilizing these tools and training, the candidate will determine 1) the signals directly generated by lipolysis, and 2) the dynamics of lipid trafficking and lipolysis-derived signals within a cell. Central to this aim is the hypothesis that signals directly produced by lipolysis function to maintain lipid homeostasis and are highly dynamic. The research component of the award will be accomplished by the following specific aims: Aim 1: Identification of signals that are generated directly by lipolysis. Lipolysis is known to produce signals, but up to this point the direct effects of lipolysis were not distinguishable from transmembrane-PKA signals. Utilizing novel synthetic ligands that activate ABHD5, a lipase co-activator protein, Aim 1 will be accomplished by the following sub-aims: 1a: To identify ABHD5-dependent lipid mediators. Utilizing a lipidomic approach, the candidate will identify the bioactive lipids produced by ABHD5 that regulate downstream metabolism. 1b: To identify ABHD5-dependent kinase activation pathways. Using a phosphoproteomic approach, the candidate will determine the phosphorylation events, kinases and pathways that are a direct consequence of ABHD5 activation. Aim 2: To determine the trafficking dynamics of fatty acids and their metabolites and lipid mediators. This will be accomplished by the use of newly developed genetically encoded fluorescent sensors that allow the monitoring of the temporal and spatial dynamics of fatty acids and fatty acyl-CoAs. The proposed K00/K99 is well aligned with the mission of the NIH and the NIDDK and will train a promising scientist to understand the mechanisms that regulate lipid homeostasis and potentially the pathways that are disrupted during obesity, a significant public health priority.

Principal Investigator: Pablo Ortiz, Ph.D.
Fructose Induced Salt-Sensitive Hypertension: Role of Thick Ascending Limb Transport (R01DK107263)

A high-fructose diet is linked to the epidemic of hypertension, diabetes, and obesity. Up to 25 million Americans consume up to 20% of their calories from added fructose1,2. We found that feeding rats a fructose-enriched diet (20%) *for 4 weeks did not increase blood pressure. However, a fructose-enriched diet combined with high salt (4% Na) caused salt-sensitive hypertension within 1 week* (Figures 1,11); prior to the development of metabolic abnormalities. The initial phase of salt-sensitive hypertension is in part mediated by a renal defect that prevents NaCl excretion during high salt intake. The thick ascending

limb (TAL) reabsorbs 25% of filtered NaCl. Enhanced TAL NaCl absorption is related to salt-sensitive hypertension in humans and rodents3-5. However, the mechanism by which a fructose-enriched diet rapidly (1 week) causes salt-sensitive hypertension is not clear and the role of TAL NaCl absorption in this process is completely unknown. NaCl reabsorption by the TAL depends on the apical Na/K/2Cl cotransporter NKCC2, the target of loop diuretics. Our preliminary data show that a fructose-enriched diet enhanced NKCC2 phosphorylation at Threonine (Thr)96,101. NKCC2 phosphorylation at Thr96,101 activates NKCC26,7. *Our data show that NKCC2-mediated NaCl transport is abnormally elevated in rats fed fructose plus a high salt diet*. However, the effects of fructose and *the signaling induced* in the TAL and the distal nephron have not been studied. Our data show that plasma and urine fructose increase rapidly after fructose intake. Thus, fructose reaching the nephron may be transported in by a fructose channel, activating protein kinase signaling. The only kinases known to phosphorylate Thr96,101 of NKCC2 are SPAK (STE20/SPS1- related proline-alanine-rich kinase) and OSR1 (Oxidative Stress Responsive 1) kinases. *In the TAL, these kinases specifically phosphorylate NKCC2. In the distal convoluted tubule (DCT), these kinases specifically phosphorylate the thiazide sensitive NaCl transporter NCC.* We found that a 20% fructose diet increases SPAK/OSR1 phosphorylation in TALs. In addition, stimulation of β-adrenergic receptors (β-AR) in the TAL activates NKCC213. A fructose-enriched diet may increase sympathetic activity by 2 weeks12, or enhance the sensitivity or signaling of β-AR. Our preliminary data show that β-AR stimulation increases SPAK/OSR1 phosphorylation in TALs. *In the Dahl salt sensitive (SS) rat, NKCC2 and SPAK/OSR1 phosphorylation are abnormally enhanced in a normal salt diet. It is not known whether this increases the effect of fructose on blood pressure and NaCl absorption*. *We hypothesize that a fructose-enriched diet enhances thick ascending limb (TAL) and distal tubule (DCT) NaCl absorption by inducing NKCC2 and NCC phosphorylation via SPAK/OSR1 kinases and enhanced β-AR signaling. These effects occur within 1 week, prior to metabolic alterations, and are maintained chronically (16 weeks), promoting salt- sensitive hypertension in normal rats.* In *Dahl SS rats, abnormally elevated SPAK/OSR1 in the TAL, enhances the effect of fructose on blood pressure in normal- or high-salt diets*.

Principal Investigator: Suresh Palaniyandi, Ph.D.
4-hydoxy-2-nonenal in Mitochondrial DNA Damage and Contractile Dysfunction in Diabetic Heart: A Role for Aldehyde Dehydrogenase 2 (R01HL139877)

Diabetes mellitus (DM) afflicts 26 million people in the US. 40-70% of these diabetics die of cardiovascular complications. We and others found that DM increases reactive oxygen species (ROS)-mediated aldehydes like 4-hydroxy-2-nonenal (4HNE) generation. 4HNE forms covalent bonds with macromolecules known as adducts, which lead to cellular damage and decreased cardiac function. Aldehyde dehydrogenase (ALDH2) is a mitochondrial enzyme that detoxifies 4HNE in the heart. We and others have reported that in streptozotocin- induced hyperglycemic models increase in 4HNE protein adducts and decrease in myocardial ALDH2 activity correlate with cardiomyopathy. Although we think this causes cardiac dysfunction, the exact mechanism is unclear. However, most diabetic patients have type-2 DM. Thus, it is imperative to investigate whether hyperglycemia-induced 4HNE and lower ALDH2 activity contribute to cardiac dysfunction in type-2 DM models. We recently demonstrated that high glucose stress or 4HNE administration decreased mitochondrial respiration with increased mitochondrial DNA (mtDNA) damage in cultured cardiomyocytes. In our preliminary study using type-2 diabetic mouse heart, we found an increase in mitochondrial levels of 8-hydroxyguanine (8OHG), an oxidized mtDNA product, which is primarily repaired by 8-oxoguanine glycosylase (OGG)-1. Next, we found increased 4HNE adduct formation on OGG-1 and reduced cardiac OGG-1 levels. These data suggest that 4HNE adduction on OGG-1 reduces its level and activity thereby raising the unmetabolized 8OHG level. Thus, we postulate that 4HNE-mediated mtDNA damage is part of the mechanism by which lower ALDH2 causes mitochondrial respiratory dysfunction and thus cardiac contractile dysfunction. To test our idea, we will use a high-fat diet induced type-2 DM model in wild type (WT) C57BL/6 and ALDH2*2 mutant mice. This mutation mimics East Asians with the E487K variant (ALDH2*2), which exhibits lower ALDH2 activity. We will overexpress ALDH2 gene in the myocardium *in situ* or treat our diabetic mice with Alda-1, the only specific drug available to improve the catalytic activity of both WT and mutant ALDH2. We propose following three specific aims: **Aim 1- Hyperglycemia in models of type-2 diabetes reduces ALDH2 activity in cardiac myocytes by increasing 4HNE adduction with ALDH2: Aim 2- Increased 4HNE adduct formation on mtDNA and OGG-1 causes mtDNA damage and poor mitochondrial respiration in type-2 DM: Aim 3- Augmenting ALDH2 activity reduces 4HNE-mediated mtDNA damage and thereby cardiomyopathy progression in type2-DM.** This study will identify a novel role of ALDH2 in type-2

DM mediated cardiac dysfunction and establish that ALDH2 could be a therapeutic target for restoring cardiac function in type-2 diabetic patients.

Principal Investigator: Nour-Eddine Rhaleb, Ph.D.
Ac-SKDP in the Treatment of Cardiac Dysfunction in Hypertension or Ischemic Heart (R01HL136456)

Hypertension is a major health care burden in the United States, affecting 1 in 3 adults. Hypertension is associated with concomitant coronary artery disease with myocardial infarction (MI) and heart failure (HF). In this study, we will define how N-acetyl-seryl-aspartyl-lysyl-proline (Ac-SDKP) protects cardiac structure and function in a mouse model of HF that will be induced in two models [angiotensin II (Ang II) hypertension- or permanent left anterior descending coronary ligation (LAD)]. We and others reported that Ang II-induced hypertension or LAD resulted in HF associated with cardiac structural remodeling and impaired function. Ac- SDKP is successively produced from thymosin ¿4 (T¿4) by two enzymes, meprin ¿ and prolyl oligopeptidase (POP). Circulating and tissue Ac-SDKP depends on the angiotensin converting enzyme (ACE) activity, since Ac- SDKP is mainly degraded by the N-terminal active side of ACE (ACE-N). ACEi are first-line drugs to treat HF. ACEi have strong side effects such as hypotension, cough, rash, angioneurotic edema, hyperkalemia, and dysgeusia, whereas Ac-SDKP has none, even at high dosages (up to 48 mg/kg/d). Also, Ac-SDKP is down- regulated in the myocardium of dogs and patients with chronic HF. Whether and how Ac-SDKP therapy could rescue hypertension- or LAD-induced cardiac complications remain to be elucidated. Increasing circulating Ac- SDKP not only inhibited fibrosis and mediators of inflammatory cell infiltration into the injured myocardium, but it also improved cardiac function in mice with LAD or hypertension (preliminary data). We have found that Ac-SDKP inhibits endoplasmic reticulum (ER) stress in cardiac fibroblasts in vitro and in mice with MI and restores phosphor-AKT in hypertensive hearts. Activation of ER stress is detrimental to the endothelium, cardiac fibroblasts, and cardiomyocytes. These findings set the scientific premise of this work, providing foundational work that Ac-SDKP represents a beneficial supplement to the existing cardiac pharmacotherapy. Our central hypothesis is that Ac-SDKP protects and potentiates cardiac protection against heart failure via the inhibition of ER stress. We propose to use the mouse model of heart failure induced by hypertension or LAD to address the following 2 two aims: (1) we will determine whether Ac-SDKP protects the heart and provides additional cardiac protective effects to ARBs, ACEi, or eplerenone in mice with MI or hypertension, (2) and we will demonstrate that Ac-SDKP improves cardiac function in mice with hypertension or LAD by inhibiting the detrimental ER stress via the PI3K/AKT pathway. A number of conditional and tissue-specific knockout female and male mice will be employed. A team with significant expertise is recruited for this project, which will apply a combination of state-of-the-art in vivo, cell and molecular techniques including measurements of cardiac remodeling and function by echocardiography in non-anesthetized mice and radiotelemetry, which can detect the blood pressure, the electrocardiogram, and the heart rate of conscious mice. These studies will help define the cause-effect relationship between Ac-SDKP and HF and its mechanism towards the protection from HF.

Pulmonary

Principal Investigator: Jayna Gardner-Gray, M.D.
Clinical Centers (CC) for the NHLBI Prevention and Early Treatment of Acute Lung: Reevaluation of Systemic Early Neuromuscular Blockade (U01HL123031)
Subcontract

Purpose: This study is evaluating whether giving a neuromuscular blocker (skeletal muscle relaxant) to a patient with acute respiratory distress syndrome will improve survival. Half of the patients will receive a neuromuscular blocker for two days and in the other half the use of neuromuscular blockers will be discouraged. **Trial Summary**: Study Design: This is a multi-center, prospective, 2-arm, unblinded, randomized clinical trial of two management strategies of neuromuscular blockade (also called skeletal muscle relaxant and muscle relaxant). Purpose: To assess the efficacy and safety of early neuromuscular blockade in reducing mortality and morbidity in patients with moderate-severe ARDS in comparison to a control group with no routine early neuromuscular blockade. Sample Size: This trial will enroll approximately 1400 subjects from PETAL network hospital ICUs.

Sleep Medicine

Principal Investigator: Philip Cheng, Ph.D.
Clinical Translation of Phenotypes of Shift Work Disorder (1K23HL138166)

Shift work disorder (SWD) is a significant threat to public health and safety; over 6 million shift workers in the United States experience the debilitating symptoms of excessive sleepiness and insomnia and suffer functional impairments that increases the risk of catastrophic industrial accidents. However, patients with SWD are often inadequately treated because the pathophysiology is not well-characterized, and current diagnostic assessments do not identify specific treatment targets. Consequently, clinicians are unable to deliver precise interventions that target the underlying causes of SWD. The proposed project in this career development award will address these gaps by taking the initial steps of translating two phenotypes of SWD for clinical use. Previous research has indicated that SWD can arise from two independent pathways that can be categorized as pathophysiological phenotypes. The first is the circadian misalignment phenotype, characterized by poor adjustment of the biological clock to the nocturnal work schedule. The second is the sleep reactivity phenotype, characterized by a trait vulnerability to sleep disturbance triggered by environmental stressors. Both phenotypes lead to symptoms of sleepiness and insomnia in SWD and is not currently distinguished in the clinic; however, the requisite treatments for each pathophysiological phenotype are entirely different. As such, the appropriate intervention of SWD requires that these phenotypes be adequately characterized and identified in the clinic. The proposed aims will complete the requisite foundational research to launch the translation of these phenotypes of SWD for clinical use. The first research aim will examine the stability of each phenotype in shift workers to characterize them as either state or trait phenotypes, which will impact both assessments of interventions. The second research aim will identify the specific clinical attributes that can be used to index the phenotypes in a brief, accurate, and cost-effective assessment tool. Finally, the third research aim will identify differences in cognitive and performance deficits between the two phenotypes so that accidents and injuries can be preempted with targeted interventions. To successfully complete the research aims, and to support my long term goal of conducting translational research to improve the health and productivity of shift workers, this career development award will provide further training in the following areas: (1) development of clinical screening tools, (2) advanced methodologies in clinical and translation research, (3) feasibility of real-world behavioral interventions for shift work disorder, and (4) advanced field measurement of circadian phase. In combination, the training activities outlined in this career development award will provide the necessary expertise for a sustained career in translational research and circadian medicine.

Principal Investigator: Christopher Drake, Ph.D.
Sleep to Reduce Incident Depression Effectively (STRIDE) (1R56MH115150)

Abstract Prevention of major depressive disorder (MDD) is a public health priority and is in critical need of innovative strategies that preemptively identify those at-risk in order to enable early intervention. A recent meta-analysis of over 20 longitudinal studies found the risk for incident depression among individuals with insomnia disorder is nearly three times that for normal sleepers, thus making insomnia a potential point of entry for depression prevention. Identification and treatment of insomnia typically occurs in primary care, and is commonly treated with hypnotic medications; however, hypnotics have significant limitations, including increased risk for residual impairment, falls in the elderly, and abuse. Cognitive behavioral treatment of insomnia (CBT-I) has been recommended as a first line approach with demonstrated efficacy that is sustained beyond initial therapeutic intervention. However, effective and widespread implementation of CBT-I is severely limited by the national shortage of trained practitioners in clinical practice. A stepped care approach rooted in primary care holds potential for innovative accessibility and delivery of CBT-I, improving insomnia therapeutics, and reducing rates of MDD by targeting a robust yet modifiable risk factor in insomnia. Our proposed stepped care model uses digital cognitive behavioral therapy (dCBT-I) as an accessible, least-restrictive, first line intervention that reduces specialist time and resources, and adds clinician based face-to-face CBT-I only for refractory patients who need a more personalized, flexible, and durable therapist driven approach. We propose a large-scale clinical trial in the primary care setting that utilizes a stepped care model (SMART design) to determine the effectiveness of dCBT-I alone and in combination with face-to-face CBT-I for insomnia, and the effects of these sleep interventions on the prevention of MDD. An important innovative component of the trial is the 1 and 2-year follow-up assessments to determine the durability of

effectiveness over time and assess the impact on depression incidence and relapse. Early risk-detection and prevention is especially critical in those at elevated risk for depression to reduce health disparities. Thus, individuals with significant vulnerability to MDD, such as high sleep-reactivity, low socioeconomic status, and racial minorities will be included in significant numbers to test for potential moderation of treatment effects stratified by risk. Finally, improving sleep through insomnia treatment may reduce nocturnal rumination, which may mitigate progression toward MDD. As such, we will determine whether changes in nocturnal rumination (i.e., target), a modifiable risk-factor, mediates the effects of CBT-I and dCBT-I on MDD incidence and relapse. This project will test a highly scalable model of sleep care in a large primary care system to determine the potential for wide dissemination to address the high volume of population need for safe and effective insomnia treatment and associated prevention of depression

Principal Investigator: Timothy Roehrs, Ph.D.
Risks for Transition from Therapeutic Hypnotic Use to Abuse (R01DA038177)

The acknowledged drugs of choice for the pharmacological treatment of insomnia are the benzodiazepine receptor ligand hypnotics (BzRL). Our nighttime studies show that with therapeutic doses used either short-term or chronically, the abuse liability of BzRLs ininsomnia is not seen universally and is relatively low. The data from our last grant, a first-ever study, showed the abuse liability of chronic zolpidem use in insomniacs was low. Yet case reports and retrospective studies continue to report BzRL dependence and for the majority of these cases the abuse developed through initial therapeutic use. In our study some subjects showed an increase in dose across time. Understanding the transition from therapeutic use to abuse and identifying risk factors, such as specific patient and drug characteristics, is both mechanistically and clinically important. Our preliminary data have shown that a subset of insomniacs, those insomniacs that have signs of hyperarousal as reflected by elevated Multiple Sleep LatencyTest (MSLT) scores, increased their nightly zolpidem dose across time. BzRLs have differential receptor binding affinities and associated anxiolytic or antidepressant properties. Zolpidem has selective alpha 1 BzRL affinity and little mood activity and thus may show less risk for transition from therapeutic use to abuse than another currently frequently prescribed BzRL with less alpha subtype selectivity such as eszopiclone. We propose to study the abuse liability of a selective (zolpidem) vs nonselective (eszopiclone) hypnotic during chronic use (six months) in an at-risk sub-population (insomniacs with hyperarousal shown by elevated MSLTs). The proposal is highly innovative as it reflects a paradigm shift in understanding the abuse liability of hypnotics. In the end, this proposal will generate a unique set of data addressing a number of previously clinically important unanswered questions regarding hypnotic abuse by insomniacs (i.e., its likelihood as a function of arousal state and specific hypnotic pharmacology, of dose escalation over time and change in mood/drug effect ratings over time). It will provide clinicians with behavioral indicators of abuse risk.

General Internal Medicine

Principal Investigator: David Willens, M.D., MPH, FACP
eASSIST A Post-Visit Patient Portal Tool to Promote Colorectal Cancer Screening (R01CA197205-05) Subcontract

The goal of this study is to develop and test a patient portal tool (e-Assist) for engaging and supporting primary care patients to make decisions about and to obtain colorectal cancer screening. Henry Ford Health System will serve as the performance site for this study. As such, the e-Assist tool will be programmed by HFHS programmers and all day-to-day aspects of the study will be coordinated by staff at Henry Ford's Center for Health Policy and Health Services Research with oversight from the study PI and team. These tasks include identifying eligible participants and coordinating all elements of communication with patients (letter, phone interviews, etch.) In addition, HFHS staff will conduct focus groups and cognitive interviews with patients for preliminary testing of the e-Assist tool.

Hematology/Oncology

Principal Investigator: Ding Wang, M.D., Ph.D.
SWOG Network Group Operations Center of the NCTN (U10CA180888) Subcontract

The impact statement in SWOG's network operations grant application succinctly summarizes our work and our goals: By continuously improving inclusion, engagement, and scientific innovation, SWOG will enhance cancer clinical trial development and conduct, reducing the burden of human neoplasm. The SWOG National Clinical Trials Network Group has established itself as an innovative, collaborative, a n d cost-effective NCTN constituent. SWOG has 60 years of trial experience, and its work has led to the Food and Drug Administration approval of 14 regimens, changing and informing oncologic practice hundreds of time more. In our 2013 grant application, we promised to make unique contributions to the new NCTN enterprise, and we successfully did so over the last five years. We are strongly committed to furthering our efforts over the next six. SWOG designs and directs high-value, pathway- and immune-driven oncology research, with the goal of achieving practice-changing results that are meaningful to both persons affected by cancer and investigators. The group's current network includes more than 1,000 member sites, with 5,000 physicians who practice across the United States, Canada, South Korea, Mexico, Saudi Arabia, and South America. Twenty-three NCI-designated cancer centers number among our members, as do 22 Specialized Programs in Oncology Research Excellence. From early 2014 through mid-2017, SWOG investigators published more than 188 cancer treatment articles and abstracts and enrolled 12,819 patients into NCTN therapeutic trials. SWOG actively collaborates in NCTN direct research and administrative functions and has developed training and education tools used throughout the network. SWOG's mission is to significantly improve lives through cancer clinical trials and translational research. The following guiding principles, ratified in 9/2017, are the foundation upon which we build to achieve that end: — We make patients our absolute highest priority — We ensure that the best science drives our research — We embrace and encourage diversity in leadership and membership, to effectively solve problems in cancer — We demand integrity, accountability, and ethical behavior in SWOG — We foster and mentor young investigators, to ensure excellent clinical research for future generations Over the next grant cycle, we will provide an efficient, innovative, and nimble network capable of developing and conducting abroad framework of clinical and translational trials; we will meaningfully contribute to the NCTN; and we will help patients lead longer and meaningful lives. SWOG will remain an innovative force in the design of the next generation of oncologic therapies.

Part II – All Other Clinical Departments

- **Dermatology**
- **Emergency Medicine**
- **Neurology**
- **Neurosurgery**
- **Orthopaedics/Bone & Joint**
- **Otolaryngology**
- **Pathology**
- **Pediatrics**
- **Psychiatry/Behavioral Health**
- **Radiation Oncology**
- **Women's Health**

Dermatology

Principal Investigator: Aimin Jiang, Ph.D.
b-catenin in Vaccine-induced Anti-tumor CD8 T Cell Immunity (5R01CA198105)

One major obstacle for the success of dendritic cell (DC) vaccines is host DC-mediated immunosuppression. Cross-priming, a process which DCs activate CD8+ T cells through cross-presentation, plays a major role in generating anti-tumor CD8+ T cell immunity. Tumor antigen cross-presentation by host DCs, however, often induces CD8+ T cell tolerance instead of immunity. Thus, there is a critical need to better understand whether and how tumors modulate cross-priming to suppress CD8+ T cell immunity. The long-term goal is to develop strategies to block tumor-induced immunosuppression to augment CD8+ T cell immunity and improve cancer vaccine efficacy. The objectives in this application is to elucidate the underlying mechanisms of how tumors inhibit cross-priming through β-catenin in DCs, and validate blocking β-catenin signaling as a novel strategy to improve cancer vaccine efficacy. The central hypothesis is that tumors differentially regulate DCs' cytokine induction through β-catenin to inhibit cross-priming, and blocking β-catenin's function in cross-priming augments vaccine-induced anti-tumor CD8+ T cell immunity. This hypothesis has been formulated on the basis of preliminary data produced in the applicant's laboratory. The rationale is that once it is known how tumors suppress CD8+ T cell responses through β-catenin, strategies targeting β-catenin signaling can then be developed to improve cancer vaccine efficacy. Three specific aims are proposed: 1) To determine whether activation of β-catenin in DCs suppresses anti- tumor CD8+ T cell immunity under diverse cancer vaccinations. 2) To elucidate the molecular mechanisms of how tumors inhibit cross-priming through β-catenin in DCs. 3) To determine whether blocking β-catenin pharmacologically improves cancer vaccine efficacy. We will carry out adoptive transfer, phenotypic and functional assays including multiple cross-priming assays, real-time PCR, in vivo killing assays and DC-targeted vaccinations with DC-specific knockout mice with either active or inactive β-catenin. The project is innovative because: (1) Based on the findings that β-catenin mediates tumor-induced suppression of CD8+ T cell immunity by inhibiting cross-priming, we will determine whether a novel strategy targeting DCs' function in cross-priming improves vaccine efficacy. (2) Using genetic and pharmacological approaches to alter β-catenin expression, this proposal will elucidate the mechanisms of how tumors inhibit cross-priming through β-catenin in DCs. As β- catenin inhibitors have been tested in pre-clinical studies and clinical trials, this proposal will additionally provide direct evidence to support the application of β-catenin inhibitors in cancer vaccines. The proposed research is significant, because it addresses how cross-priming is modulated by tumors to achieve DC-mediated immunosuppression, a fundamental but unanswered question in cancer immunology and DC biology, and more importantly will validate modulating β-catenin signaling as a novel strategy to improve cancer vaccine efficacy.

Principal Investigator: Qing-Sheng Mi, M.D., Ph.D.
Genetic and Genomic Dissection of Psoriatic Arthritis (R01AR063611)

HFHS will participate in this project by continuing its longitudinal assessment of patients with cutaneous psoriasis (PsC) and psoriatic arthritis (PsA), through our existing collaboration in IPART (the International Psoriatic Arthritis Research Team). It will also continue to collaborate with PI James Elder and Co-PI Dafna Gladman (University Health Network, Toronto, CA) to provide serum samples to identify serum mircor-RNA (miRNA) biomarkers of conversion of PsC to PsA. Under the direction of Co-PI Qing-Sheng Mi, HFH will assay serum mi RNAs for the purpose of biomarker identification and provide guidance for the assessment of biological functions of identified serum miRNA biomarkers. HFH (through IPART) will contribute additional DNA samples from patients with PsC and PsA as well as normal controls for expanded GWAS genotyping of psoriasis, PsC, and PsA. Finally, HFH (through IPART) will contribute additional blood samples for assessment of blood mRNAs and miRNAs as biomarkers for progression of PsC to PsA. Applicant Identifier 19-PAF02365 submitted in response to Opportunity ID PA-18-484, is incorporated herein by reference as applicable.

Principal Investigator: Qing-Sheng Mi, M.D., Ph.D.
Uncover the New Subsets of Epidermal Langerhans Cells (1R61AR076803)

Langerhans cells (LCs) are skin-resident dendritic cells (DCs) expressing the C-type lectin Langerin (CD207) that mediate both adaptive immunity and immune tolerance in skin and are involved in various types of skin diseases. Adult LCs are originated from embryonic yolk-sac-derived macrophages and fetal liver monocytes in the steady state. Interestingly, LCs could also be derived from the bone marrow or peripheral monocytes and repopulate the skin under inflammatory conditions. However, due to the lack of molecular profiles at individual LC level, a significant gap remains in our understanding on how a single CD207+ epidermal LC population can induce both immunity and tolerance. Fortunately, new technologies such as the single-cell RNA-sequencing (scRNA-seq) can evaluate cell-to-cell transcriptomic variation, while the single-cell assay for transposaseaccessible chromatin using sequencing (scATAC-seq) can assess the epigenomic heterogeneity at single-cell resolution in an unbiased manner. Recently, we identified two major LC subsets in mice, ATF3+Bal2a1b- (mLC1) and ATF3-Bal2a1b+(mLC2) subsets, and three major LC subsets in human including ATF3+ (hLC1) subset using scRNA-seq. We also found in ATF3 knockout mice that lack of ATF3 enhances LC maturation and promotes LCs-induced Th1 and Th17 cell differentiation suggesting immune suppressive function induced by ATF3+LC1. Hence, these preliminary data support our hypothesis that LCs are heterogeneous consisting of distinct subset with different immune functions. Our objective is to use single-cell analysis platforms plus the LC fate-mapping and mutation mouse models to further validate this. We will pursue two Specific Aims in the R61 phase: Aim 1) Characterize the gene signatures and regulatory elements of mLC1 and mLC2 by profiling LCs during embryonic, young, and aging development at steady-state and repopulated LCs at inflamed state using scRNA-seq and scATAC-seq; Aim 2) Generate ATF3negEGFP reporter mice to fate-map ATF3+LC1 embryonic development and the dynamic change of ATF3+LC1 and ATF3-LC2 subset at steady state during adult and aging development and at inflammatory state and functionally characterize LC subsets in vitro by sorting ATF3EGFP+ LC1 and ATF3- LC2 cells and rederiving ATF3.loxp mice, which will be crossed with hLangerin-Cre mice to generate LCspecific/time induced ATF3KO for in vivo functional study. In the R33 phase, we will pursue the following Specific Aim: Aim 3) Functionally characterize ATF3+LC1 subset in vivo using LC-specific ATF3 deletion hLCcre.ATF3KO mice to evaluate the potential immune regulation function of ATF3+LC1 subset in the different disease models, including autoimmune vitiligo, melanoma, and fungi infection models. Our work will uncover the mystery of LC subsets with their specific functions, which will provide new insights into the biology of LCs and lead to the development of LC-based intervention strategies for skin diseases.

Principal Investigator: Qing-Sheng Mi, M.D., Ph.D.
microRNAs and NKT Cell Development and Function (R01AI119041)

Natural killer T (NKT) cells are an evolutionarily conserved subset of T cells that are developmentally and functionally distinct from conventional T cells. The ability to quickly secrete large quantities of a variety of cytokines upon activation enables NKT cells to be potent regulators of diverse immune responses. The deficiencies in NKT cell number and function have been linked to the development of many diseases. However, *a significant gap* remains in our understanding of how the development and function of NKT cells are precisely regulated. MicroRNAs (miRNAs), a recently discovered class of evolutionarily conserved small non- coding RNAs, negatively regulate the expression of protein-coding genes and thereby control essential biological functions and contribute to the development of many diseases. We

were the first to report that the deletion of Dicer (a key enzyme for miRNA biogenesis) during hematopoiesis results in a significantly reduced NKT cell number and impaired NKT cell maturation and function, without alternating conventional T cell development in the thymus, suggesting that miRNAs are required for NKT cells. Our *long-term goal* is to understand how miRNAs regulate NKT cell development and function. While more than 1000 experimentally reported miRNAs, very few specific miRNAs are linked to NKT cells so far. Our *objective* here is to define specific miRNAs and their targets that regulate NKT cell development and function. Using miRNA arrays, we recently identified dynamic expression of miRNAs, including miR- 155, and miR-17-92 cluster, during NKT cell development and activation. These findings plus our recent other report lead to our *central hypothesis* that these dynamically expressed miRNAs serve as critical regulators controlling NKT cell development and function through fine-tuning of specific target genes. Here we will further test this hypothesis. We will investigate how dynamic and miR-155 and miR-17-92 expression regulates NKT cell development and function using specific miRNA mutant mice with the gain or loss of miRNA gene. The results from proposed studies may not only illuminate the new immunological and molecular mechanisms underlying NKT cell development but may also facilitate the development of new and more efficient intervention strategies for autoimmune diseases, infection, and cancer based on the NKT cell therapy.

Principal Investigator: Qing-Sheng Mi, M.D., Ph.D.
Roles of HDAC3 in Epidermal Langerhans Cell Ontogeny and Function (R01AR069681)

Langerhans cells (LCs), the skin residing dendritic cells (DCs), form a contiguous immune network in skin and are involved in allergy, infection, cancer, and autoimmune disease development. However, the regulatory mechanisms involved in the development and functions of LCs have not been completely elucidated. Histone deacetylases (HDACs) are enzymes that regulate gene expression by modifying chromatin structure through removal of acetyl groups from target histones or directly deacetylating nonhistone proteins and represent a key epigenetic regulatory mechanism. HDAC inhibitors (HDI) are shown to have anti-tumor and anti- inflammatory effects in a variety of diseases, in which LCs play an important role. However, the mechanisms underlying the clinical effectiveness of HDI remain largely unknown. We recently reported that the inhibition of Class I/II HDACs by Trichostatin A (TSA) regulates the homeostasis and function of LCs in vitro and in vivo and modulates the non-coding miRNA expressions in LCs, while miRNAs also control LC development and function. Our preliminary data indicate that LCs express all Class I/II HDACs. To evaluate the role of individual HDACs in LC development and function, we generated knockout (KO) mice with selective deletion of HDAC3 (Class I) or HDAC4 (Class II) in epidermal LCs. Interestingly, LC number was significantly reduced in LC-HDAC3KO mice, but unaffected in LC-HDAC4KO mice. Furthermore, LC maturation and function were altered in LC-HDAC3KO mice. Thus, we hypothesize that HDAC3 is a key epigenetic component that controls LC development and function. In Aim 1, we will investigate the roles of HDAC3 in LC development and homeostasis, using LC-HDAC3KO mice for homeostasis after birth and using constitutive Csf1r-specific HDAC3-deletion mice (Csf1r-HDAC3) and inducible Csf1rspecific HDAC3-deletion (Csfr1.Mer-HDAC3) mice for early embryonic LC development; Aim 2, we will investigate the roles of HDAC3 in LC function, using inducible LCER. HDAC3KO mice. In Aim 3, we will elucidate the molecular mechanisms and signaling pathways by which HDAC3 regulates LC development and function, by combining cDNA array, miRNA array and ChiP-Seq techniques. The proposed studies will uncover the epigenetic regulatory mechanisms of HDAC3 in LC development and function and may also elucidate new mechanisms for HDI therapy.

Principal Investigator: Qing-Sheng Mi, M.D., Ph.D.
Serum MicroRNA Biomarkers of Islet Autoimmunity (R01AI123258) Subcontract

Under Dr. Mi's leadership, the team at Henry Ford Health System will perform miRseq profiles and quantitative miRNA analysis on serum samples using the Exiqon RT-PCR platform. Based on preliminary data, a custom panel of 188 microRNAs will be used. This strategy will allow greatly reducing the cost of measuring microRNAs by almost 50% and yet allow to study serum microRNA extensively; making it possible to measure a larger number of samples for increased statistical power. Over the course of the four-year program, we anticipate measuring microRNA levels in 600 serum samples from the DPT?1 cohort, as described in the experimental plan. In addition to this, the team at Henry Ford Health System will perform miRseq to define potential candidates that may be missed by the Exiqon platform.

Principal Investigator: Li Zhou, M.D.
miRNAs Regulate Skin Langerhans Cell Ontogeny and Function (R01AR072046)

Langerhans cells (LCs), the skin residing dendritic cells (DCs), control both the induction of adaptive immunity, and immune tolerance in skin and are involved in variety of skin disease development. However, the regulatory mechanisms involved in the development and functions of LCs have not been completely elucidated. MicroRNAs (miRNAs), a class of non-coding small RNAs, are recognized as important regulators of protein-coding genes through the inhibition of mRNA translation. Using Cre-loxP Dicer deletion mouse models, our laboratory and others have reported that deletion of miRNAs by CD11c-Cre or hLangerin-Cre significantly reduced the number and interrupted the function of LCs, indicating that miRNAs are required for LC homeostasis and function after birth. While there are more than 1000 experimentally reported miRNAs, very few individual miRNAs are linked to LCs so far. We were the first to report that miR-150 and miR-223 differentially regulated LC-induced T cell proliferation and cytokine production. Most recently, our embryonic lineage-tracing studies showed that miRNAs, including miR-17-92cluster, regulate LC embryonic development. Furthermore, using miRNA arrays, we identified that mature LCs have a unique miRNA gene expression profile compared to immature LCs, and that miRNA expression is dynamically changed during LC embryonic ontogeny. These findings led to our central hypothesis that the dynamically changed miRNAs may serve as critical regulators controlling LC ontogeny, homeostasis and function through fine-tuning specific target genes. In Aim 1, we will investigate the roles of miRNAs in LC ontogeny and homeostasis. Constitutive or inducible Csf1r-specific individual miRNA mutant mice will be used for studying embryonic LC ontogeny and LC repopulation after inflammation, while LC-specific Dicer or individual miRNA mutant mice will be used for LC homeostasis after birth. In Aim 2, we will investigate the roles of miRNAs in LC function, inducible LC-specific Dicer or individual miRNA mutation mouse models will be used. In Aim 3, the direct target gene(s) of miRNAs and related signaling pathways involved in LC development and function will be investigated by the combination of RNA-seq, miRNA bioinformatics and related target functional validation strategies. The proposed studies will uncover the dynamic miRNA-mRNA regulation and related molecular mechanisms and signaling pathways that control LC development and function, which will not only provide new insight into the biology of LCs, but may also facilitate the development of LC-based intervention strategies for diseases.

Emergency Medicine

Principal Investigator: Christopher Lewandowski, M.D.
Longitudinal Assessment of Post-traumatic Syndromes (U01MH110925)

Each year, more than 40 million Americans present to US emergency departments (EDs) for evaluation after trauma exposure (TE). While the majority **of** these individuals recover, an important subset develops adverse posttraumatic neuropsychiatric sequelae (APNS). These APNS include traditionally categorized outcomes such as posttraumatic stress disorder (***PTSD***), depression, minor **Traumatic** brain injury (MTBI), and regional or widespread pain. However, these previous definitions **of** outcome have limited progress, and we now appreciate that the actual trajectories **of** APNS are multidimensional, incorporating a range **of** specific outcomes that may be best understood, and optimally targeted for intervention, by dividing across specific domains **of** functioning. This application, submitted in response to RFA-MH-16-500, proposes to identify and characterize the trajectories **of** the most common trauma-induced APNS within these domains **of** functioning using the RDoC classification system. 5,000 patients presenting to the ED after trauma will be screened, recruited, and will receive initial baseline evaluation in the ED, including blood collection and psychophysical, survey, and neurocognitive evaluation. They will be closely monitored over the next 8 weeks using innovative technologies (a wrist wearable for continuous-time monitoring **of** daytime physiology and sleep; a smart phone app for continuous-time monitoring **of** GPS and daily “flash” surveys; weekly web-based neurocognitive tests; periodic mixed-mode surveys; serial saliva collection; deep phenotyping [blood collection, fMRI, psychophysical evaluation]) and then followed less intensively using similar procedures (including deep phenotyping) over the remainder **of** a 52-week follow-up period. Adaptive sampling and state-of-the-art statistical methods will be used to (1) optimize precision in characterizing RDoC construct trajectories and (2) test theoretically-guided, “high yield” hypotheses evaluating the effects **of** pre-trauma, peritraumatic, and recovery-related factors on these trajectories and on multivariate RDoC construct trajectory profiles. The longitudinal schedule **of**

rich, granular, multidimensional data collection in the study has been specifically designed to evaluate those constructs most important to post-TE outcomes and to test the proposed hypotheses. Ensemble machine learning methods will be used to develop tiered-targeted clinical decision support models to identify individuals at high risk **of** specific, common APNS outcomes. The close-knit ED research network that will undertake the study has a strong track record **of** prospective research on APNS and is ideally suited to carry out this exceedingly complex study. The study has been designed to be a resource for the entire field (for example, it has been designed and budgeted to collect and store a great many more biological samples at the ***NIMH*** Biorespository than we can analyze, for use by other investigators).

Principal Investigator: Christopher Lewandowski, M.D.
ICECAP: Influence of Cooling duration on Efficacy in Cardiac Arrest Patients (ICECAP) Trial (SUBK00012911)

Cardiac **Arrest** is a common and devastating emergency **of** the heart and the ***Brain***. More than 380,000 patients suffer out **of** hospital **Cardiac Arrest** (OHCA) each year **in** the US. Improvements **in** cardiac resuscitation (the early links **in** the "chain **of** survival" for **Patients** with OHCA) are tempered by our limited ability to resuscitate and protect the ***Brain*** from global cerebral ischemia. Neurological ***Death*** and disability are common outcomes **in** survivors **of Cardiac Arrest**. Therapeutic **Cooling of** comatose **Patients** resuscitated from shockable rhythms may markedly increase the rate **of** good neurological outcome, but poor outcomes still occur **in** as many as 50%, and the benefit **of Cooling in** those resuscitated from ***Asystole*** and pulseless electrical activity has not been evaluated **in** a ***Randomized*** study. Even **in Patients** with shockable rhythms, prior trials showing **Efficacy** have been questioned. Therapeutic **Cooling** is already a guideline-recommended and commonly used treatment **in** comatose survivors **of Cardiac Arrest**, but because **of** limited data, the optimal duration and ***Patient Selection*** criteria remain unknown and **Cooling** devices are not FDA approved for this indication. ***preclinical*** data and mechanistic studies strongly suggest that durations **of** hypothermia longer than those typically used may minimize ***Brain Injury***. This study will determine if identifying an optimal **duration** of therapeutic hypothermia can improve outcomes, and if development **of** a **duration *response*** curve can substantiate **Efficacy in** a wider ***patient population*** **of Cardiac Arrest** survivors. We hypothesize that longer durations **of Cooling** may improve either the proportion **of Patients** that attain a good neurological recovery or may result **in** better recovery among the proportion already categorized as having good outcome. The overarching goal **of** this project is to identify ***Clinical*** strategies that will increase the number **of Patients** with good neurological recovery from **Cardiac Arrest**. The results **of** this **Trial** will be immediately significant, impacting both ***Clinical*** practice and regulatory ***Evaluation***. The **Trial** uses ***innovative*** adaptive dose finding methods that allow exploration **of** a wide range **of** potential durations and efficiently allocate subjects where they will be most informative. The study methods also include ***innovative*** approaches to traditional outcome assessment and ***innovative*** outcome assessment tools, including the ***NIH*** Toolbox. The study will be conducted **in** the ***NIH*** SIREN Emergency ***Clinical*** Trials ***Infrastructure***. SIREN leverages existing resources to achieve economies **of** scale, maintain talented rapidly responding teams to screen and enroll subjects **in** the emergency department setting, and to continue ***Clinical*** investigations through the ICU stay and beyond with proven performance.

Principal Investigator: Jacob Manteuffel, M.D.
Clinical Trials Network: New England Node: CTN0099 ED-INNOVATION supplement (SUBK00012911)

Study site principal investigator (PI) will be responsible for oversight of all local scientific and administrative processes and procedures required for implementation of ED-initiated buprenorphine in their ED, including use of both SL and XR BUP formulations, and conducting the randomized clinical trial (RCT). They will develop ED protocols, including site-specific standard operating procedures (SOPs) for study and if needed, will establish referral sites including developing partnerships with community opioid treatment providers and programs. They will engage their IT colleagues to ensure that the necessary reports will be available on time. They will hire the research associates (RAs) and assist with their training and supervision. In addition, they will assist in training the ED providers, physicians, advanced practice practitioners (APPS) and nurses on how to administer and prescribe both formulations of buprenorphine. They will work with the pharmacy to be sure that both formulations are in the ED pyxis or easily accessible to the ED providers. They will ensure that all study forms are completed accurately during the baseline index visit, as well as at the 7- and 30-day assessments. They

will be responsible for all the local CQI and monitoring of the research protocol and ensuring quality, and for securing initial and ongoing Institutional Review Board (IRB) approval utilizing the single IRB.

Neurology

Principal Investigator: Jieli Chen, Ph.D.
Diabetic Stroke Cardiac Dysfunction; Treatment with CD133 + Exosomes (R01HL143432)

Cardiovascular complications are primarily responsible for the high morbidity and mortality in people with stroke and diabetes mellitus (DM). Cardiovascular diseases are roughly three times higher in patients with neurological deficits than in patients without neurological diseases. DM is a prominent risk factor for cardiovascular diseases and cerebral ischemic stroke. Our preliminary data show that ischemic stroke and type two DM (T2DM) each induces cardiac dysfunction, while T2DM animals subjected to ischemic stroke exhibit profound cardiac dysfunction compared to non-stroke T2DM mice or non-T2DM stroke mice. Therefore, there is a compelling need to develop therapeutic approaches specifically designed not only to reduce neurological deficits, but also to decrease cardiac dysfunction after stroke with diabetes. Our preliminary data indicate that treatment of stroke in T2DM mice with exosomes derived from human umbilical cord blood isolated CD133+/KDR+ cells (CD133+Exo) 3 days after stroke not only improves neurological and cognitive outcome, but also significantly improves cardiac function and increases heart microRNA (miR)126 and miR29b expression. In a novel and clinically relevant approach, based on our robust preliminary data, we propose to investigate the underlying cardioprotective therapeutic mechanisms of CD133+Exo treatment of stroke in T2DM mice, and we will test the hypothesis that miR126 and miR29b mediate CD133+Exo-induced cardiac protective effects in male and female mice in vitro and in vivo. Two Aims are proposed. Aim 1: To investigate the effect of cerebral ischemic stroke and stroke-related factors (age, sex and T2DM) on cardiac and neurological function in mice. To test the therapeutic effects of CD133+Exo treatment of T2DM-stroke in male, female and aged mice, time window, dose response, multiple doses and combination with anti-diabetic drug (Metformin) studies will be performed. Aim 2: To investigate the mechanism of CD133+Exo induced cardiac protective effects in male and female T2DM-stroke mice in vitro and in vivo. We will focus on miR126 and miR29b, and will test: 1) whether CD133+Exo treatment of T2DM-stroke increases heart and serum miR126 or miR29b levels; 2) whether increasing miR126 or/and miR29b expression in heart or/and serum mediates the CD133+Exo induced cardiac beneficial effects in male and female T2DM-stroke mice; 3) whether the miR126/Spred-1 and/or the miR29b/DPP4 signaling pathways mediate CD133+Exo treatment induced myocardiocyte protection of cultured cardiomyocytes. A major significance of our investigations is that it opens up important and novel ways to understand how exogenously administered CD133+Exo communicate with and alter heart cells by means of miR delivery to thereby activate endogenous cardiac protective events. This proposal is highly clinically relevant and if successful, it will significantly impact the treatment of stroke, diabetes, and cardiac dysfunction. Importantly, this proposal will elucidate novel mechanisms of action and generate therapeutic targets for CD133+Exo treatment of cardiac dysfunction after stroke with T2DM in male, female and aged mice.

Principal Investigators: James Ewing, Ph.D., Neurology and Stephen Brown, Ph.D., Radiation Oncology MRI Signatures of Response to High-Dose Radiotherapy in Rat Models of Cerebral Tumor (R01CA28596)

In some cases, e.g. small brain tumor metastases, responses to single or multiple fraction high-dose radiation therapy (HD-RT) have been remarkable, suggesting that HD-RT tumor control is at least as effective as biologically equivalent doses of conventional fractionated radiation therapy (CF-RT), even in radioresistant tumors. Although the mechanism for its effectiveness is not well understood, HD-RT is becoming accepted practice for a variety of tumors, including brain tumors.

Our recent preclinical study using MRI measures of short-term changes in tumor physiology after HD-RT in a small-animal model of cerebral tumor suggests a physiological response that includes vascular effects but is multifactorial and temporally variable. Hypothesizing that these short-term changes may both explain the increased effectiveness of HD-RT, and serve as a predictor of long-term response, we propose to investigate the relationship between short-term physiological changes after HD-RT and long-term outcome as a result of that therapy. In counterpoint, we will also study physiological changes during and after CF-RT. Detailed poroelastic modeling is proposed

to generate a map of local solid and fluid parameters (stress, flow) that will help explain short-term changes in physiology. Aim 1 studies short-term changes in measures of tumor physiology as predictors of response. Aim 2 describes the behavior of these same measures over the course of CF-RT. Our long-range goals are to develop noninvasive biomarkers of response that predict tumor control after HD-RT and CF-RT, and to describe physiological changes and related biomarkers that might be used to optimize the order and timing of RT and adjuvant chemotherapies.

Principal Investigator: Shailendra Giri, Ph.D.
Novel Regulation and Targeting of Macrophages Metabolism in Neuroinflammatory Disorders (R01AI144004)

Myeloid cells play a critical role in CNS demyelination and axonal destruction of multiple sclerosis (MS) and experimental autoimmune encephalomyelitis (EAE). The early phase of the disease is characterized by the presence of pathogenic activated macrophages (M1 type), while the recovery phase is associated with alternatively activated macrophages (M2 type) which release anti-inflammatory cytokines that resolve the pathogenic inflammation. Activated M1 macrophages depend on glycolysis to boost biosynthetic pathways to produce inflammatory mediators. However, anti-inflammatory M2 macrophages rely primarily on mitochondrial respiration. Adenosine monophosphate-activated protein kinase (AMPK) regulates energy metabolism, and thus controls the balance between glycolysis and mitochondrial respiration. We reported previously that AMPKα1 knockout (KO) mice develop severe EAE indicating AMPK activation is protective, yet the molecular mechanism by which AMPK regulates EAE disease progression is not known. AMPKα1-KO macrophages exhibit a hyperinflammatory phenotype and have a lower rate of metabolism. AMPKα1-KO macrophages also show glycolysistricarboxylic acid (TCA) cycle remodeling, which results in an imbalance in the levels of the endogenous metabolites, succinate and itaconate, which regulate pro- and anti-inflammatory macrophage functions, respectively. Their levels are tightly controlled by succinate dehydrogenase (SDH) and immune responsive gene 1 (IRG1), respectively. We *hypothesize* that the loss of AMPKα1 remodels the glycolytic-TCA pathway causing an imbalance in the levels of succinate and itaconate, which promotes an M1 phenotype over an M2 phenotype. This, in turn, promotes Th17 cells and suppresses T regulatory cells leading to a hyperinflammatory CNS immune response and CNS tissue damage. To test our hypothesis, we have generated monocyte-specific AMPKα1 KO and macrophage-specific, constitutively active AMPKα1T172D transgenic mice. In **Aim 1**, we will examine how the loss or gain of function of AMPKα1 in macrophages regulates M1 versus M2 macrophage polarization and consequently, Th17 and Tregs differentiation and disease outcomes. Studies under **Aim 2** will elucidate the mechanism by which the loss of AMPKα1 reprograms glycolysis-TCA metabolism leading to an imbalance of succinate and itaconate metabolites in macrophages, which in turn, determine the macrophage phenotype. The proposed study is expected to have a positive impact by elucidating the metabolic regulatory mechanism responsible for macrophage plasticity during disease and investigating AMPKα1 as a potential therapeutic target for MS. Our innovative genetic mouse models and precise metabolomics approach will allow us to identify the apparent rewiring of cellular metabolic pathways specific to AMPKα1 in hyperinflammatory cells. Ultimately, this process could be exploited to tailor novel therapeutic strategies to resolve or limit autoimmune inflammation in the CNS.

Principal Investigator: Shailendra Giri, Ph.D.
Endogenous Metabolite Restricts GM-CSF Signaling Pathway in Pathogenic Macrophages to Ameliorate CNS Autoimmunity (1R01NS112727)

Identifying a therapeutic option that can modulate the innate immune response without generally suppressing the immune system as a whole has been a key barrier to improving treatment for patients with MS. Using metabolic profiling, we have reported that resolvin D1 (RvD1), a pro-resolving lipid metabolite of omega-3 polyunsaturated fatty acids, is significantly decreased in the plasma of patients with MS. Consistent with this finding, MS patients have lower levels of omega-3 metabolites, which are precursors of resolvins, compared to healthy controls, a finding that has been replicated in animal models of the disease, experimental autoimmune encephalomyelitis (EAE). Notably, we found that daily supplementation with RvD1 significantly attenuated clinical symptoms in both chronic and relapsing remitting EAE. These data are provocative for their translational potential, particularly because the immune system is not depressed by RvD1 treatment as it is with steroids and most other MS therapies. The immunomodulatory effect of RvD1 is mediated through its receptor, formyl peptide receptor 2 (FPR2), leading to modulation of AMP-activated protein kinase (AMPK), an important regulator of cell

metabolism. In other human disease models, the RvD1-FPR2 signaling cascade protects by inducing an anti-inflammatory phenotype in macrophages. However, the mechanism affording this protection remains elusive. Granulocyte-macrophage colony-stimulating factor (GM-CSF) is a key player both in the pathology of both MS and EAE, promotes an inflammatory environment and neuronal damage. There is a growing interest in inhibiting the pro-inflammatory effects of GM-CSF signaling as a therapeutic target in MS. In our preliminary work, we found that RvD1 treatment inhibited GM-CSF signaling in macrophages and that this inhibition was AMPK de-pendent. However, how RvD1 affects AMPK activity and GM-CSF signaling to attenuate EAE is unclear. Our **long-term goal** is to identify natural endogenous signaling mechanisms that can be harnessed to treat autoimmune diseases, particularly MS. Our **overall objective** here is to determine the mechanism of action of RvD1 in resolving inflammation and disability in mouse models of MS. Our **central hypothesis** is that RvD1 attenuates EAE disease progression by abrogating GM-CSF signaling resulting in the polarizing of pro-inflammatory macrophages into an anti-inflammatory phenotype. And the underlying mechanisms of macrophage phenotype switch are through FPR2-AMPK-dependent metabolic reprogramming. To test this hypothesis our specific aims are: **1) to identify the effects of RvD1 on the cellular phenotype and function of CNS-infiltrating macrophages in EAE**; and **2) to determine the effects of RvD1 on metabolic reprogramming in macrophages.** We will address these aims with a combination of immunological, biochemical and innovative metabolomic approaches that are already well in hand. The proposed studies will form the foundation for the development of innovative therapeutic strategies to resolve inflammation during MS with no side effects and will likely apply to other diseases involving pathogenic activation of the immune system.

Principal Investigator: Quan Jiang, Ph.D., and Xu Cui, Ph.D.
Investigation of D4-F Effects on Neurovascular Remodeling after Diabetic Stroke (R01NS097747)

Ischemic stroke patients with Diabetes mellitus (DM) exhibit a distinct risk-factor and etiologic profile and a worse neurovascular prognosis than non-DM patients. Therefore, there is a compelling need to investigate neurovascular changes after stroke in the DM and non-DM population and to develop therapeutic approaches specifically designed to reduce neurological deficits after stroke. Type 2 diabetes (T2DM) constitutes 90% of diabetic patients and is associated with low high-density lipoprotein cholesterol (HDL-C), impairment of the anti-oxidative capacity of HDL-C, low phosphorylation of endothelial nitric oxide synthase (p-eNOS), and with reduced ATP-binding cassette transporter A1 (ABCA1) gene expression. D-4F is an economical apolipoprotein A-I (ApoA-I) mimetic peptide, presently employed in clinical trials to reduce coronary atherosclerosis in patients with acute coronary syndrome. However, the therapeutic effects of D-4F in post-ischemic stroke have not been investigated. Our preliminary data show that D-4F treatment of stroke starting 2h or 24h after ischemic stroke improves recovery of neurological function in both T2DM and non-DM mice and also increases p-eNOS and ABCA1 in the ischemic brain. In a novel and clinically relevant approach, based on our robust preliminary data, we propose to use D-4F in the treatment of stroke in the non-DM and T2DM population in mice. We seek to develop D-4F as a novel neurorestorative therapy to reduce white matter (WM) dysfunction and vascular damage, in T2DM and non-DM mice when treatment is initiated at 24h after onset of ischemic stroke. In addition, most development of stroke treatments has focused on young adult animals, but not on old animals, the prevalent population with stroke. Increased age also increases neurological impairment after stroke. We have also developed and implemented multimodality MRI imaging which can dynamically monitor neurovascular remodeling in both the animal and the patient. In the current study, we will measure WM and vascular changes and elucidate the mechanisms of action of D-4F in young adult and aged animals with and without T2DM after stroke. Our hypothesis is that D-4F increases ABCA1 and p-eNOS signaling activity which mediates vascular and WM remodeling and in concert improve functional outcome after stroke. We, therefore, propose two highly integrated and longitudinally designed Specific Aims. Aim 1 will investigate the delayed (24h after stroke) therapeutic effects of D-4F in non-DM and T2DM in young adult and aged mice after stroke. The differences in cerebral WM and vascular changes, and neurological functional outcome after stroke between non-DM and T2DM mice treated with or without D-4F will be analyzed. MRI will be employed to measure the dynamics of neurovascular reorganization underlying therapeutic response and recovery. In Aim 2, using eNOS knockout mice and specific loss of brain ABCA1 mice, we will investigate the mechanisms by which D-4F promotes neurovascular remodeling and hence, neurological recovery. The long-term objective of this RO1 is to develop a neurorestorative treatment for stroke in patients with or without diabetes.

Principal Investigator: Quan Jiang, Ph.D.
Glymphatic and Cognitive Impairment of Aging and Diabetes (RF1AG057494)

The objective of this application is to investigate glymphatic impairment and cognitive deficits during progression of aging with and without diabetes. Emerging data1-5 indicate that the glymphatic system in the brain mediates the cerebrospinal fluid (CSF)-interstitial (ISF) exchange and solute clearance from the brain parenchyma. However, despite the well-described dysfunction of the glymphatic system in the development of neurodegenerative conditions, there is still no reported study that focuses on the role of the glymphatic system in the development of cognitive impairment during aging and aging with type-2 diabetes (DM). Using noninvasive MRI methodologies to investigate cerebral solute waste clearance in middle-age control and type-2 diabetic (DM) rats, we have found increased impairment of the glymphatic system, as indicated by reduced clearance of interstitial Gd-DTPA in brain parenchyma, primarily in the hippocampus and hypothalamus in DM rats (**Fig.2&3**). In parallel, 3D confocal microscopic analysis of the brain-wide distribution of fluorescent tracers revealed increased delayed clearance of ISF in the hippocampus and hypothalamus from DM rats (**Fig.2&3**). Impairment of the glymphatic system in DM rats was shown to be highly correlated with cognitive deficits as measured by an array of cognitive tests including the Morris Water Maze (MWM) for hippocampal related learning and memory. Importantly, histopathological analysis shows that delayed clearance of interstitial solutes is associated with sporadic cerebral microvascular thrombosis in the hippocampus 2 months after hyperglycemia (15 months from birth), while extensive microvascular thrombosis and para-vascular accumulation of beta-amyloid (Aβ) are detected at 4 months after induction of hyperglycemia (17 months from birth), suggesting that the impairment of the glymphatic system leads to Aβ accumulation. Collectively, our preliminary data, for the first time, demonstrate that non-invasive MRI methodologies can detect DM-induced early impairment of the glymphatic system which is highly correlated with hippocampal related dysfunction of learning and memory. Based on our novel preliminary data, we will employ MRI and 3D confocal microscopy to evaluate and quantitatively measure kinetic clearance parameters of the glymphatic system during progression of aging with and without DM (Aim 1). We will then investigate whether impairment of the glymphatic system predicts cognitive dysfunction, the sensitivity and association between impairment of the glymphatic system, the onset of brain vascular dysfunction, and cognitive deficits during aging with and without DM (Aim 2). Data generated from this application will provide new insights into aging and age-matched DM associated impairment of the glymphatic system and the relationship of the glymphatic system with vascular and cognitive dysfunction.

Principal Investigator: Quan Jiang, Ph.D.
Interaction Between Glymphatic and Vascular Systems for Waste Clearance in Brain (R01NS108463)

The objective of this application is to first develop and validate micro vessel measurement for the entire brain to enhance detection sensitivity of micro vessels by ten-fold using superparamagnetic iron oxide (SPIO) enhanced susceptibility weighted imaging (SWI, SPIO-SWI) and then to investigate the interaction between glymphatic and vascular systems for waste clearance in the diabetic brain. Emerging data indicate that the glymphatic system in the brain mediates the cerebrospinal fluid (CSF)-interstitial (ISF) exchange and solute clearance from the brain parenchyma and plays an important role in neurological diseases1-6. Despite many milestone achievements, conclusive findings on the solute efflux pathways are relatively limited. Consequently, the interaction between vascular and glymphatic systems on waste clearance, especially with neurological diseases, is unclear.

The paucity of research into the efflux pathway may be attributed in part to technical difficulties, such as the challenging need to perform minimally invasive in-vivo, ultra-high detection sensitivity for tube-shaped influx and efflux pathways, and whole brain imaging. Although MRI can overcome the weak points of two-photon confocal microscopy to provide non-invasive whole brain in-vivo imaging of the glymphatic system, conventional MRI sensitivity is insufficient for the required spatial resolution for investigating micro vessels of glymphatic and vascular systems. We have developed highly sensitive MRI methods (Fig. 1) which significantly improve the detection sensitivity of small vessels by using the combination of high susceptibility of MRI agents with blooming effects7-9. The new methods provide excellent tools for investigating the efflux pathways of waste clearance under normal and pathophysiological conditions. Three efflux routes have been recently proposed and solutes in the brain could reach the lymphatic network by the olfactory bulb across the ethmoid plate10, 11 or by functioning conventional lymphatic vasculature in the meninges12. We found that tracer concentration in the venous system significantly

increased with diabetes (Fig. 9), thus adding a new route for brain waste clearance. Based on our novel preliminary data and published studies by others, we hypothesize that, the newly developed SPIO-SWI technique significantly increases detecting sensitivity of micro vessels in both vascular and glymphatic systems, and the efflux pathways of waste clearance with and without diabetes can be identified and investigated using this optimized SPIO-SWI method. To test these hypotheses, we will first (Aim 1) further develop, optimize and validate SPIO-SWI techniques to enhance the detection sensitivity for both vascular and glymphatic micro vessels. We will perform computer simulation, optimize SWI technique and experimental conditions in animal studies and then validate USPIO-SWI technique by LSCM measurements. We will then (Aim 2) investigate the interaction between vascular and glymphatic systems for waste clearance in diabetic brain using the optimized USPIO-SWI technique. Data generated from this application will provide new insights into the efflux pathways between glymphatic and vascular systems in diabetic brain.

Principal Investigator: Quan Jiang, Ph.D.
Investigation of D4-F Effects on Neurovascular Remodeling after Diabetic Stroke (R01NS097747)

Ischemic stroke patients with Diabetes mellitus (DM) exhibit a distinct risk-factor and etiologic profile and a worse neurovascular prognosis than non-DM patients. Therefore, there is a compelling need to investigate neurovascular changes after stroke in the DM and non-DM population and to develop therapeutic approaches specifically designed to reduce neurological deficits after stroke. Type 2 diabetes (T2DM) constitutes 90% of diabetic patients and is associated with low high-density lipoprotein cholesterol (HDL-C), impairment of the anti-oxidative capacity of HDL-C, low phosphorylation of endothelial nitric oxide synthase (p-eNOS), and with reduced ATP-binding cassette transporter A1 (ABCA1) gene expression. D-4F is an economical apolipoprotein A-I (ApoA-I) mimetic peptide, presently employed in clinical trials to reduce coronary atherosclerosis in patients with acute coronary syndrome. However, the therapeutic effects of D-4F in post-ischemic stroke have not been investigated. Our preliminary data show that D-4F treatment of stroke starting 2h or 24h after ischemic stroke improves recovery of neurological function in both T2DM and non-DM mice and also increases p-eNOS and ABCA1 in the ischemic brain. In a novel and clinically relevant approach, based on our robust preliminary data, we propose to use D-4F in the treatment of stroke in the non-DM and T2DM population in mice. We seek to develop D-4F as a novel neurorestorative therapy to reduce white matter (WM) dysfunction and vascular damage, in T2DM and non-DM mice when treatment is initiated at 24h after onset of ischemic stroke. In addition, most development of stroke treatments has focused on young adult animals, but not on old animals, the prevalent population with stroke. Increased age also increases neurological impairment after stroke. We have also developed and implemented multimodality MRI imaging which can dynamically monitor neurovascular remodeling in both the animal and the patient. In the current study, we will measure WM and vascular changes and elucidate the mechanisms of action of D-4F in young adult and aged animals with and without T2DM after stroke. Our hypothesis is that D-4F increases ABCA1 and p-eNOS signaling activity which mediates vascular and WM remodeling and in concert improve functional outcome after stroke. We, therefore, propose two highly integrated and longitudinally designed Specific Aims. Aim 1 will investigate the delayed (24h after stroke) therapeutic effects of D-4F in non-DM and T2DM in young adult and aged mice after stroke. The differences in cerebral WM and vascular changes, and neurological functional outcome after stroke between non-DM and T2DM mice treated with or without D-4F will be analyzed. MRI will be employed to measure the dynamics of neurovascular reorganization underlying therapeutic response and recovery. In Aim 2, using eNOS knockout mice and specific loss of brain ABCA1 mice, we will investigate the mechanisms by which D-4F promotes neurovascular remodeling and hence, neurological recovery. The long-term objective of this RO1 is to develop a neurorestorative treatment for stroke in patients with or without diabetes.

Principal Investigator: Jaspreet Singh, Ph.D.
Deciphering Neuroinflammation-Specific Regulatory RNA and Metabolic Networks in Human iPSC-derived Astrocytes in Cerebral Adrenoleukodystrophy (1R21NS114775)

The mechanism of onset of neuroinflammation in fatal cALD in males with inherited X-linked adrenoleukodystrophy (X-ALD) disease remains unknown. 40% of male X-ALD patients develop fatal cerebral neuroinflammation (cALD) while remaining develop milder adrenomyeloneuropathy (AMN) characterized by axonopathy without neuroinflammation. The primary genetic defect in X-ALD (ABCD1 gene deletion) and the biochemical defect (accumulation of very long chain fatty acid; C>22:0 in plasma and tissues) cannot predict the onset of neuroinflammation in cALD. Our long-term goal is to dissect the

molecular mechanism underlying differential phenotype development in X-ALD. The objective of this application is to identify integrated microRNA (miRNA) and metabolites that underlie the differential neuroinflammatory response in AMN and cALD human astrocytes. These astrocytes were differentiated from induced pluripotent stem cells (iPSCs), which in turn were generated by reprogramming of human control, AMN and cALD patient-derived untransformed fibroblasts. The neuroinflammatory response in X-ALD is likely initiated by astrocytes since the inflammatory areas in the X-ALD postmortem brain have cytokine secreting astrocytes but are devoid of activated microglia, T-cells and macrophages. Dysregulated miRNA and metabolite levels are associated with neuroinflammatory disease phenotype in a number of neurodegenerative diseases. Our preliminary proof-of-concept data, with next generation sequencing (miSeq) and untargeted metabolomics, identified miRNA and metabolites altered between healthy-control and cALD phenotype postmortem brain. Within the cALD brain white matter, miRNA and metabolite were altered between distant normal looking areas and neuroinflammatory areas adjacent to the plaque suggesting an association with disease progression. Our central hypothesis is that miRNA and metabolomic analysis in AMN and cALD human induced astrocytes will identify regulatory (miRNA) and active (metabolic) pathways that underlie the neuroinflammatory response and disease progression in cALD. To test our hypothesis we propose two specific aims: 1) To determine the miRNA altered in AMN and cALD astrocytes and 2) To identify metabolites altered between AMN and cALD astrocytes. This proposal is innovative, because it departs from the status quo by identifying for the first time, miRNA and metabolite pathways differentially regulating inflammatory response in human AMN and cALD astrocytes. In a step further, we will identify miRNA and metabolites reversed by CRISPR/Cas9 editing of AMN and cALD astrocytes with a functional copy of ABCD1. The proposed research is significant because the cellular mechanism(s) that lead to less severe AMN or neuroinflammatory cALD in response to the same ABCD1 mutation remain unknown even four decades after the identification of gene defect in X-ALD. As a result no therapy exists for AMN or cALD phenotypes. Impact: X-ALD was added to the federal newborn screening list in 2016, and with the rising rate of newly diagnosed cases there is urgent need to identify novel targets to develop effective therapies for AMN and cALD.

Principal Investigator: Jaspreet Singh, Ph.D.
Use of IPSC to Define Role of Astrocytes in Specifying Risk for Onset of Cerebral Adrenoleukodystrophy (1R56NS114245)

The mechanism of onset of neuroinflammation in fatal phenotypes in males with inherited X-linked adrenoleukodystrophy (X-ALD) disease remains unknown. 60% of male X-ALD patients develop fatal cerebral neuroinflammation (cALD) while remaining develop milder adrenomyeloneuropathy (AMN) characterized by axonopathy without neuroinflammation. The primary genetic defect in X-ALD (mutation/deletion in ABCD1 gene) and the biochemical defect (accumulation of very long chain fatty acid; C>22:0 in plasma and tissues) cannot predict the onset of AMN or cALD. Our long-term goal is to dissect the molecular mechanism underlying differential phenotype development in X-ALD. The objective of this application is to identify metabolic pathways that underlie the differential neuroinflammatory response in AMN and cALD human astrocytes. These astrocytes were differentiated from induced pluripotent stem cells (iPSCs), which in turn were generated by reprogramming of human control, AMN and cALD patient-derived fibroblasts. Metabolic reprogramming is emerging as a novel regulator of inflammatory response. Astrocytes rely on mitochondrial respiration (OXPHOS) for their metabolic needs but switch to glycolysis under neuroinflammatory environment to boost biosynthetic pathways to produce inflammatory mediators. Our preliminary proof-of-concept data, with untargeted metabolomics, identified metabolites altered between healthy-control and cALD phenotype postmortem brain. Within the cALD brain white matter, unique metabolite changes were recorded between distant normal looking areas and areas adjacent to the plaque suggesting an association with disease progression. We found both OXPHOS and glycolysis decreased (low metabolic state) in human cALD astrocytes despite higher inflammatory response. This low metabolic state suggests role of novel alternative source(s) of fuel driving the neuroinflammatory response in cALD astrocytes. Our central hypothesis is that metabolic reprogramming in cALD astrocytes drives their proinflammatory shift that underlies the neuroinflammatory disease progression in cALD. To test our hypothesis we propose two specific aims: 1) To elucidate the metabolic reprogramming responsible for inflammatory response in cALD astrocytes. 2) To determine if dysfunctional mitochondria play a role in inflammatory nature of cALD astrocytes? We will take advantage of control, AMN and cALD astrocytes generated from iPSC's in our laboratory for these studies. This proposal is innovative, because it departs from the status quo by identifying for the first time, metabolic pathways differentially regulating inflammatory response in human AMN and cALD astrocytes. The proposed research is significant because the cellular mechanism(s) that lead to less

severe AMN or fatal cALD phenotype in response to same ABCD1 mutation remain unknown even four decades after the identification of gene defect in X-ALD. Impact: With the rising rate of newly diagnosed cases after X-ALD was added to the federal newborn screening list in 2016, there is urgent need to identify novel targets to develop effective therapies for AMN and cALD for which no satisfactory therapy exists.

Principal Investigator: Poornima Venkat, Ph.D.
Vasculotide Promotes Cognitive Improvement in Rats with Vascular Dementia (1R01AG063750)

Vascular dementia (VaD) is common in patients after a stroke or after a series of mini-strokes and results from several mechanisms, one of which involves injury to blood vessels supplying deep white matter (WM) of the brain resulting in silent, multifocal, brain microinfarcts, vascular dysfunction, decrease in cerebral blood flow, and cerebral parenchymal cell damage. Extensive WM damage such as vacuolization, rarefaction, and demyelination in the periventricular region have been reported in patients with VaD. There is a critical need to develop therapeutic strategies for VaD that identify and target key pathophysiological events driving axonal/WM damage and cognitive deficits. The therapeutic effects of Vasculotide, an Angiopoietin-1 mimetic peptide, in VaD have not been investigated. Our preliminary in-vitro studies show that Vasculotide treatment can dose dependently increase axonal outgrowth in primary cortical neurons (PCN). In male retired breeder rats subjected to a multiple microinfarction (MMI) model of VaD, Vasculotide treatment initiated at 24 hours after MMI, significantly decreases axonal/WM injury and improves long term cognitive outcome. In a novel and clinically relevant approach, based on our robust preliminary data, we propose to use Vasculotide for the treatment of MMI induced VaD in male and female middle-aged rats (10-12 months old). We seek to develop Vasculotide as a therapeutic agent to decrease vascular dysfunction and axonal/WM injury, decrease inflammatory responses, attenuate glymphatic dysfunction and improve cognitive outcome. By affecting gene regulation, microRNAs (miRs) are involved in most biological processes and act as molecular rheostats that fine-tune and switch regulatory circuits governing tissue repair, inflammation, hypoxia-response, and angiogenesis. Elucidation of the role of miRs in VaD pathogenesis, and identification of key miRs that can potentially serve as therapeutic targets in VaD are lacking. We hypothesize that Vasculotide treatment induced vascular and axonal/WM remodeling; anti-inflammatory responses and cognitive recovery are mediated via modulation of key miRs and their target gene expression. Therefore, we propose three highly integrated and longitudinally designed Specific Aims. In Aim 1, we will perform dose-response studies and investigate the safety and long-term cognitive outcome of Vasculotide treatment in middle-aged, male and female rats subject to MMI model of VaD. In Aim 2, we will investigate the therapeutic effects of Vasculotide on vascular remodeling, axonal/WM remodeling, synaptic plasticity, inflammatory responses and glymphatic waste clearance pathway in middle-aged rats subject to MMI. In Aim 3, using “gain or loss” of brain miR-145 and miR-124, we will test whether Vasculotide treatment induced therapeutic effects after MMI in rats are mediated via the miR-124/Interleukin-6 and miR-145/Aquaporin-4/ATP-binding cassette transporter A1 (ABCA1) signaling pathways. The long-term objective of this R01 application is to develop a novel treatment for VaD.

Principal Investigator: Lei Wang, M.D.
Schwann Cell Derived Exosomes Improve Diabetic Peripheral Neuropathy in Type II Diabetic Mice (R01DK124377)

Peripheral neuropathy is one of the major common complications of diabetes. There is a compelling need to develop effective therapeutic approaches specifically designed to improve neurological function caused by diabetic peripheral neuropathy (DPN). Communications between Schwann cells and sciatic nerves of dorsal root ganglia (DRG) neurons maintain homeostasis of peripheral nerve function. Exosomes, endosome-derived nano vesicles carry RNAs and proteins as their molecular cargo. Exosomes mediate intercellular communication by transferring their cargo between source and recipient cells. Our preliminary data showed that treatment of type II diabetes db/db mice with Schwann cell derived exosomes (SC-Exos) remarkably ameliorated neurological dysfunction of DPN, which was associated with significant augmentation of intraepidermal nerve fibers and myelinated axons of the sciatic nerve. We also found that intravenously administered SC-Exos were internalized by Schwann cells and nerve fibers of the sciatic nerve, suggesting that SC-Exos act on Schwann cells and sciatic nerves. Our preliminary data also showed that the SC-Exo treatment did not significantly change blood glucose and glycosylated hemoglobin (HbA1c) levels and liver function; however, importantly, SC-Exos

reversed a network of miRNAs and proteins in the sciatic nerve tissues that mediate development of DPN. Based on these preliminary data, using a clinically relevant mouse model of high fat diet/streptozotocin-induced Type 2 diabetes, we propose to test the hypothesis that SC-Exos interact with Schwann cells and sciatic nerves to modulate this network of miRNAs and proteins and thereby ameliorate DPN. We will first examine whether the miRNA cargo of SC-Exo contribute to the therapeutic effect of SC-Exos on DPN. We will then examine whether endogenous miRNAs in Schwann cells and in the sciatic nerve of dorsal root ganglion (DRG) enhance the therapeutic effect of SC-Exo. Subsequently, we will examine whether engineered SC-Exos carrying elevated selected miRNAs to suppress genes that induce axonal injury and demyelination further reduce neurological dysfunction of DPN. Relevance Statement: Diabetic peripheral neuropathy is a major disability affecting millions of Americans. In this proposal, employing clinically relevant animal models of diabetic peripheral neuropathy, we seek to develop a novel therapeutic approach to treat diabetic peripheral neuropathy using exosomes derived from healthy Schwann cells. In this proposal, we will also elucidate the molecular mechanisms by which exosomes are therapeutically effective. This research will potentially provide the essential pre-clinical data for translation of this novel therapeutic approach to a phase 1 clinical trial.

Principal Investigator: Li Zhang, M.D.
Interaction Between Glymphatic and Vascular Systems for Waste Clearance in Brain (R01NS108463)

The objective of this application is to first develop and validate microvessel measurement **for** the entire **Brain** to enhance detection sensitivity of microvessels by ten-fold using superparamagnetic iron oxide (SPIO) enhanced susceptibility weighted ***imaging*** (SWI, SPIO-SWI) and then to investigate the **Interaction Between Glymphatic** and vascular **Systems for Waste Clearance in** the diabetic **Brain**. Emerging data indicate that the **Glymphatic** system in the **Brain** mediates the ***Cerebrospinal Fluid*** (CSF)-interstitial (ISF) exchange and solute **Clearance** from the brain parenchyma and plays an important role **in** neurological diseases1-6. Despite many milestone achievements, conclusive findings on the solute efflux pathways are relatively limited. Consequently, the **Interaction** between vascular and **Glymphatic Systems** on **Waste Clearance**, especially with neurological diseases, is unclear. The paucity of research into the efflux ***pathway*** may be attributed **in** part to technical difficulties, such as the challenging need to perform ***minimally invasive*** in-vivo, ultra-high detection sensitivity **for** tube-shaped influx and efflux pathways, and whole **Brain** ***imaging***. Although ***MRI*** can overcome the weak points of two-photon confocal microscopy to provide non-invasive whole **Brain** in-vivo ***imaging*** of the **Glymphatic** system, conventional MRI sensitivity is insufficient **for** the required spatial resolution **for** investigating microvessels of **Glymphatic** and vascular **Systems**. We have developed highly sensitive ***MRI*** methods (Fig. 1) which significantly improve the detection sensitivity of small vessels by using the combination of high susceptibility of ***MRI*** agents with blooming effects7-9. The new methods provide excellent tools **for** investigating the efflux pathways of **Waste** clearance under normal and pathophysiological conditions. Three efflux routes have been recently proposed and solutes in the **Brain** could reach the lymphatic network by the olfactory bulb across the ethmoid plate10, 11 or by functioning conventional lymphatic vasculature **in** the meninges12. We found that tracer concentration **in** the venous system significantly increased with diabetes (Fig. 9), thus adding a new route **for Brain Waste Clearance**. Based on our novel preliminary data and published studies by others, we hypothesize that, the newly developed SPIO-SWI technique significantly increases detecting sensitivity of microvessels **in** both **Vascular** and **Glymphatic Systems**, and the efflux pathways of **Waste Clearance** with and without diabetes can be identified and investigated using this optimized SPIO-SWI method. To test these hypotheses, we will first (Aim 1) further develop, optimize and validate SPIO-SWI techniques to enhance the detection sensitivity **for** both **Vascular** and glymphatic microvessels. We will perform computer simulation, optimize SWI technique and experimental conditions in animal studies and then validate USPIO-SWI technique by LSCM measurements. We will then (Aim 2) investigate the **Interaction Between Vascular** and **Glymphatic Systems for Waste Clearance in** diabetic **Brain** using the optimized USPIO-SWI technique. Data generated from this application will provide new insights into the efflux pathways **Between Glymphatic** and **Vascular Systems in** diabetic **Brain**.

Principal Investigator: Li Zhang, M.D.
Combination Treatment with Vepoloxamer and tPA for Acute Stroke (R01NS102744)

Stroke is one of leading causes of death and disability worldwide, mainly affecting elderly. Tissue plasminogen activator (tPA), the only Food and Drug Administration (FDA) approved treatment, is limited in its use to < 8.5% of stroke patients. Therefore, there is a compelling need to develop new and broader utility therapies for acute ischemic stroke. Vepoloxamer is a well characterized proprietary amphipathic copolymer with rheological properties, which is currently under investigation in a global phase III clinical trial for patients with sickle cell disease. Our preliminary studies demonstrate that administration of Vepoloxamer in combination with tPA 4h after embolic stroke facilitates recanalization and thrombolysis reduces ischemic neuronal damage and improves neurological outcome but does not increase cerebral hemorrhage in young adult rats. We also found that platelet-derived exosomes contribute to the therapeutic effect of Vepoloxamer on enhanced tPA-thrombolysis. In this application, we propose to investigate effect of Vepoloxamer in combination with tPA on acute stroke and molecular mechanisms underlying the combination therapy on the thrombolysis and neurovascular function in the aged male and female rats. Data generated from this application may provide a novel and potentially useful treatment strategy for patients with acute stroke.

Principal Investigator: Zhenggang Zhang, M.D., Ph.D.
Exosome Therapy for Acute Stroke with Large Artery Occlusion (R01CA219829)

Large cerebral vessel occlusion is the most disabling and life-threatening form of ischemic stroke. Human stroke primarily occurs in late middle age and beyond. Approximately two thirds eligible patients treated with tPA experience incomplete reperfusion. Thrombectomy is now also a standard of care for treatment of acute stroke with large vessel occlusion. However, recanalization of the occluded large vessels by thrombectomy only leads to ~71% of patients achieving improved tissue reperfusion, often incomplete. In addition, due to unfavorably large ischemic cores, many patients with large artery occlusion are not eligible to receive tPA or thrombectomy. Patients with reperfusion of the ischemic tissue are closely associated with good clinical outcome. Thus, there is a compelling need to develop therapies in combination with tPA and thrombectomy to enhance cerebral perfusion and thereby augment the therapeutic efficacy of tPA and thrombectomy monotherapies. Also, therapies to block ischemic core expansion will increase numbers of patients who would be eligible to receive tPA and thrombectomy. Using rat models of embolic middle cerebral artery occlusion (eMCAO) and transient MCAO (tMCAO, ischemia/reperfusion), we found that exosomes derived from cerebral endothelial cells (CEC- exos) in combination with tPA after eMCAO or CEC-exos given upon reperfusion after tMCAO substantially increased recanalization and downstream cerebral blood flow (CBF), and reduced blood brain barrier (BBB) leakage and infarction compared to tPA or tMCAO alone. Exosomes are nano-vesicles that contain lipids, proteins, and RNAs including microRNAs (miRs). Our preliminary data suggest that exosomal cargo miRs likely contribute to the therapeutic effect of CEC-exos in combination with tPA on acute stroke by acting on cerebral endothelial cells to suppress proteins that promote thrombosis and BBB disruption. We thus propose to develop CEC-exo therapy as an adjunctive treatment to enhance tPA and thrombectomy treatments of acute ischemic stroke. Aim 1 is to investigate whether the CEC-exo therapy as an adjunctive treatment enhances tPA and thrombectomy treatments in aged rats after large artery occlusion. Aim 2 is to investigate whether CEC exosomal cargo miRs contribute to CEC-exos-amplified thrombolysis leading to reduction of neurovascular damage. Aim 3 investigates whether a special set of CEC-exo cargo miRs contribute to the therapeutic effect CEC-exos on stroke- induced neurovascular damage by suppressing a network of pro-BBB leakage and thrombotic genes. Accomplishing these aims will potentially lead to development of a mechanistically based exosome therapy as an adjunctive treatment to enhance tPA and thrombectomy treatments of acute ischemic stroke, leading to improvement in the neurological outcome.

Principal Investigator: Zhenggang Zhang, M.D., Ph.D.
Exosomes and Platinum-Induced Peripheral Neuropathy (R01NS111801)

Platinum-based drugs are commonly used to treat cancers. Platinum drugs are the first line therapy for ovarian and colorectal cancers. However, chemotherapy-induced peripheral neuropathy (CIPN) is one of the most common complications. More than 70% of the patients receiving oxaliplatin are affected by neuropathy. Oxaliplatin induces two symptoms of peripheral sensory neuropathy; an acute and transient cold-aggravated, and a chronic form that has onset after multiple exposures to the drug and does not

disappear with drug cessation. The neurotoxicity often leads to platinum drug dose reductions, compromising efficiency of platinum drugs to suppress tumor progression. On an average of 6 years after chemotherapy, 47% of women still reported symptoms of CIPN. Studies to develop a neuroprotective agent have, to date, been unsuccessful to reduce CIPN. There is an imperative need to develop new therapies to CIPN. Challenges to develop such therapies include that a therapy needs not to impede antitumor efficacy, but to effectively inhibit CIPN. Our preliminary data demonstrated cerebral endothelial cell derived exosomes (CEC-exos) abolish oxaliplatin- induced peripheral neuropathy in tumor bearing mice and sensitize oxaliplatin on cancer cell killing. Exosomes are nanovesicles and mediate intercellular communication by transferring cargo proteins, lipids, and genomic materials including mRNAs and microRNAs (miRNAs) between source and target cells. We found that treatment of the tumor bearing mice with CEC-exos along with oxaliplatin induces a network of miRNAs/mRNAs in sciatic nerves that exerts neuroprotection in sciatic nerves and DRG neurons but triggers a distinct miRNAs/mRNAs network in tumor to promote cancer cell death. We, thus, hypothesized that CEC- exos mitigate peripheral neurotoxicity induced by platinum drugs and that CEC-exos enhance the anti- cancer efficacy of platinum drugs on tumor cells. Three specific aims are proposed to test this overall hypothesis. Aim 1 is to investigate the efficacy of the CEC-exos on ameliorating platinum drug-induced peripheral neurotoxicity and on improving the treatment of tumor. Aim 2 is to investigate molecular mechanisms underlying the therapeutic effect of CEC-exos on platinum drug-induced peripheral neuropathy with a focus on the interaction between CEC exosomal miRNAs and their target proteins in axons and DRG neurons. Aim 3 is to investigate molecular mechanisms underlying the effect of CEC-exos on sensitizing tumors to platinum drugs with a focus on the interaction between CEC exosomal miRNAs and their target proteins in tumor cells. Accomplishing these aims will potentially lead to development of a new CEC-exo based therapy for CIPN, leading to improvement in the quality of life and possibly cure of cancers.

Neurosurgery

Principal Investigator: Ye Xiong, Ph.D.
Exosome-based Therapeutics in TBI (R01NS100710

Traumatic brain injury (TBI) is a major cause of death and disability worldwide. There are no effective therapies available for TBI patients. Thus, there is a compelling need to develop novel therapeutics in order to improve neurological recovery after TBI. Mesenchymal stem cells (MSCs) are adult multipotent cells that give rise to various mesodermal cell types. The use of MSCs for tissue repair is of great interest because of their ability to home to damaged and inflammatory tissues. However, previous studies from us and others show that only a small proportion of transplanted MSCs actually survive and few MSCs differentiate into neural cells in injured brain tissues. The predominant mechanisms by which MSCs participate in brain remodeling and functional recovery are related to their secretion-based paracrine effect rather than a cell replacement effect. Our recent data suggest that posttraumatic treatment with cell-free exosomes isolated from rat and human MSCs improves functional recovery in male rats after TBI. Exosomes play an important role in intercellular communication. Exosomes transfer not only proteins and lipids but also genetic materials including mRNAs and microRNAs (miRNAs) to recipient cells, thereby mediating a variety of biological responses. Our preliminary data further demonstrate that the labeled exosomes administered intravenously after TBI reach the brain and are incorporated into brain cells as well as in macrophages in peripheral organs. Our encouraging findings indicate that MSC-derived exosomes have equivalent restorative effects as their cellular counterparts on brain remodeling and functional recovery after TBI. Thus, MSC-generated exosomes are novel candidates as a cell- free therapy that can overcome the obstacles and risks associated with the use of naive or engineered stem cells or MSCs. While our results are promising, the precise therapeutic mechanisms underlying exosome therapy for TBI recovery warrant further elucidation. In this proposal, we will first determine therapeutic efficacy of naïve MSC-exosomes for improvement in functional recovery in male and female rats after TBI. We will then evaluate the effect of MSC-exosomes on brain neuroplasticity, and growth factor expression as well as on the brain and peripheral immune response, effects that likely underlie and contribute to functional recovery (Aim 1). We will then evaluate the role of the miRNA content of the MSC-derived exosomes on brain angiogenesis, neurogenesis, synaptogenesis, cell death, growth factors and immune responses underlying functional recovery (Aim 2). Finally, we propose to enhance the therapeutic effects of exosome treatment of TBI by generating and employing tailored MSC-derived exosomes enriched with the miR-17-92 cluster as a treatment for TBI. In addition, we will investigate the molecular mechanisms underlying cellular exosome uptake (Aim 3). This proposal is innovative, and highly translational. This study will provide novel insights into mechanisms underlying the MSC-derived

exosome-promotion of functional recovery after TBI, develop a means to amplify the therapeutic effects of exosome therapy for TBI, and form the foundation for clinical translation of exosome therapy for TBI.

Principal Investigator: Yanlu Zhang, Ph.D.
Treatment if Traumatic Brain Injury with Velpoloxamer (R01NS109477)

Traumatic brain injury (TBI) is a major cause of death and disability worldwide. There are no effective therapies available for TBI patients. Thus, there is a compelling need to develop novel therapeutics in order to improve neurological recovery after TBI. Among many secondary injury events that occur after TBI, cerebral microthrombosis is an under-recognized, yet important contributor to the secondary brain ischemia and damage that occurs after TBI, and would therefore seem to be one of the central secondary events after brain trauma to bear in mind when designing treatment strategies. Cerebral microthrombi not only lead to ischemia and cell death but also prevent therapeutic drugs from entering into the affected brain and therefore constrain the efficacy of therapeutic drugs, which may be one of important factors ignored during preclinical and clinical trials. Our recent study indicates that early (2 hours post injury) intravenous administration of Vepoloxamer promotes sensorimotor function and cognitive functional recovery after TBI induced by controlled cortical impact (CCI-TBI), which is associated with its robust effect on reducing cerebral microthrombosis formation and neuroinflammation. Vepoloxamer is a purified form of Poloxamer 188 where impurities associated with renal dysfunction have been removed, which is an amphiphilic polyethylene-polypropylene-polyethylene tri-block copolymer that is reported to seal membranes and restore plasma membrane integrity in damaged cells. However, to date, there is a paucity of information about Vepoloxamer for treatment of TBI and the mechanisms underlying its therapeutic effects. von Willebrand factor (vWF) released into blood from injured endothelial cells inversely correlates with clinical outcome of severe TBI. vWF can induce microthrombosis formation. Our previous study demonstrated that the level of vWF released into plasma increases at 1-4 hours, peaks at 1-3 days, declines at 8 days, and returns to normal at 15 days in rats after CCI-TBI. We hypothesize that TBI induces the blood-brain barrier (BBB) damage and release of endothelial-derived vWF, which leads to platelet aggregate and subsequent cerebral microthrombosis-induced secondary injury. In Aim 1, we will first conduct a dose-finding study to identify Vepoloxamer dose and therapeutic window effect on functional recovery without toxicity in young rats (male and female) with TBI. In Aim 2, we will then investigate the mechanisms by which IV administration of Vepoloxamer enhances cerebral microvascular perfusion and promotes functional recovery after TBI. Microvascular integrity, cerebral blood flow, and BBB leakage will be measured dynamically using either laser scanning confocal microscopy or magnetic resonance imaging (MRI). This work will address a previously understudied important issue and is highly translational. Successful completion of this proposed research will elucidate mechanisms underlying IV Vepoloxamer-mediated promotion of TBI recovery, and facilitate development of Vepoloxamer as a novel therapeutic approach targeting endothelial cells/microthrombi to improve neurological outcome for TBI patients.

Principal Investigator: Ana deCarvalho, Ph.D.
Targeting Oncogene Amplification in Glioblastoma (W81XWH-19-1-0693)

Malignant gliomas originate in astrocytes or neural progenitor cells within the brain. These tumors rarely metastasize outside of the brain and exert their devastating health effects by damaging this vital organ. Glioblastoma is the most aggressive type of glioma, and unfortunately the most frequent in adults, with an incidence of about 12,000 new cases per year in the US. Surgery followed by radiation and chemotherapy with a DNA targeting agent temozolomide are able to control the disease temporarily We have learned from the many failed clinical trials that these tumors have been unexpectedly resistant to therapy directed at what seemed rational targets. In over 70% of the cases, proteins that drive glioblastoma growth are overexpressed due to high level gain in copy numbers in regions of the genome that become amplified. In this project we are focusing on two oncogenes, CDK4 (cyclin-dependent kinase 4) and MDM2 (mouse double minute 2 homolog) that overrule the two most important pathways restricting cell proliferation. Novel potent inhibitors targeting these oncogenes are now in clinical trials enrolling glioblastoma patients. This project involves bringing the clinical challenges to the research laboratory in a tangible way, by testing these novel therapies in patient-derived models (neurosphere cells and mouse xenografts) that are as hard to treat as the original tumors they came from, because we have shown they indeed preserve the genomic complexity and oncogene amplifications of glioblastomas. Similar to clinical studies, this project uses genomic information to assign glioblastoma patient-derived models to drugs that in theory should be effective. However, unlike the clinical setting, the same “patient” will be assigned

to multi-arm treatments simultaneously. In this project will investigate the pharmacological properties, specificity and efficacy of the most promising pharmacological inhibitors of MDM2 and CDK4 in treating glioblastoma models with a diverse set of genomic abnormalities. Not only MDM2 and CDK4 genes are amplified, but they are amplified in a circular segment of DNA, that like the chromosomes is packed in chromatin, but does not have centromeres, so they can increase dramatically in number. Furthermore, the tumor cells have different amounts of these circular DNA elements, thus variable levels of the drug target among cells within the same tumors. This likely poses a challenge for these new drug treatments. For that reason, we are adding another therapeutic strategy to our study, we will target an enzyme that is a central regulator of DNA repair, named DNA-PK, also using novel more selective and potent drugs in currently in clinical trials. This has a broader application for glioblastoma treatment, because radiation and temozolomide inflict DNA damage, and so does the rapid cell proliferation rate, and if DNA repair is inhibited the damage to the DNA becomes toxic and eventually lethal to the cell. However, here we will also test if this strategy affects the propagation of the circular DNA elements carrying oncogenes, as a novel application for DNA-PK inhibitors. First, we will test each of the CDK4 and MDM2 inhibitors separately in the glioblastoma cells and xenografts obtained from various patients. We will quantify their efficacy to selectively inhibit their targets, and to what extent they can control glioblastoma growth, and what are the effects of combining them with radiation and temozolomide. If resistance to therapy is observed, we will analyze these tumors in novel and important ways. We will quantify the shifts in the number of the circular DNA elements that carry the oncogenes and also other molecular changes that will be analyzed by Dr. Poisson, a co-investigator in this project and bioinformatics expert. We will then test the efficacy of the DNA damage inhibitor. It is not feasible to conduct these analyses to identify possible mechanisms of resistance to therapy in the clinic. Our results will greatly help the optimization of these therapies. This proposed research happens in the context of a truly multi-disciplinary team, with the relevance for patient treatment provided by Dr. Snyder, a neuro-oncologist and collaborator in this project, as with any pre-clinical study, the final validation for our findings will take place in the clinic.

Glioblastoma affects men and women of all ages. Military service members, veterans, and their family members are among those who have suffered from the significant symptoms associated with this tumor. Next, they have to deal with craniotomy, radiation therapy and chemotherapy. In most cases, what follows are just months of decline before patients succumbs to this devastating disease. It is becoming common for the tumors that were removed to undergo genomic profile, and the presence of “targetable genomic abnormalities” is used in molecular tumor boards to recommend experimental treatments for patients that have progressed after the standard of care, even when evidence for clinical benefit is not present, due to the lack of options. Our work takes place in the interface between the research laboratory and clinic, and by tackling the complexity of drug resistance in the laboratory we can contribute in a meaningful way to the long road of bringing glioblastoma into the category of treatable diseases.

Orthopaedics/Bone & Joint

Principal Investigator: Michael Bey, Ph.D.
Shoulder Function After Rotator Cuff Repair (R01AR051912)

Rotator cuff tears affect about 40% of the population over age 60 and are a common cause of pain and disability. Approximately 250,000 rotator cuff repairs are performed in the United States each year, but healing following surgery is a significant challenge (e.g., 20-70% of surgical repairs fail) and postoperative shoulder function is unpredictable. There is also often a disconnect between repair tissue healing and shoulder function where patients have poor shoulder function (e.g., limited strength and pain) despite an intact repair or, conversely, excellent shoulder function despite a failed repair.
Conventional clinical data (e.g., patient age, tear size) are not strong predictors of clinical outcome, and Therefore, this disconnect between healing and function remains difficult to explain. Recent research suggests that repair tension and repair tissue elongation may provide insight into post-operative healing and shoulder function that is not adequately provided by clinical data. However, the relationships between repair tension, repair tissue deformation, healing, and shoulder function are not well understood. The objectives of this application are to determine how rotator cuff repair affects shoulder motion, strength, and patient-reported outcomes, and to assess the influence of repair tension and repair tissue deformation on these outcomes. The rationale for this project is based on several important findings from our on-going work regarding the progression and treatment of rotator cuff tears:
1) rotator cuff pathology, even in the absence of symptoms, has a significant impact on shoulder

function, 2) physical therapy improves clinical outcomes despite only minor changes in joint motion, 3) surgical repair appears to alter glenohumeral joint (GHJ) motion in a way that suggests excessive repair tension, and 4) shoulder motion, strength, and patient-reported pain/function scores are interrelated after surgery. Based on these findings and the purported roles of repair tension and repair tissue elongation, our central hypothesis is that repair tissue elongation (up to and including failure) is due, at least in part, to repair tension approaching or exceeding the mechanical capacity of the healing repair tissue. We also hypothesize that repair tissue deformation affects joint motion in ways that have a significant impact on strength and patient-reported outcomes. Our approach will be to conduct a longitudinal study that measures repair tension, repair tissue deformation, joint motion, strength, and patient-reported outcomes before and after surgical repair. The proposed research is innovative because it will use a state-of-the-art imaging technique to provide an accurate assessment of the mechanical progression of healing rotator cuff repair tissues. The contribution of this research will be significant because it will advance our understanding of how surgical repair influences shoulder function and clinical outcomes, ultimately leading to improved patient care.

Principal Investigator: Michael Bey, Ph.D.
Shear Wave Elastography to Predict Repair Tissue Healing and Shoulder Function After Rotator Cuff Repair (R21AR072785)

Rotator cuff tears are common, affecting up to 40% of individuals over age 60 and accounting for an economic burden of $3-5 billion per year. Surgical repair is a satisfactory solution for many patients, but clinical outcomes and healing of the repair tissue after rotator cuff surgery can be unpredictable. Tear chronicity (i.e., the extent to which the muscle/tendon unit has degenerated over time) is a critical factor in determining healing and clinical outcomes. However, conventional approaches for assessing tear chronicity uses only qualitative descriptions (mild, moderate, severe) or grades (0 to 4) without any explicit assessment of the quality of the muscle and tendon tissues. Consequently, it is perhaps not entirely surprising that these conventional assessments are only weak predictors of healing and clinical outcome after surgery. This is important, because without a reliable measure of tear chronicity it is difficult for surgeons to know prior to surgery how challenging the repair may be what alternatives may need to be considered during surgery, what post-operative rehabilitation activities should be prescribed, and how best to counsel patients on expected outcomes. Ultrasound shear wave elastography has emerged as a promising technique for non-invasively assessing the in-vivo stiffness of soft tissues.

Given that the pathologic processes associated with rotator cuff tears are characterized by changes in tissue stiffness, shear wave elastography may have clinical utility in assessing the chronicity of rotator cuff disease. However, even though this advanced technique has been used extensively for breast and liver imaging, it has seen only limited use in musculoskeletal tissues. Consequently, the objective of this study is to determine the extent to which rotator cuff shear wave speed (SWS) predicts healing and clinical outcomes after rotator cuff repair. Our approach will be to use shear wave elastography to measure SWS in patients who are having surgical rotator cuff repair. These data will be acquired prior to surgery and then related to conventional tear characteristics (tear size, tear retraction, muscle atrophy, fatty degeneration), healing, and conventional clinical outcomes (strength, ROM, patient-reported outcomes) collected at 12 months post-surgery. Our central hypothesis is that SWS will be a significant predictor of healing and clinical outcomes and superior to conventional predictors of healing and clinical outcome. The proposed research is innovative because it will use an emerging technology to assess the quality of the rotator cuff tissues, which cannot currently be obtained in any other way. This contribution of the proposed research will be significant because we believe it will establish the clinical utility of shear wave elastography by identifying SWS as a superior predictor of clinical outcome and repair tissue healing. In turn, clinical use of shear wave elastography will provide physicians with the information necessary to improve care for patients suffering with rotator cuff tears.

Principal Investigator: Joseph Gardinier, Ph.D.
Modifying the Mechanotransduction of Bone by Targeting Purinergic Receptors (R01AR076378)

Osteoporotic fractures are common, increasing in incidence, and have a high associated economic burden. This significant clinical problem is further compounded by a lack of therapeutic strategies to increase bone formation and improve tissue strength. Bone formation is a function of osteocytes' response to mechanical loading during physical activity and exercise. Osteocytes' purinergic signaling through the release of nucleotides plays a key role in regulating bone adaptation in response to loading.

In particular we have found the P2Y2 receptor downregulates osteocytes' sensitivity to loading and that the loss in mechanosensitivity is accompanied by an increase in actin-stress fiber formation (ASFF) through cofilin phosphorylation. These findings are significant because they suggest targeting P2Y2 signaling as a potential strategy to enhance osteocyte mechanotransduction and increase bone formation. However, the extent to which P2Y2 influences bone formation by regulating osteocytes' sensitivity to loading through ASFF remains unknown. These gaps in knowledge limit our development of new therapeutic strategies that increase bone formation and reduce fracture risk in an aging population. Our long-term goal is to prevent osteoporosis and reduce fracture risk in an aging population. The objective of this study is to determine the role of purinergic signaling through the P2Y2 receptor in regulating the anabolic response to loading. The premise for this study is that blocking P2Y2 signaling has therapeutic potential to prevent age-related bone loss and reduce fracture risk. The central hypothesis states that blocking P2Y2 signaling will increase osteocytes' sensitivity to loading, allowing greater gains in bone mass and tissue strength in response to loading. The central hypothesis will be tested under three specific aims. Aim 1 will determine the extent to which P2Y2 signaling in-vitro influences osteocytes' sensitivity and overall response to loading by regulating ASFF through cofilin phosphorylation. Our approach in aim 1 utilizes osteocyte knockout cell lines generated using CRISPR/Cas9 to examine in-vitro their response to fluid flow. Aim 2 will determine the extent to which P2Y2 expression in-vivo contributes to bone formation in response to loading and unloading. Our approach in aim 2 will prescribe treadmill exercise and hindlimb immobilization to conditional knockout mice that target osteocytes' P2Y2 expression. Aim 3 will examine the efficacy of AR-C118925, a selective P2Y2R inhibitor, to increase the anabolic response to loading in aged mice as well as prevent age-related bone loss. Our approach in aim 3 will treat wild-type as well as P2Y2- knockout mice with AR-C118925 to identify off-target effects that are not specific to osteocytes. This study is innovative because it 1) evaluates a novel therapeutic agent (AR-C118925) for increasing bone formation, and 2) uses new cell-lines and animal models to establish P2Y2 signaling as a unique mechanism to increase bone mass. Overall, this study is significant because we expect it to demonstrate the therapeutic potential of targeting P2Y2R signaling to increase bone formation and reduce fracture risk.

Principal Investigator: Rebekah Lawrence, Ph.D.
Investigating the Multi-factorial Etiology of Rotator Cuff Pathology in Human Subjects (K99AR075876)

PROJECT SUMMARY A rotator cuff tear is a common shoulder condition that affects approximately 40% of individuals over the age of 60. This condition is painful, debilitating, and reduces quality of life. Despite their prevalence, the etiology of rotator cuff tears is not fully understood but is generally believed to involve extrinsic factors (i.e. tendon impingement during shoulder motion), intrinsic factors (i.e. tendon degeneration), and/or overuse. These factors have been studied extensively in animal models, which have provided support for each factor contributing to rotator cuff pathology. However, these findings have not yet been confirmed in human studies largely because of the difficulty in accurately and reliably assessing intrinsic factors and overuse in humans. Ultimately, understanding the etiology of rotator cuff pathology in humans will remain difficult without a model that characterizes the role of each factor in rotator cuff pathology. The objectives of the proposed studies are to: 1) develop a preliminary multivariable model classifying the effects of extrinsic, intrinsic, and overuse factors on rotator cuff pathology in asymptomatic individuals (K99); 2) extend the model with additional asymptomatic participants (R00); and 3) expand the model to include symptomatic participants (R00). Our approach will be to quantify shoulder motion and impingement (extrinsic factors) via biplane x-ray imaging, rotator cuff degeneration (intrinsic factors) via shear wave elastography, overuse factors via a novel estimate of lifetime shoulder exposure, and the severity of rotator cuff pathology via diagnostic imaging. We will investigate the relationship between the etiological factors and rotator cuff pathology using classification and regression tree analysis. The proposed studies are the keystone of a career development plan developed to provide the necessary mentorship, coursework, and research training for me to become an independent and impactful researcher. The goals of the K99 phase are to: 1) obtain training in advanced methods of biomechanical data collection and analysis to assess the roles of extrinsic, intrinsic, and overuse factors in the etiology of rotator cuff pathology; 2) develop a preliminary multivariable model describing the role of extrinsic, intrinsic, and overuse factors on rotator cuff pathology; and 3) obtain a tenure track position at a respected research- intensive university. The goals of the R00 phase are to: 1) independently conduct the R00 phase study by implementing the skills learned during the K99 phase; 2) establish multi-disciplinary research collaborations with engineers,

orthopaedic surgeons, and physical therapists; 3) lead a well-funded and productive research laboratory; and 4) build upon the K99/R00 research findings to secure independent R01 funding. Together with the rich research environment at Henry Ford Health System, the proposed career development plan will ensure that I have a unique skillset to pursue an independent research career, produce sound and impactful research, and help prepare the next generation of scientists.

Principal Investigator: Jamie Fitzgerald, Ph.D.
The Role of SHIP2 in Mineralization (R21AR072297)

Skeletal mineralization is fundamentally important to all vertebrate species. Too little mineralization results in structurally compromised bone that is prone to failure. On the other hand, pain and disability occur when there is inappropriate or ectopic mineralization and calcification of soft tissues. The major mechanisms controlling mineralization are poorly understood resulting in a major gap in knowledge. Our ongoing studies on the genetic basis of opsismodysplasia (OPS), a rare chondrodysplasia that is characterized by a marked delay in endochondral ossification, identified a new potential regulator of matrix mineralization: SH2 Domain-containing Inositol 5-phosphatase 2 (SHIP2). SHIP2 functions as a phosphatase that dephosphorylates phosphatidylinositol (3,4,5) P3 (PIP3) to generate hosphatidylinositol (3,4) P2 (PIP2). Data from our *in vitro* SHIP2 inhibitor and SHIP2-deletion studies confirmed that SHIP2 deficiency leads to a mineralization defect. Furthermore, experiments on matrix vesicles (MVs) isolated from chondrocytes and osteoblasts demonstrated that the loss of SHIP2 leads to a failure of MVs to support mineral deposition. Together, our data support the overall hypothesis that **SHIP2 regulates MV function**.

Prinicipal Investigator: Yener Yeni, M.D.
Clinical Assessment of Vertebral Bone Quality Direct Biomechanical and Textural Analysis via Digital Tomosynthesis (W81XWH1910373)

This project relates to the Topic Area “Musculoskeletal Disorders”, and specifically to the encouragement area of research on measures to improve diagnosis, prediction and optimization of health outcomes. This is because the proposed project ultimately aims to improve the accuracy of assessment for spinal bone fragility and fracture risk. The bones of the spine (vertebrae) are the most frequently fractured ones due to osteoporosis. These fractures are economically costly and burden the patients with many downstream problems including back pain. Military personnel are known to be at greater risk for these fractures and complications. An accurate assessment of vertebral fracture risk is essential for appropriate and timely intervention for the prevention of fracture. This research also relates to the Topic Area “Diabetes”, because a diabetic cohort will be included in the study. Current standard techniques for fracture risk assessment rely on radiographic bone density scans. Additional information regarding the patient’s demographic status and medical history is also incorporated in tools predicting fracture risk. However, these techniques are not very sensitive in identifying who will have a fracture and who will not. This is not too surprising, considering the fact that the information used in the assessment is a crude indirect measure of bone strength not based on biomechanics. To address this concern, we developed a new method, in which two images of a patient’s vertebra are taken in the presence and absence of the patient’s body weight by having them stand and lay down for both images respectively. The images are obtained using digital tomosynthesis (DTS), a system that is similar to computed tomography (CT). The advantages of DTS over CT are that DTS allows for standing and lying images to be captured, offers high resolution and exposes patients to less radiation than CT. The two sets of images are compared using an advanced computational method and deformations in the vertebra caused by standing are measured. From the displacement measurements, vertebral stiffness and overall displacement are calculated as metrics of strength and factor of safety (factor safety is a measure of how strong the bone is relative to the loads it normally experiences). Information on bone microstructure, additional to bone density, is known to increase accuracy in predicting fractures. We can also derive properties related to bone microstructure from DTS images without the biomechanical test. These properties are determined by quantifying the texture in the bone image and called textural properties. We developed these methods in the laboratory in detail using cadaveric vertebrae and laboratory-standard imaging and strength testing. We also performed pilot human studies to establish feasibility of the methods in the clinic. What remains to be determined is how successful the methods will be in the clinical environment for identifying individuals who are at risk. Therefore, this study will be a clinical validation of the new biomechanical and textural DTS methods. In order to determine the ability of DTS methods to correctly identify at-risk patients, the approach will be to compare patients who have conditions or diseases that are known to

increase their risk of fracture to normal patients. Therefore, a group of osteoporotic patients with an existing vertebral deformity, a group with primary hyperparathyroidism (pHPT) and a third group with diabetes will be compared to normal patients. These diseases are considered service-related and thus represent a greater risk for military families. Importantly, each of these diseases increase the risk of fracture but alter bone in different ways that are not always detectable by bone density scans. For example, osteoporosis primarily results in loss of bone mass, pHPT alters the organization of bone structure and affects the cortical bone (in the case of a vertebra, the dense bony shell surrounding the vertebra), and diabetes alters the quality of the bone material without reducing bone mass. By studying these groups using DTS and comparing the assessment of bone strength to standard bone density results, we will; i) establish for which types of patients and to what extent the DTS methods might be useful, ii) identify in which way the method must be performed for best results, iii) better understand how differences in bone quality specific to each disease affect the biomechanical outcome, and iv) establish a group of patients that we can follow up for longer term results. In the long term, the method will be useful in other clinically significant issues such as low back pain associated with vertebral fractures, implant stability, degenerative and congenital diseases of the skeletal system resulting in deformities, skeletal response to drug, exercise and disuse.

Otolaryngology

Prinicipal Investigator: Lamont Jones, M.D., M.B.A.
Characterization of Keloid Specific Exosomes and Determination of Exosomal Critical Signaling Pathways in the Keloid Microenvironment (1K08GM128156)

There are more than 11 million people in the world with keloids and more than 425,000 associated clinic visits, yearly, in the United States. Keloids are benign fibroproliferative tumors which cause pain, pruritus, emotional distress and loss of function. Current therapies are unsatisfactory with unacceptably high recurrence rates, mainly because of an incomplete understanding of keloid pathogenesis. Fibroblasts are a key player in keloid pathogenesis, but the drivers are unknown. Keloid disease is influenced by aberrant signaling pathways. However, no clear signaling pathway has been identified. Exosomes mediate cell-cell communication, exercising primary physiological and pathophysiological function. Exosomal cargo, such as microRNAs (miRNAs), regulate cellular function.

Significance: This project will lead to an enhanced understanding of keloid pathogenesis and the potential for exosome-based therapy. **Innovation:** (i) rational progression from preliminary data supporting the novel role of exosomes in keloid pathogenesis; (ii) investigating the influence of RAB27 methylation on the function and production of keloid exosomes would suggest a mechanistic basis for novel epigenetic biomarkers;(iii) using unique resources which includes fibroblast cell lines from primary untreated keloid (25) and matched normal skin (25) from a multi-ethnic group of patients and an *in vivo* animal model allow for the pragmatic translational application of results; (iv) entirely new field of keloid investigation. In summary, this project, mentoring and career development plan will position, Lamont R Jones, MD, MBA, to become an independent clinician scientist and leader in keloid pathogenesis.

Pathology

Prinicipal Investigator: Azadeh Stark, Ph.D.
Molecular Markers of Risk of Subsequent Invasive Breast Cancer in Women with Ductal Carcinoma In Situ (R01CA218429)

Ductal **Carcinoma in Situ** (***DCIS***) is considered to be a non-obligate precursor **of Invasive** breast cancer (IBC). Use **of** screening mammography has led to a substantial increase **in** detection of DCIS over the past 2-3 decades. About 5-14% **of** patients diagnosed **with *DCIS*** and treated with breast-conserving therapy, **with** or without radiation, develop an ipsilateral IBC and 1-6% develop a contralateral IBC over a period **of** 10 years. However, natural history studies have shown that, in the absence **of** treatment, 14-53% **of *DCIS*** cases develop IBC if followed for up to ~30 years. Treatment **of *DCIS*** is variable, and many ***DCIS*** patients are either under- or over-treated. Elucidation **of** the **Molecular** changes detectable **in *DCIS*** lesions that are associated **with Risk of** IBC development is critically needed, as this may help not

only to reduce **Risk of** development **of** IBC but also to ***prevent*** overtreatment **of** patients **with** lower **Risk of** IBC. **in** this regard, a multigene expression assay, consisting **of** genes related to proliferation, as well as PR and GSTM1, was recently shown to predict **Risk of Subsequent** ipsilateral IBC **in Women with *DCIS***. Similarly, immunohistochemically detected expression **of** p16, COX-2, and Ki67 has also been associated with increased **Risk of** IBC development. However, these findings require confirmation. Furthermore, novel prognostic (and ultimately predictive) **Markers** may emerge from assessment **of** gene expression patterns on a global scale. **in** this regard, microRNAs (miRNAs), which are noncoding RNAs that are master regulators **of** gene expression, are thought to contribute to the development of **Invasive Cancer**. Against this background, our overarching goal is to facilitate early detection of patients **with *DCIS*** at **Risk of** IBC development. To this end, building upon our previous work, we propose to use ***Clinical*** data and archived formalin-fixed paraffin-embedded (FFPE) tissue from a large, population-based multi-center cohort **of** 7,275 patients initially diagnosed **with *DCIS*** in community-based health plans and followed for **Subsequent** IBC development, to identify and then validate miRNA expression changes associated **with Risk of Subsequent** IBC, to evaluate **Risk of** IBC in association **with** 2 previously identified sets **of Markers** (Oncotype DX ***DCIS*** score; positivity for p16, COX-2, and Ki67 ***protein expression***), and to examine the association between ***Clinical*** factors and **Risk of Subsequent** IBC **in** the largest such study to date. Our **Molecular** epidemiologic study, which proposes to apply state-of-the art technologies to archived ***DCIS*** FFPE specimens for the detection **of Molecular** changes associated **with Risk of** IBC development **in** a large, multi-center population-based cohort **of Women** initially diagnosed **with *DCIS***, has the potential to lead to approaches that will help to refine identification **of Women** who need enhanced surveillance and early aggressive treatment.

Pediatrics

Principal Investigator: Charles Barone, M.D.
Prenatal Exposures and Child Health Outcomes: A Statewide Study (UG3OD023285)
Subcontract

Evidence from epidemiologic studies demonstrates the negative effects of both chronic and acute stress during gestation. These effects may occur perinatally or later in the child's life. The COVID-19 global pandemic has led to unprecedented mass disruption of social and financial security as well as changes in medical care delivery. These conditions are causing elevated levels of distress even for portions of the population that may have previously been protected from psychosocial stress. Of particular concern for pregnant women and their children, there may be direct biological effects related to infection with SARS-CoV-2 as well as substantial indirect psychosocial effects during critical periods of development with long-lasting impact on children relevant to the Environmental Child Health Outcomes (ECHO) program. This proposal addresses how psychosocial stress related to the COVID pandemic may impact perinatal and neurodevelopmental outcomes. Furthermore, evidence suggests that psychosocial stress is associated with both the gastrointestinal and vaginal microbiomes. Therefore, we will determine if maternal microbiomes or infant microbiomes mediate the impact of psychosocial stress on perinatal and neurodevelopmental outcomes. In aim 1, we address the maternal microbes and their role in mediating perinatal outcomes caused by maternal psychosocial stress during pregnancy. In aim 2, we focus on maternal psychosocial stress and its impact on neurodevelopment as mediated by the changes to the infant microbiota. We will examine these objectives in the context of our ongoing work, and as an extension of the parent grant (UG3/UH3OD023285, Paneth), where our organizing principle is that for many environmental exposures the most sensitive period of risk for child health is pregnancy and the perinatal period. The parent grant explores three primary exposures: toxic, nutritional, and inflammatory in a stratified random sample of state births recruited in the first trimester of pregnancy. Of the planned 1,100 new enrollments of cohort dyads into ECHO, more than 700 pregnant women have been consented, and, with a 75% follow up rate, more than 400 children have already been seen in infancy. Over 300 women are expected to be enrolled during the project period. While this research will leverage the local ECHO cohort, the project is designed to engage ECHO team science through two distinct but complementary ECHO-wide projects: (1) incorporation of data from two cohorts (O'Conner & Deoni) to address the aims proposed above and (2) provision of data and biospecimens to separate COVID supplement (Transande) which addresses SARS-CoV-2 seropositivity/COVID illness as well as psychosocial stress (assessed via questionnaire and cortisol measured in hair) as they relate to shortened gestation and other perinatal outcomes. Our efforts will not only inform the specific hypotheses being tested but will also inform “touch-free” methods for sample collection and patient interaction. The

work proposed herein complements the parent grant by addressing an exposure (maternal psychosocial stress during a time of pandemic), not included in the parent grant, and at least two of ECHO's outcomes (PPP and neurodevelopment).

Principal Investigator: Maureen Connolly, M.D.
Using Evidence-Informed Interventions to Improve Health Outcomes among People Living with HIV: Transgender Women Engagement and Entry to Care Project (TWEET) (U69HA310670100)

There is a pronounced need for implementation of evidence-informed interventions to reduce HIV-related health disparities and improve health outcomes, including improving retention in care, treatment adherence, and viral suppression for people living with HIV (PLWH). In 2016, 81.7% of PLWH in the U.S. were retained in care, and approximately 85% were virally suppressed.1 The need for these efforts is felt most deeply among racial/ethnic minority men who have sex with men (MSM) and among transgender women. Retention in care for young Black MSM (YBMSM) was lower (75%) than the national RWHAP average. 79% of transgender women has achieved viral suppression. Transgender Black/African American had lower percentages of viral suppression across demographic subgroups compared to transgender Hispanic/Latinos and whites. PLWH often have complex behavioral health comorbidities that complicate their ability to maintain treatment adherence and continuous care. A 2010 survey of 246 Ryan White Part C medical providers found that 30% of PLWH had a substance use disorder and 35% had a serious mental illness.2 Other studies have found between 35-64% of PLWH suffer from PTSD. 3,4Although research has defined best practices for addressing steps along the HIV care continuum, the implementation of such interventions lags behind. This is especially true for the implementation of interventions that: 1) are tailored for Black MSM and transgender women; 2) address the co-occurring behavioral health needs of PLWH; 3) tackle the social, structural, and environmental barriers– including experiences of trauma–that hinder attainment of positive health outcomes. This initiative will focus on supporting the implementation of interventions to improve HIV-related health outcomes in the above focus areas. The implementation of the interventions will be evaluated using an implementation science approach. The evaluation will systematically collect and analyze project data in order to measure and monitor progress towards meeting the goals and objectives of the project, while also evaluating the ability of specific interventions to improve the HIV care continuum outcomes of linkage, retention, re-engagement, and viral suppression among client participants. Lessons learned and best practices will be identified throughout the course of the initiative and will be shared rapidly with the larger field.

Psychiatry/Behavioral Health

Principal Investigator: Lisa Matero, Ph.D.
A Technology-based Intervention to Reduce Alcohol Use after Bariatric Surgery (1R34AA027775)

Despite bariatric surgery being the most effective weight loss intervention for patients who are severely obese, as many as 1 in 5 patients will develop an alcohol use disorder after their surgery. Changes in metabolism, hormone levels, and behavior as a result of bariatric surgery alter the rewarding effects of alcohol while concurrently changing its absorption rate, putting patients at significantly elevated risk of hazardous drinking. Simply providing education to this vulnerable patient population about post-surgical risks has not been sufficient to reduce alcohol use, yet comprehensive in-person interventions are met with significant challenges, including hours-long distances between patients and their bariatric surgery programs. Thus, our long-term goal is to increase access to an empirically supported intervention for reducing alcohol use among patients who undergo bariatric surgery by leveraging technology. Our intervention, rooted in motivational interviewing and the transtheoretical model, is a two-session computerized brief intervention (CBI), supplemented by six months of tailored text messaging based on participants' CBI results and subsequent fluctuations in their readiness to change. The purpose of the proposed study is to optimize this technology-based intervention for patients who undergo bariatric surgery and to examine feasibility and acceptability of the intervention. In the first phase, patient interviews (n= 20) will be utilized to identify preferences for intervention content and treatment delivery. Ten patients will then participate in an open trial of the intervention, which will be subsequently revised based on feedback from these patients. In Phase 2, patients (N = 60) will be recruited between 3 and 6 months following bariatric surgery and randomized to the intervention or treatment as usual control group. All patients will complete baseline questionnaires and at 1, 3, 6, and 9 months post-assessments. We

expect that this intervention will be both feasible and acceptable to patients. Results will be used as preliminary data to inform a large, fully powered clinical trial to test the larger efficacy of this intervention. Although primary outcomes focus on feasibility and acceptability, we also expect that patients assigned to the intervention will have a longer time to their first post-surgical drink, report more days of abstinence, fewer drinks per drinking day, and a lower prevalence of alcohol use disorder after bariatric surgery compared to controls. This project is innovative because it expands upon existing interventions for bariatric surgery patients by implementing evidence-based strategies for alcohol use. By utilizing a technology-based approach, we can also reach a larger number of patients to prevent initiation of drinking, reduce current alcohol use, and facilitate better engagement in care, should individuals opt into traditional treatment approaches. The proposed line of research is significant and relevant to NIH's mission because the intervention is expected to reduce the likelihood that patients will develop an alcohol use disorder following bariatric surgery. Given the potential of wide dissemination at low cost, the proposed study has high potential public health and clinical significance.

Principal Investigator: Lisa Matero, Ph.D.
Pathways from Chronic Prescription Opioid Use to New Onset Mood Disorder
(R01DA043811)

Our previous work indicates a **New** period of **Opioid** analgesic **Use** (OAU) lasting beyond 30 days, is associated with increased risk for **New Onset** depression, depression recurrence and transition **to** treatment resistant depression compared **to** 1-30 OAU days. In multiple studies with robust control for confounding, including pain severity, longer OAU predicted **New Onset** depression in middle-aged patients (substantially older than the age of risk for **New Onset** depression in the population) with no recent ***History*** of depression, no evidence of opioid misuse and no recent ***History*** of OAU. Our research utilized electronic medical record (EMR) data **from** large samples of Veterans Administration (VA) and ***Private Sector*** patients. Compared **to** patients who discontinued OAU within 30 days, patients with 31-90 days OAU were 18% (VA) **to** 33% (***Private Sector***) more likely **to** have new **Onset** depression. In patients with >90 days OAU, the likelihood increased **to** 35% in VA and 105% in private sector data. In patients with recent depression and in remission, initiation of OAU, compared **to** no OAU, was associated with depression recurrence in VA (HR=2.2, 95% CI = 2.0-2.3) and ***Private Sector*** data (HR=1.8, 95% CI = 1.4-2.2). We found that patients with depression were 22% more likely **to** develop treatment resistant depression with OAU of 31-90 days and 49% more likely with OAU of >90 days. The consistency of findings, replication in VA and ***Private Sector*** patients, and rigorous control for pain support the hypothesis that OAU is likely a risk factor for depression, as well as its recurrence and severity. A prospective study is needed **to** confirm and advance this line of research, in part because medical record data lack lifetime histories of **Mood** disorders and other ***Risk Factors*** such as substance **Use** disorder, ***trauma exposure***, as well as good measures of functional impairment, sleep quality and social support. Also, EMR data do not contain prospective data on the sequence of pain, OAU and ***depression symptom*** development. In the proposed research, we hypothesize that events prior **to** OAU, such as ***History*** of depression, will increase risk of post- OAU **New Onset** major ***depressive*** episode. Second, we hypothesize that OAU-related adverse outcomes, such as **Opioid** misuse, sleep apnea, occur after long term OAU and subsequently contribute **to New** onset depression. Third, we hypothesize that OAU leads **to** worse depression that in turn contributes **to** higher OAU and still worsening depression, independent of longitudinal pain measures. Fourth, we focus on depression phenotypes (anhedonia, vital exhaustion, dysthymia, comorbid substance **Use** disorder) **to** elucidate the new onset depression phenotypes most strongly associated with **Chronic** OAU. Fifth, we determine which depression phenotypes are ***Risk Factors*** for incident **Opioid** misuse and abuse.data is obtained at baseline, 6 month and 12 months follow-up with monthly brief assessments for trajectory analysis. Our innovative research has great potential **to** advance understanding of depression in OAU and **Opioid** misuse, abuse/use disorder. Results will inform pain management and safe **Opioid** prescribing for patients with **Chronic** non-cancer pain.

Radiation Oncology

Principal Investigator: Stephen Brown, Ph.D.
MRI Signatures of Response to High-Dose Radiotherapy in Rat Models of Cerebral Tumor
(R01CA218596)

In some cases, e.g. small brain tumor metastases, responses to single or multiple fraction high-dose

radiation therapy (HD-RT) have been remarkable, suggesting that HD-RT tumor control is at least as effective as biologically equivalent doses of conventional fractionated radiation therapy (CF-RT), even in radioresistant tumors. Although the mechanism for its effectiveness is not well understood, HD-RT is becoming accepted practice for a variety of tumors, including brain tumors. Our recent preclinical study using MRI measures of short-term changes in tumor physiology after HD-RT in a small-animal model of cerebral tumor suggests a physiological response that includes vascular effects but is multifactorial and temporally variable. Hypothesizing that these short-term changes may both explain the increased effectiveness of HD-RT, and serve as a predictor of long-term response, we propose to investigate the relationship between short-term physiological changes after HD-RT and long-term outcome as a result of that therapy. In counterpoint, we will also study physiological changes during and after CF-RT. Detailed poroelastic modeling is proposed to generate a map of local solid and fluid parameters (stress, flow) that will help explain short-term changes in physiology. Aim 1 studies short-term changes in measures of tumor physiology as predictors of response. Aim 2 describes the behavior of these same measures over the course of CF-RT. Our long-range goals are to develop noninvasive biomarkers of response that predict tumor control after HD-RT and CF-RT, and to describe physiological changes and related biomarkers that might be used to optimize the order and timing of RT and adjuvant chemotherapies.

UROLOGY

Principal Investigator: Sahn-ho Kim, M.D.
Role of Androgen Receptor in Telomere Stability: A Novel Therapeutic Strategy in Potentiating AR-Targeted Therapies for the Treatment of Prostate Cancer (WX1XWH-17-1-305) Subcontract

The androgen receptor (AR) plays a critical role at all stages of prostate cancer (PCa) (1-4). Therefore, for over seven decades, treatments that target AR action have been a mainstay for the treatment of advanced PCa. However, these therapies do not provide a lasting remission and the disease usually recurs as castration-resistant prostate cancer (CRPC), which, remarkably, still relies on AR. New drugs that target AR action (e.g., enzalutamide and abiraterone) provide incremental benefit but no cure. We have discovered a new role of AR, and we have found a way to exploit this role and create a more effective way to kill PCa cells. We discovered that AR plays a critical role in maintaining telomere stability, even in CRPC cells (5-7). This is important because telomere stability is essential for genome stability and cell survival (8,9). Telomeres are the DNA-protein structures that cap the ends of linear chromosomes, which are double stranded DNA with a single-stranded overhang (12), and that protect them from fusing to each other (8,9). When such protection is lost (an event referred to as telomere dysfunction), chromosome ends are recognized as lesions and this results in the activation of a DNA damage response (DDR) at the telomeres (8,13). The DDR includes recruitment of specific proteins to the telomeres and activation of ATM. ATM activation leads to the activation of Chk2, a cell cycle checkpoint protein that activates a checkpoint control. Checkpoint activation causes cells to arrest, allowing for repair so that cells may resume cell cycle progression to mitosis. Unprotected telomere ends may undergo fusion or recombination (processes referred to as ‘repair’), leading to the formation of telomere end to end fusions and telomere sister chromatid exchanges. Such telomere aberrations push cells into breakage fusion- bridge cycles, resulting in unequal distribution of genetic material to daughter cells and the development of genome instability (14,15).

Notably, when cells with telomere dysfunction are treated with an ATM inhibitor, checkpoint activation is abrogated, allowing cells to enter mitosis with damaged telomeres; the more damage, the more likely the cell will activate a cell death pathway (7,16,17). We discovered that a subset of AR in human PCa cells is associated with telomeres, and that AR antagonists, including bicalutamide (Casodex), enzalutamide (MDV3100), or AR-siRNA, induce telomere dysfunction and activate a DDR at the telomeres, in both androgen-sensitive (e.g., LNCaP) and castration resistant(e.g., C42B and 22Rv1) PCa cells (5-7). Most notably, we found that treating CRPC cells with AR antagonist plus ATM inhibitor abrogated checkpoint activation and killed cells that were resistant to growth inhibition by AR antagonist alone (7). These effects on cells in vitro lead us to test the hypothesis that co-treatment with AR antagonist and ATM inhibitor will suppress the growth and recurrence of CRPC in vivo (Aim 1). In addition, we have observed that AR antagonist treatment induces telomere aberrations in LNCaP, C4-2B and 22Rv1 cells (6,7). Therefore, we hypothesize that PCa cells that survive treatment with AR antagonist may develop genome instability, which may promote tumor progression (15,18,19) and help to explain the recurrence of PCa treated with AR antagonist alone

Impact: Combined treatment with AR antagonist plus ATM inhibitor may represent a new way to effectively treat patients with CRPC.

Principal Investigator: Nallasivam Palanisamy, Ph.D.
Comprehensive Molecular Profiling of Prostate Cancer in African American Population: Unraveling Molecular Heterogeneity **(W81XWH-16-1-0544)**

Background: Among various epithelial cancers, genomic studies of prostate cancer (PCa) identified several molecular markers including E26 transformation specific (ETS) gene fusions, *SPINK1* and many others. The prevalence of these molecular markers in African American (AA) prostate cancer has not been studied to the extent that has been studied for Caucasian (CA) prostate cancer to understand the racial disparity. Contrary to the conventional approaches, new approaches are needed to understand the underlying genetic disparity between the AA and CA PCa. Therefore, we have developed refined approaches to screen ***whole mount radical prostatectomy*** tissues rather than ***systematic sampling*** of the tumor from dominant/index nodule to assess the fundamental molecular differences in the incidence of molecular markers between AA and CA prostate cancer. **Hypothesis/Objective:** Prostate molecular markers have been first discovered using the cancer genome of individuals other than African American decent. Due to the lack of screening in a large cohort of AA PCa the prevalence of these markers in AA PCa is not known. *Given the fundamental differences in the ancestral history of the genome of AA and CA* the prevalence of these molecular markers may be markedly different. Conventional systematic sampling approaches may not reveal the true prevalence in AA PCa. Therefore, we propose to undertake an innovative approach using **whole mount radical prostatectomy** to understand the racial disparity. Based on the multifocal nature, morphological heterogeneity and clonal origin of many tumor foci, we *hypothesize that different tumor foci may harbor distinct driver molecular aberrations making more complex disease and difficult to manage.* Moreover, it is likely that smaller tumor foci with high Gleason grade and distinct driver aberration can be easily missed by conventional approaches. Therefore, in our innovative approach we will be able to understand the racial differences in the overall incidence of molecular markers based on **whole mount radical prostatectomy** (see preliminary data) screening rather than systematic sampling of dominant nodule alone. Further, in order to maximize the chances of identifying new molecular subsets of AA prostate cancer, we hypothesize that we need to interrogate the genome of AA patients that are negative for any of the known molecular markers in all the tumor foci and subjecting them for in-depth genomic characterization.

WOMEN'S HEALTH

Principal Investigator: Ramandeep Rattan, Ph.D.
AMPK as a Novel Host Factor Regulating Ovarian Cancer Progression (W81XWH-17-1-0170)

We and others have demonstrated the re-purposing of the anti-diabetic drug metformin in EOC. Retrospective studies alsosupport the beneficial survival effects of metformin in diabetic EOC patients. The echanism of metformin's anti-cancer effects has been largely attributed to activation of its target enzyme, AMPK (Adenosine monophosphate-activated protein kinase). AMPK is a highly conserved cellular energy sensor that plays a critical role in the regulation of cell growth by regulating protein synthesis via mTOR; cell cycle by cyclins and p21; insulin and IGF-1 signaling and lipid metabolism. From a previously funded DOD Pilot grant, we recently showed that AMPK is a key player in metformin's ability to limit high fat-diet and adipocyte mediated promotion of EOC. We also reported that AMPK activation occurred both in the host and the tumor cells, indicating its modulation on both host factors and tumor cells.

To further gain insight into the role of host AMPK in restraining EOC growth, we generated syngeneic ID8 ovarian tumors in AMPK alpha1 knockout (KO). Our preliminary data showed: **1)** AMPK KO mice exhibited an accelerated EOC growth and significantly decreased survival compared to wild type (Wt) mice. **2)** Absence of AMPK□1 resulted in a dysregulated host immune environment characterized by increased myeloid derived suppressor cells (MDSCs) with amplified immunosuppressive ability. **4)** Absence of AMPK altered the energy metabolism of MDSCs by shifting their metabolic state to a highly active state, independent of fatty acid oxidation, which correlated with its increased arginase dependent immunosuppressive function. MDSCs have emerged as critical elements of cancer-induced immune dysfunction by creating immunosuppressive conditions, allowing unchecked tumor growth via their ability

to suppress T-cell proliferation and function. EOC has been shown to be associated with infiltrated MDSCs that enhance incidence, metastasis and stemness. Recently, the understanding of energy metabolic pathways used by immune cells to convey their effector functions has seen major advances. AMPK has emerged as one of the central molecules regulating the metabolic shift in the energy pathways of various immune cells vital to their functioning, but its role in regulating MDSC is unknown.

Principal Investigator: Ramandeep Rattan, Ph.D.
Determining the Mechanisms by which Calorie Restriction Alters Macrophage Polarization to Promote an Anti-Tumor Environment in Epithelial Ovarian Cancer (R01CA249188)

Epithelial **Ovarian Cancer** (EOC) is **the** leading cause of gynecologic **Cancer** death **in the** United States, and despite **the** advances made **in** EOC therapy, **the** five-year survival rate has been stagnant at approximately 45% for decades. **the** current standard ***Therapeutic*** approach is accompanied **by** toxic side effects, and **the** high cost of ***chemotherapy*** places **an** enormous ***financial burden*** on patients, reducing their quality of life. Thus, there is a critical need **to** identify low-cost approaches that can both enhance responses **to** current therapies and improve survival **by** inhibiting ***tumor progression***. **Calorie Restriction** has a strong capacity **to** alter **the** responses of cancer cells and host cells **in the** ***tumor microenvironment***, yet **the Mechanisms** of such cross talk are elusive. Our long- term goal is **to** identify dietary **Mechanisms** that can be modulated **to** impede EOC progression and thus be translated into **the** development of more effective therapies and lifestyle changes for EOC patients. Our studies show that 30% **Calorie Restriction** (CR), without malnutrition, **in** a ***mouse model*** of EOC decreases tumor burden, ascites, and metastases. Additionally, our preliminary data strongly suggest that CR inhibits EOC due **to** a decrease **in** alternatively activated pro-tumorigenic (M2-like) macrophages and a corresponding increase in classically activated **Anti-Tumor** macrophages (M1-like), resulting **in an** increased M1/M2 ratio. This is important as 50% of cells **in** EOC ***Ascites*** are pro-tumorigenic macrophages (M2-like) and **an** increased M1/M2 ratio is an indicator of better prognosis **in** EOC patients. **Macrophage Polarization** is regulated, **in** part, through metabolic reprogramming, with M1-like macrophages mainly relying on glycolysis and M2-like macrophages primarily utilizing aerobic ***Respiration***. AMPK, a well-known regulator of energy ***Metabolism***, controls **the** ***balance*** between glycolysis and ***mitochondrial Respiration*** and our studies demonstrate that ***Mice*** fed a CR diet have increased AMPK activity. **the** overall objective of **the** proposed research is **to** determine **the** mechanism **by which** a CR diet regulates **Macrophage Polarization in** EOC. Our central hypothesis is that **the** increased activity of AMPK due **to** a CR diet remodels **the** glycolysis-tricarboxylic acid (TCA) ***pathway*** **to Promote an** M1 (**Anti-Tumor**) phenotype, thus leading **to** a robust **Anti-Tumor** immune response and reduction of **the** tumor. This hypothesis will be tested **in** two aims: Aim 1 will identify **the** effects of increased AMPKα1 activity due **to** CR on **the** EOC progression and Aim 2 will determine **the Mechanisms** underlying CR-mediated **Macrophage Polarization** in EOC. **the** proposed study is expected **to** have a ***translational impact*** **by** elucidating how **the** simple approach of dietary intervention can cause metabolic regulatory changes responsible for **Macrophage** plasticity during EOC. Ultimately, this process could be exploited **to** tailor novel complementary ***Therapeutic*** strategies and life-style modifications **to** curb progression of EOC and other types of **Cancer**.

Part III – Population and Health Sciences

- **Center for Health Policy and Health Services Research**
- **Center for Individualized and Genomic Medicine Research**
- **Department of Public Health Sciences**

Center for Health Policy and Health Services Research

Principal Investigator: Brian Ahmedani, Ph.D.
Patient perspectives on clinical approaches to prevent opioid related suicide attempts (U01MH114087)

The opioid attributable death rate in the U.S. has more than quadrupled over the last 20 years. Simultaneously, suicide has become the 10th leading cause of death and 8th leading cause of death for American Indians and Alaskan Natives. More than 48,000 people die by suicide annually, and it is estimated that for every suicide death there are 25 attempts; clearly indicating many opportunities for prevention. Experts estimate that up to 30% of opioid overdoses are suicides. Those using opioids to manage chronic pain may be at particular risk for opioid-related mortality through intentional or accidental overdose. The Suicide Prevention Resource Center was formed in response to multiple agency recommendations regarding suicide prevention which in turn created the Zero Suicide framework to address suicide prevention in health care settings. The framework is a set of evidence-based approaches for suicide prevention which can be tailored by health care settings. The Mental Health Research Network (MHRN) received funding in 2017 for five years from the National Institute of Mental Health (NIMH) to evaluate the implementation of the Zero Suicide framework across six health systems serving over nine million people (Award # U01MH114087). This evaluation is not focused on understanding the experience of patients who may be at high risk for suicide such as those with diagnosed Opioid Use Disorder (OUD), those without this diagnosis who are using opioids for pain management, and native people. In addition, although providers and health system leaders are involved in the parent NIMH-funded study, we have little information from providers who are treating patients with OUD, using opioids for their patients' pain management, and/or practicing within native communities. We do not know to what extent they have been involved in the Zero Suicide implementation nor their perceptions of its effectiveness. These providers could give clinical and research teams valuable suggestions for tailoring the implementation for high-risk patients. To address these gaps, we propose to incorporate the voice of the patient and provider stakeholders as part of the implementation of the Zero Suicide framework in three health settings from the NIMH-funded parent award as well as the Southcentral Foundation which is an Alaska Native-owned, nonprofit health care organization serving nearly 65,000 American Indian/Alaskan Native people living in and around Anchorage, Alaska. We will test the following aims as part of this proposal: AIM 1: Systematically engage patients, providers, national consumer advocacy groups, and MHRN scientists in formulating research questions to address the prevention of opioid-related overdoses in people with OUD or people without diagnosed OUD who are using opioids for pain management; and AIM 2: Understand how people with OUD or people without diagnosed OUD who are using opioids for pain management are experiencing the implementation of the Zero Suicide framework in four diverse health systems (Kaiser Permanente Northwest [Oregon] and Southern California, Henry Ford Health Systems [Detroit], and Southcentral Foundation [Anchorage and surrounding communities]).

Principal Investigator: Brian Ahmedani, Ph.D.
An Evaluation of the National Zero Suicide Model Across Learning Healthcare Systems (U01MH114087)
Developing Tools to Evaluate the Impact of Safety Planning and Lethal Means Assessment on Suicide Outcomes (U01MH114087S1) Subcontract

Suicide is a major public health concern – it is the 10th leading cause of death and number one cause of injury related death in the United States (US). Due to national concern about this problem, the National Action Alliance for Suicide Prevention and the US Surgeon General published the joint 2012 National Strategy for Suicide Prevention (NSSP). The NSSP outlines a series of Aspirational Goals (AG) with the specific objective to reduce the national suicide rate by 20%. AG 8 and 9 promote healthcare settings as

primary targets for suicide prevention. Consistent with this message, Henry Ford Health System's (HFHS) Perfect Depression Care (PDC) Zero Suicide Initiative was the first US program linked with a substantial decrease in the suicide rate among behavioral health patients after implementation. These findings have motivated national promotion of this model for suicide prevention in health systems. As such, the National ZS Model (NZSM) was developed, based on the HFHS PDC program, but with flexibility to allow adaptation to diverse settings and patient populations. Overall, the NZSM is founded on the realization that suicidal individuals often fall through multiple cracks in a fragmented and sometimes distracted healthcare system, and on the premise that a systematic, comprehensive approach to care is necessary for suicide prevention. The comprehensive approach of the NZSM includes implementation of a series of clinical and quality strategies within the following components: 1) Identification of those at-risk, 2) Engagement and care management; 3) Effective treatment, and 4) Care transition. Despite being a model program promoted internationally for healthcare system quality improvement in suicide prevention, the NZSM has very limited evidence outside of the findings from the HFHS PDC program. The proposed study seeks to conduct a comprehensive process and outcome evaluation of NZSM implementation in real-world clinical settings across 6 large, diverse Mental Health Research Network Affiliated Learning Healthcare Systems providing healthcare for over 9 million individuals each year. The project aims are to:1) Collaborate with health system leaders to develop EHR metrics to measure specific quality improvement targets and care processes tailored to local NZSM implementation, 2) Examine the fidelity of the specific NZSM care processes implemented in each system, and 3) Investigate suicide attempt and mortality outcomes within and across NZSM system models. Study data are captured using electronic health records and insurance claims. Given strong national support for NZSM, if it is found to be effective to reduce suicide behavior, this model will have nationwide implications for suicide prevention in healthcare settings.

Principal Investigator: Brian Ahmedani, Ph.D.
Evaluating the Impact of Changes to Opioid Prescribing Across Health Systems Implementing Zero Suicide (U01MH114087S2)

Suicide is a major public health concern – it is the 10th leading cause of death and number one cause of injury related death in the United States (US). Suicide rates have risen over 25% in the last 15 years. In parallel, the nation is struggling with an opioid epidemic. Opioid prescribing, heroin use, and opioid related overdose deaths have risen substantially. Approximately 15% of all suicide deaths are due to drug overdose, and prescription opioids specifically, are commonly used among people who attempt suicide. Health systems across the country have made decisions to tackle both of these public health crises – implementing policies to dramatically reduce opioid prescribing as well as clinical processes within the Zero Suicide model to improve suicide prevention for their patients. The parent award for this supplement is focused on evaluation of Zero Suicide implementation, including fidelity to each of these clinical processes and suicide outcomes, across 6 large, diverse Mental Health Research Network- affiliated Learning Healthcare Systems providing healthcare for over 9 million individuals each year.

Given the overlap, significant reductions in opioid prescribing as part of newly implemented policies should lead to a reduction in the availability of opioids. These reductions may result in a public-health level means reduction approach to reduce suicide. Means reduction is among the interventions recommended within Zero Suicide. The concurrent implementation of these new opioid prescribing policies in the context of implementation of Zero Suicide allows the opportunity to evaluate how changes in opioid prescribing impacts suicide outcomes in health care. This supplement project seeks to accomplish three specific aims: 1) Evaluate changes in opioid prescribing patterns during the period of NZSM implementation across health systems, 2) Investigate whether changes in opioid prescribing patterns reduce suicide attempt and mortality, and 3) Investigate whether changes in opioid prescribing patterns reduce opioid- related suicide attempt and mortality poisonings. Overall, we propose to use an Interrupted Time Series Design, consistent with the parent award, to measure changes in prescribing patterns and suicide outcomes.

Principal Investigator: Brian Ahmedani, Ph.D.
Effectiveness and Implementation of a Peer Mentorship Intervention (PREVAIL) to Reduce Suicide Attempts among High-risk Adults (R01MH115111)

Suicide is **a** growing ***Health*** problem in the US with more than 42,000 **Suicide** deaths and approximately 1 million **Suicide Attempts** occurring each year. Individuals identified as **High risk** for **Suicide** are often

referred to health systems for mental ***Health*** treatment; however, there are few ***Health*** service interventions known to reduce suicides or **Suicide Attempts**. Few interventions have focused on addressing ***hopelessness*** and thwarted belongingness, two ***Risk Factors*** for **Suicide** emphasized by the US Surgeon General. **Peer** mentorship is **a** novel approach **to** addressing these ***Risk Factors***. **Peer *Mentors*** are individuals with **a** lived experience of suicidal thoughts or behaviors who have achieved stable recovery and work **to** support others at risk. There are over 20,000 state-certified professional **Peer** specialists who currently provide services **to** many high-risk individuals and who could serve as ***Mentors***; however, no **Peer Mentorship** protocols have been rigorously studied **to** determine their ***Safety*** and **Effectiveness** or the barriers **to Implementation**. PREVAIL is **a Peer Mentorship Intervention** developed in **a** prior ***research study***. PREVAIL consists **of** 3 months **of** one-to-one sessions between **Peer *Mentors*** and individuals recently hospitalized due **to Suicide** risk, with sessions typically occurring in community settings. **Peer *Mentors*** adhere **to Suicide *Safety*** protocols and are supervised by **a** mental ***Health*** clinician. Peers ***Mentors*** share their experiences and use semi-structured discussion guides that include content related **to** improving hope (e.g., setting hopeful ***Goals***, identifying reminders **of** hope) and belongingness (e.g., developing supportive relationships). PREVAIL has been pilot tested in **a** sample **of** 70 participants and was found **to** be acceptable, feasible, and without ***Safety*** concerns. This study will conduct **a** two-site, single-blinded, ***Randomized*** controlled trial **of** 490 ***Adult Patients*** admitted to an inpatient psychiatric unit for **Suicide** risk **to** assess the **Effectiveness of** the PREVAIL **Intervention**. Participants will be ***randomly assigned*** **to** receive either 3 months **of** the PREVAIL **Intervention** or an enhanced usual care control condition. Assessments at baseline, 3, and 6 months will measure ***suicidal ideation***, suicide attempts, ***hopelessness***, and belongingness. Specific Aim 1 **of** this study is **to** determine whether PREVAIL is effective at reducing the severity **of *suicidal ideation*** or the likelihood **of** making **a Suicide** attempt among recipients. Specific Aim 2 is **to** assess the effect **of** PREVAIL on ***hopelessness*** and belongingness; exploratory analyses will assess whether these effects explain improvements in ***suicidal ideation*** and **Suicide Attempts**. Specific Aim 3 **of** the study is **to** identify barriers and facilitators **to Implementation of** PREVAIL by health systems. Qualitative interviews with key stakeholders (e.g., ***Health*** system leaders, **Peer *Mentors***, ***Patients***) will be analyzed **to** guide future, timely **Implementation of** PREVAIL. The effect **of** PREVAIL on outcomes relevant to ***Health*** systems, such as readmissions and ***Outpatient Care***, will also be explored.

Principal Investigator: Brian Ahmedani, Ph.D.
ER/LA Opioid Post-Marketing Requirement Studies: Observational Study (1A (2065-1) Subcontract

The food and Drug Administration (FDA) has asked the companies that are New Drug Application (NDA) holders of extended-release/long-acting (ER/LA) opioids to conduct one or more studies to provide quantitative estimates of the serious risks of misuse, abuse, addiction, overdose, and death associated with long-term use of opioid analgesics for management of chronic pain, among patients prescribed ER/LA opioid products. Although abuse and misuse of prescription opioids have increased over the past decade, there is debate about the magnitude of misuse, abuse, and addiction among patients who are treated with opioids for chronic pain. Further, although there appears to be comorbidity of opioid use disorders with other substance use and psychiatric disorders, there is insufficient data to estimate how the risk of these outcomes varies by the presence of risk factors among patients treated with opioids long-term. This study seeks to fill that gap. '[-The primary objective is to quantify the serious risks of misuse, abuse, and addiction associated with long-term use of opioid analgesics for management of chronic pain among patients prescribed ER/LA opioid products. Specifically, we will:

1. Estimate the incidence of misuse, abuse, and addiction (separately, and as a composite measure) associated with long-term use of opioids for chronic pain
2. Evaluate and quantify risk factors for misuse, abuse, and addiction associated with long-term use of opioids for chronic pain, including:
    a. product/formulation (grouped)
    b. whether or not product is an abuse-deterrent ER/LA formulation
    c. whether or not participants are receiving ER/LA opioids concomitantly with IR opioids
    d. average dose (in morphine equivalents [MEqs]) and duration of opioid use
    e. prescriber specialty
    f. indication
    g. demographics (e.g., age, sex, race/ethnicity)
    h. other clinical factors (e.g., concomitant medications, personal or family history of substance abuse, history of psychiatric illness, tobacco use)

i. Type of delivery system (e.g., integrated, network/fee-for-service) and state.
j. Mu opioid receptor OPMR1 and cytochrome P450 enzyme (e.g., 3A4 and 2D6) status

3. Estimate the risk of misuse, abuse, and addiction (separately and as a composite measure) and identify risk factors in those who initiate ER/LA opioids, but do not progress to longer-term use (>90 days). We will then compare, qualitatively, differences in risk and risk factors among individuals who use ER/LA opioids for 90 days or fewer and those who opioids for more than 90 days.
4. Evaluate and describe deaths and overdoses encountered among the recruited patient population throughout the length of the study.
5. Qualitatively assess risk related to efficacy, triangulating results from all study components

In addition, a supplemental cross-sectional sample of patients on long-term (>1 year) opioid therapy will provide an estimate of the prevalence of misuse, abuse, and addiction associated with longer-term opioid therapy.

Principal Investigator: Jordan Braciszewski, Ph.D.
A Pragmatic Trial of Parent-focused Prevention in Pediatric Primary Care: Implementation and Adolescent Health Outcomes in Three Health Systems (UG3AT009838) Subcontract

Fifty percent of all adolescents will use some form of illicit drugs before the end of high school, 20-25% will meet criterial for depression, and many others will engage in health compromising behaviors like delinquency and violence with consequences for their long-term health. Evidence-based interventions shown to prevent these behavioral health concerns could improve adolescent health trajectories if implemented widely in pediatric primary care. The American Academy of Pediatrics? Bright Futures recommends that pediatricians offer developmentally tailored anticipatory guidance to all parents to support their children's healthy development, but programs providing guidance are not offered universally. This UG3-UH3 application tests the feasibility and effectiveness of implementing Guiding Good Choices, a universal, evidence-based anticipatory guidance curriculum for parents of early adolescents, in three large, integrated healthcare systems serving socioeconomically diverse families. This intervention reduced adolescent alcohol, tobacco and marijuana use, depression, and general delinquency in two previous rigorous randomized controlled trials. It also strengthened parenting practices and parent-adolescent relationship quality, both broadly protective against behavioral health concerns. Guiding Good Choices has the capacity to achieve population-level impact on adolescent health if made widely available through pediatric primary care. Parents trust pediatricians? advice regarding their children's well-being, and current research with socioeconomically diverse groups suggests that they are eager to participate in family-focused programs offered in primary care clinics. Building on this body of research, the investigative team, in close cooperation with the NIH Healthcare Systems Research Collaboratory and healthcare systems partners, will conduct a cluster-randomized trial of Guiding Good Choices in 72 pediatric primary care practices. Half will be randomly assigned to offer the program universally to parents of adolescents ages 11 to 12, and half will serve as usual care controls. The study will use a workflow that is easy to adopt, implement, and maintain by primary care clinics to enroll families in the intervention at the adolescent well visit. We anticipate recruiting over 4,500 families into the trial. The team will use the RE-AIM framework to test implementation outcomes and effectiveness, including hypothesized reductions in several behavioral health problems (e.g., substance use initiation, mental health symptoms and diagnoses), and emergency department and inpatient service utilization. We will use data from the EHR and a supplemental behavioral health survey to monitor outcomes up to 3 years post intervention. We will also assess the feasibility and sustainability of implementing the intervention in each HCS, including health economic evaluation to understand costs in relation to value gained. Throughout the trial the investigative team will engage in ongoing dialog with HCS leaders, pediatricians, and clinic staff to ensure the intervention and implementation process fit the needs of each HCS. We anticipate that evidence of feasibility and effectiveness in three different HCS will foster broad dissemination to achieve public health impact.

Principal Investigator: Jordan Braciszewski, Ph.D.
NIDA CTN-0074: Primary Care Opioid Use Disorders Treatment (PROUD) Trial (3UG1DA040314) Subcontract

Over 20 million US adults and youth suffer from substance use disorders (SUDs) and substance use (SU) related problems. However, most people with SUDs never receive SUD treatment. Historically, research on SUDs has focused on the small minority of patients with SUDs who are seeking, or already

engaged in, specialty SUD treatment. The overall goal of the proposed Addictions Research Network (ARN) node of the Clinical Trials Network will be to conduct cutting edge research to improve outcomes in all patients with SU/SUD who are seen in medical settings. The ARN includes 15 large health systems across the US that use the HMO Research Network's (HMORN's) Virtual Data Warehouse, providing geographic and racial/ethnic diversity as well as variation in systems of medical and SU/SUD care. The proposed ARN node has 3 broad agendas—1) to evaluate effective practices for identifying, engaging and treating patients with SU or SUDs in medical settings; 2) to develop and test effective, practical ways to implement these practices in a sustained manner as part of routine medical care; and 3) to develop and disseminate innovative research methods on SU and SUDs. Three PIs will lead the ARN node, each with expertise critical to our research agenda. Dr. Weisner, who has more than 25 years of experience leading SUD research in public and private medical settings, will lead the ARN as Senior PI at Kaiser Permanente. She partners at Kaiser Permanente with Dr. Campbell, an expert in research on opioid misuse and patient-centered and comparative effectiveness research, and Dr. Bradley, Senior PI at Group Health, who has 20 years of research experience targeting non-treatment-seeking patients with alcohol misuse and SUDs in medical settings. The ARN will have 3 Cores: 1) an Administrative Core will support all aspects of the ARN node; 2) an Implementation Core will support patient-centered design of practical, sustainable approaches to implementing SUD care in routine medical settings using electronic health records (EHRs), and; 3) an Analytics Core with expertise in programming, biostatistics using EHR data, and economics, will support innovative methods research and study design. ARN work will leverage the HMORN's 20 years of conducting pragmatic clinical trials and comparative effectiveness research across health systems using EHRs and the nationwide Virtual Data Warehouse. The ARN node will provide a robust foundation for population-based studies—including pragmatic randomized controlled trials, comparative effectiveness studies, and implementation research—that can evaluate long-term health outcomes. Moreover, through our connection to 15 learning healthcare systems, our research will design approaches to improve the quality of care for SU and SUDs in real-world medical settings. In this way—with the other CTN nodes—the ARN node will help build the infrastructure required for the next era of addictions health services research.

Principal Investigator: Amy Loree, Ph.D.
SBI-Tech Michigan: Optimizing SBI Implementation for High Risk Alcohol Use Among Women of Childbearing Age (NU84DD000001) Cooperative Agreement

The purpose of this Notice of Funding Opportunity (NOFO) is to reduce risky alcohol use among women of childbearing age through system-level implementation of alcohol screening and brief intervention (SBI) in health systems providing women's health services. Risky alcohol use can result in a variety of negative health and social consequences, such as motor vehicle crashes, intimate partner violence, and fetal alcohol spectrum disorders. It is costly, results in over 88,000 deaths annually, and can affect serious medical conditions, such as hypertension, liver disease and certain types of cancer. Health professionals are uniquely positioned to intervene with patients with acute and chronic health conditions caused or exacerbated by risky alcohol use. Alcohol SBI implementation efforts within health systems will focus on development and implementation of: a training and technical assistance plan; alcohol SBI protocols in primary care clinics; system-level approaches that facilitate uptake (e.g., electronic health record integration and performance metrics); an evaluation plan assessing feasibility and impact of system-level implementation; a dissemination plan on promising models and lessons learned; and a sustainability plan. Expected performance outcomes include documenting provider/clinic readiness to conduct alcohol SBI, documenting implementation barriers and proposed solutions, tracking clinic-level data on alcohol SBI, and assessing the use of system-level strategies.

Center for Individualized and Genomic Medicine Research (CIGMA)

Principal Investigator: Keoki Williams, M.D.
Leveraging Electronic Medical Records to Perform Large-Scale Diabetes Pharmacogenomics among Ancestrally Diverse Patient Populations (R01DK113003)

Diabetes mellitus is a modern-day scourge, affecting an ever-increasing proportion of individuals worldwide, including 26 million Americans currently. Moreover, type-2 diabetes (T2D) disproportionately affects historically disadvantaged U.S. minority groups, as evidenced by the much higher rates of disease and more severe complications among African American individuals. Although there are multiple

therapeutic classes of oral medication available for treating T2D, metformin is currently recommended as the first-line therapy. Metformin lowers blood glucose levels by reducing hepatic gluconeogenesis, improving skeletal muscle insulin sensitivity, and limiting intestinal glucose uptake. It has also been shown to be an effective therapy for preventing incident diabetes. Despite being one of the most frequently prescribed drugs worldwide, very little is known about the biologic mechanism(s) through which metformin mediates its effect. This knowledge would be of value therapeutically to better understand and predict treatment response. By extension, even less is known about the activity of metformin among African American individuals, as few studies have included substantial numbers of non-European population groups. This application will help rectify existing knowledge gaps by studying a large and diverse patient population with T2D. Specifically, we will utilize electronic medical record (EMR) data for large-scale diabetes pharmacogenomics. These data have the advantage of being able to account for medication use and drug exposure over time; to provide substantial numbers of individuals for combined and population group specific analyses; and to assess clinical endpoints both retrospectively and prospectively. In this application, we propose the following study aims: 1) To assess whether there are differences in metformin treatment response by self-reported race-ethnicity and genetic ancestry; 2) To use novel, gene-based association approaches to identify both shared and population group specific genetic variants influencing metformin's effect on blood glycemia (i.e., HbA1c levels); and 3) To replicate our findings in a separate group of patients and to include additional exploratory analyses to assess whether the identified genetic variants influence diabetes-related microvascular events, macrovascular events, and adverse drug reactions. The knowledge gained through this study will directly address the goals of Health People 2020 – “achieve health equity, eliminate disparities, and improve the health of all groups.”

Principal Investigator: Keoki Williams, M.D.
Poly-omic Study of Asthma Exacerbations in Diverse Populations (R01HL141845-01A1)

Asthma exacerbations contribute to considerable disease morbidity and account for nearly half of all asthma related costs. Nevertheless, we do not currently have biomarkers that can be used clinically to reliably predict an impending exacerbation. Such measures could transform asthma care if they allowed for the timely recognition, treatment, and prevention of these severe events. It is important to note that certain population groups, such as African Americans and Latinos (particularly Puerto Ricans), suffer disproportionately from these complications with rates of asthma-related emergency department visits, hospitalizations, and deaths nearly 3-5 times higher than those of European Americans. Therefore, it should be surprising that nearly all existing genetic studies of asthma exacerbations have focused on individuals of European descent and have been insufficiently powered to study other groups. Other limitations include analyses which didn’t take into account the timing of events and studies which focused on allergic mechanisms (as opposed to taking an agnostic approach). In this application, we will utilize the enormous amount of whole genome sequence data that will be generated by our Asthma Translational Genomics Collaborative (ATGC) and the NHLBI’s Trans-Omic Precision Medicine (TOPMed) program to identify genomic markers of asthma exacerbations. The ATGC comprises 9 cohort studies and 10,840 patients with asthma (7,212 African American individuals and 3,628 Latino individuals). We will use the Study of Asthma Phenotypes and Pharmacogenomic Interactions by Race-Ethnicity (SAPPHIRE) as the discovery set to identify genetic variants associated with time to exacerbation (Aim 1). The SAPPHIRE cohort is ideally suited to serve as the discovery set for this project because of its prospective longitudinal records of events, detailed characterization of participants, and extensive biobank, which includes serum and RNA samples. Replication of top genetic associations will be performed in the other 7,086 ATGC participants (Aim 2). Transcriptomic data generated from RNA sequencing will be used to identify genes whose expression in whole blood is associated with time to exacerbation (Aim 3a), and variants promoted from Aims 1 & 2 will be assessed as expression quantitative loci for their association with gene expression (Aim 3b). For Aim 4, banked serum will be used to assess the proteome of individuals from phenotype extremes (i.e., serum collected from individuals prior to a severe exacerbation vs. serum from individuals with asthma who don’t experience exacerbations). Using mass spectrometry, we will broadly assess serum for proteins differentially expressed between these groups (i.e., an untargeted proteomic approach), and we will use the information gleaned from the genomic, transcriptomic, and untargeted proteomic analyses to assess specific proteins (i.e., a targeted proteomic approach) for expression differences in additional groups of individuals at phenotype extremes. In short, we are proposing both independent and interdependent “omic” analyses to identify biomarkers of asthma exacerbations in populations at highest risk.

Department of Public Health Sciences

Principal Investigator: Andrea Cassidy-Bushrow, Ph.D.
Delivery Mode, Environment and the Gut Microbiome: Influence on Childhood Body Size (R01HD082147)

Caesarean section (CS) delivery, which accounts for ~32% of all US births, has been associated with offspring obesity. Little is known about the mechanisms linking CS with obesity risk. The gut microbiome, which varies by mode of delivery, is also associated with childhood obesity. In our established racially and socioeconomically diverse birth cohort (WHEALS; Wayne County Health, Environment, Allergy and Asthma Longitudinal Study), the early-life gut microbiome is associated with body mass index (BMI) category at age 2 years; CS is associated with both a distinct early-life gut microbiome and with increased BMI at age 2 years; and the presence of pets in the home, which increases microbial diversity, reduces the association between CS and BMI. Our data provide evidence for a mediating role of the gut microbiome in the CS-obesity relationship. However, to provide stronger evidence requires additional study. This project builds on extant data in WHEALS and on-going data collection in a subset of these children to examine the role of the gut microbiome in the CS-obesity association. Children will be invited for a research clinic visit for comprehensive body size assessment and blood draw at age 10-12 years. Gut microbiome composition and predicted function will be measured in banked early- life (1 and 6 months of infancy) stool samples and in samples from these children at age 10-12 years using the 16S rRNA and ITS2 biomarker genes and the Illumina MiSeq platform. A metabolomics analysis will be conducted in a subset of these stool samples. Adiposity will be measured as BMI at ages 2 and 10-12 years, BMI trajectory from birth to age 10-12 years, and anthropometric, bioimpedance and inflammatory measures at ages 10-12 years. Combined, we anticipate 630 unique children will have 10-year adiposity measures and at least one early-life microbiome measure (~405 with 1 month and ~381 with 6 month stool samples, which includes ~300 children with paired 1 and 6 month samples). Of these children, 400 will also have gut microbiome measured at age 10-12 years. Our specific aims are to: (1) examine if mode of delivery is associated with childhood adiposity; (2) examine if the gut microbiome is associated with childhood adiposity; and (3) examine whether the gut microbiome mediates relationships between mode of delivery and measures of adiposity. Such a complementary “omics” approach has never been applied to the study of childhood obesity and is likely to provide critical insights into disease development in early- life as well as potential targets amenable for intervention.

Principal Investigator: Melissa Davis, Ph.D.
The DARC side of Breast Cancer (R21CA210237)

TNBC is arguably the most deadly BrCa subtype with higher prevalence in pre-menopausal women and in women of African descent. We know that the combined TNBC prevalence and poor treatment options are a likely cause of persistently higher mortality rates in African Americans compared to European Americans in the US. However, we have shown that within African Americans, disparities in BrCa survival are more pronounced within the TNBC category compared to the ER positive groups. These data indicate that *unique mechanisms are operating in either tumor biology or host response in women of African descent*. The ancient and African- specific *Fy*- allele alters the regulation of DARC/ACKR1, an atypical chemokine receptor, in a tissue-specific fashion beyond the previously described RBC phenotype. This implicates DARC/ACKR1 in various altered phenotypes in these ancestry groups, specifically as it relates to chemokine regulation. This project will test the hypothesis that DARC expression in tumor cells alters tissue chemokine levels to modify the host immune response to tumorigenesis, and that absence of DARC expression on blood cells as a result of the African-specific *Fy*- allele alters circulating chemokine levels, altering the tumor microenvironment and enhancing tumor aggression. Specifically we will; 1- Determine if DARC tumor expression associates with ancestry and altered host immune responses in a pilot BrCa cohort of African Americans and European Americans and 2- Determine if loss of DARC on bone-marrow-derived (bmd) blood cells alters chemokine profiles and tumor immune response, using pre-existing transgenic C3-
1Tag BrCa and AckR1-/- mice.

Principal Investigator: George Divine, Ph.D.
Targeted Clinical Trials to Reduce the Risk of Antimicrobial Resistance: Randomized Controlled Trial for Treatment of Extensively Drug-Resistant Gram-Negative Bacilli (Option 5) (HHHSN272201600049C) Subcontract

The Gram-negative bacilli organisms Acinetobacter baumannii, Klebsiella spp., Escherichia coli, Enterbactor spp. and Pseudomonas aeruginosa have become a frequent cause of bloodstream infection and pneumonia in the hospital and other healthcare settings. Among these pathogens, antimicrobial resistance has emerged to many classes of antimicrobial agents. Most concerning has been the emergence of resistance to group 2 carbapenems (such as imipenem). In several regions of the world, including Southeastern Michigan, strains of extensively-drug resistant Gram-negative bacilli (XDR-GNB) that exhibit resistance to most, and in some cases all types of available antimicrobial agents, including group 2 carbapenems, have emerged and disseminated. Treatment options for XDR-GNB typically include Colistimethate sodium (referred to as colistin in this study), used alone (monotherapy) or in combination with other agents. Unfortunately, resistance to colistin has begun to emerge in some strains of XDR-GNB, which is a truly concerning development, since colistin is one of the last remaining treatment options for XDR-GNB. No prospective, randomized controlled trials have been conducted to evaluate the clinical efficacy of colistin monotherapy versus colistin-containing combination therapy or the impact of these therapeutic modalities on the emergence of colistin resistance among XDR-GNB. We plan to conduct a double-blind randomized controlled trial including patients with pneumonia and bloodstream infection due to XDR-GNB. After enrollment, subjects will be randomized to receive 14 days of either colistin monotherapy or colistin plus meropenem.

In the Detroit metro area, infections due to XDR-GNB have developed into a regional challenge and common problem. We have assembled a multi-disciplinary team that includes Infectious Diseases researchers, clinicians, infectious diseases pharmacists, microbiologists, epidemiologists and statistical experts to address critically important questions and challenges regarding the management of bloodstream infection and pneumonia due to XDR-GNB. Specifically, we hypothesize that the combination of colistin and imipenem will provide superior efficacy in the treatment of XDR-GNB pneumonia and bloodstream infection and will prevent the emergence of decreased susceptibility to colistin among XDR-GNB strains. We also aim to analyze tools that could be used in "real time" to aid clinicians treating patients with infection due to XDR-GNB. For example, we aim to analyze the association between the presence of in vitro synergy of the colistin and carbapenem (imipenem or meropenem) combination (as determined by E-test) and clinical outcomes; and the association between colistin plasma levels and clinical outcomes and the development of nephrotoxicity.

Principal Investigator: Christine Cole-Johnson, Ph.D.
Project 1-Early Microbiota-Related Risk Factors and the Development of a Multi-Sensitized High Risk for Allergic Asthma Phenotype (P01AI089473)

the ***Health*** status **of** our ***children*** has long lasting ***social*** and economic ramifications **for the** nation. Asthma is **the** most common chronic condition in **the** U.S. ***pediatric Age*** group. This ***Disease*** often carries on into adulthood and is associated with lifelong deficits in ***lung function***. **the** majority **of** these ***children*** are also allergic, and **a** sub-group have **Asthma** that is difficult to control. Despite substantial ***Research*** effort, the dramatic increase in **Asthma** ***Prevalence*** over **the** past decades has not been mitigated. New hope is centered on ***Research*** investigating **the** influence and possible interventional opportunities afforded by study **of the** ***gut microbiota***. This has become possible with **the** advent **of** culture-independent technology. Our initial P01 used our WHEALS ***Birth*** cohort to demonstrate that numerous ***Child*** and also maternal ***Characteristics*** were associated with **the** infant's ***gut microbiota*** community composition. Infant gut ***microbiota Characteristics***, such as lower bacterial diversity and higher fungal diversity, were associated with **a** multi-allergen-sensitized (IgE) **Phenotype** at ***Age*** 2 years and **Asthma** at ***Age*** 4 yrs. Our new ***Data*** reveals that this ***Age*** 2yr **Phenotype** is associated with **a High Risk of Multi-Sensitized Allergic Asthma** at ***Age*** 10 yrs, and **the** same ***gut microbiota Characteristics*** are associated with this higher **Risk**. Our new P01 ***Murine Data*** supports a ***maternal microbiota*** influence on **the** offspring's ***Immune system***. **the** WHEALS ***Birth*** cohort was not initially designed to examine how **the** ***Infant gut microbiota*** is related to allergy, or **the** maternal contributions to this association. ***Infant*** stool samples were obtained using limited institutional funds and therefore at only one or two points in time and relatively sporadically. This **Project** will capitalize on **a** new, large and diverse ***Health*** system-based general **Risk** ***Birth*** cohort with **the** focus **of** studying **the** ***gut microbiota*** with **the** latest ***sample collection*** and analytic techniques and collection **of** stool specimens at earlier and more

frequent ***Infant*** time points and one in ***Late pregnancy***. We propose detailed studies **of** multiple variables likely to ***Affect*** **the** ***maternal microbiota*** during ***Pregnancy***, how these effects are related to **the** child's risk **of Allergic** sensitization, and how **the** maternal and ***Infant*** gut microbiotas can mediate **Risk**. **Project** 1 is designed to home in on maternal/infant exposures and gut microbiotas and how they associate with **the** child's risk **of** becoming highly **Multi-Sensitized** or not sensitized (resilient to sensitization) by **the** ***Age*** **of** 2 yrs. Altogether, **the** coordinated Projects in this P01 are addressing hypotheses highly informative to future development **of** potential microbial-related preventive interventions through both behavioral/social or direct microbial means.

Principal Investigator: Christine Cole-Johnson, Ph.D.
Project 3-Identification of Microbial Founder Species and Metabolic Products that Promote Microbiota and Immune Development Resilient to Childhood Allergy and Asthma (P01AI089473)

The gut microbiome accumulates bacterial diversity over the first several years **of** life and plays a critical role in **Immune Development** including **Immune** tolerance via production **of** microbial-derived metabolites such as short chain and polyunsaturated fatty acids. We and others have demonstrated **that** children who develop allergic sensitization or **Asthma**, exhibit consistent bacterial genera depletions and **Metabolic** perturbations in infancy. Relative **to** those at low-risk **of** disease **Development**, the associated **Products of** the perturbed, early life high-risk gut microbiome induce expansion and activity **of** T-helper 2 cells and reduce the frequency of regulatory T cells in vitro. Thus, the implication is **that** the very early-life gut microbiome, via microbial-derived metabolites, shapes nascent **Immune** function in a manner consistent with disease or health in **Childhood**. Our most recent studies indicate **that** the meconium microbiome **of** high-risk for **Asthma** infants (with at least one asthmatic parent) is distinct from **that of** low-risk neonates, and exhibits a significantly delayed bacterial diversification trajectory over the first year **of** life, implicating differences in vertically transmitted foundational gut microbes and subsequent gut microbiome and **Immune Development**. Thus, the human gut microbiome appears **to** adhere **to** the tenets **of** primary succession, the process **of Species** diversification in a pristine ecosystem, central **to** which is the tenet **that Founder** (or pioneer) **Species**, (i.e. those **that** first colonize), shape ecosystem conditions and thus the pace and trajectory **of** subsequent **Species** accumulation. We thus hypothesize **that** in those children protected against **Allergy** and **Asthma Development**, specific early-life gut microbiome strains, and more specifically, their **Metabolic Products**, **Promote Immune** tolerance which shapes subsequent **Immune** and **Microbial Development** throughout **Childhood** protecting against disease **Development**. P3 aims **to** build upon our previous studies and address this hypothesis using both banked samples from WHEALS for which 10-year allergic sensitization and **Asthma** outcomes are known, and prospectively collected longitudinal samples in this P01 from mother-infant dyads in children with a High Risk for Allergic Asthma Phenotype (HiRAAP) or Low Risk for Allergic **Asthma** Phenotype (LoRAAP) at ***age 2 years***. P3 proposes to identify early-life gut **Microbial** derived metabolites **that Promote Immune** functions associated with protection against allergic **Asthma Development** in **Childhood**, identify their **Microbial** source, and develop and, based on these findings, test a novel **Microbial** polybiotic for its capacity **to** shape **Immune** function and protect against airway allergic sensitization in mice. This study will advance our knowledge **of** how gut **Microbial** strains and their **Products** program protective immunity against **Childhood** allergic **Asthma Development** and serve as a foundation for primary prevention **of** the disease.

Principal Investigator: Christine Cole-Johnson, Ph.D.
Project 4-Alteration of Mouse Maternal Gut Microbiota Alters Metabolic Profiles and Immune Phenotype in Offspring (P01AI089473)

in our initial P01, we found that ***Mice*** orally supplemented with dust from homes with ***Dogs*** were resistant to induction **of** allergic ***Lung Inflammation*** compared to ***Mice*** supplemented with dust from homes without pets. Examination **of** ceca from ***Mice*** supplemented dog-home dust identified a keystone species, Lactobacillus johnsonii. Oral supplementation **of** ***Mice*** with viable but not killed L. johnsonii reduced susceptibility to induction of both allergic and respiratory syncytial virus (RSV) induced ***Lung Inflammation***. These reductions **in** lung inflammation appear to be related to alterations **in** the functional activity **of** bone marrow-derived dendritic cells (DC). Preliminary data suggests that microbial metabolites **in** the circulation **of** supplemented animals differ from those **of** un-supplemented animals. Limited data suggests that the differences **in** circulating metabolites are responsible for the alterations **in** DC function. Our rationale for including studies **of** RSV are epidemiologic studies showing that RSV infections **in** human infants increase the risk **of** subsequent asthma. Our mouse models mirror this relationship since

neonatal infection with RSV leads to greater pathology when the ***Mice*** are sensitized to allergen 4 weeks later. Interestingly our preliminary studies have shown that supplementation of female ***Mice*** with L. johnsonii prior to mating reduces responses to allergen and RSV challenges **in Offspring** to a level similar to that observed **in** directly supplemented ***Mice***. Among the questions raised by this observation was whether the effects **of Maternal** supplementation on **Offspring** occurred during **in** utero development or post-partum from components **of *Breast Milk***. This question led to cross-fostering experiments. **in** these experiments **Offspring of** supplemented or un-supplemented ***Mice*** were nursed by either supplemented or un- supplemented mothers revealing that ***Breast Feeding*** can partially protect pups **of** un-supplemented mothers from RSV. Based on our findings we propose studies **in** this **Project** based on the hypothesis that the maternal microbiota shapes the developing neonatal **Immune** homeostatic mechanisms through alteration **of** the offspring **Gut Microbiota** and related microbial metabolites which lead to differences **in Immune** responsiveness and the risk **of** pathogenic allergic responses. Our studies will continue to examine the mechanisms though which microbial changes affect pathologic responses to allergens and RSV. These studies will include further studies to differentiate **in** utero effects and ***Breast Milk*** effects on **Offspring**. Finally, we will examine the effects of supplementation with consortia **of** bacteria selected **in Project** 3 on the response **of Offspring** to allergen and RSV challenges. These studies will provide greater ***insight*** into the findings from the human studies **in** Projects 1 & 2, especially questions concerning when effective interventions might be most safely instituted.

Principal Investigators: Christine Cole-Johnson, Ph.D.
Human Epidemiology and Response to SARS-COV-2 (HEROS)
Core A, Core D, Core E
Principal Investigator: Albert Levin, Ph.D., Core B
Principal Investigator: Kimberley Woodcroft, Ph.D., Core C
(P01A1089473)

This request is in response to NOT-AI-20-031 for supplement funding in response to the COVID- 19 emergency. COVID-19, the infectious disease caused by SARS-CoV-2, is rapidly affecting humans around the globe. While initial epidemiological data have focused on cases that resulted in severe respiratory disease seen predominantly in adults, little information regarding the infection burden in children is available. This is complicated by the observation that many virologically confirmed cases in children are asymptomatic. Undocumented, and likely infectious, cases could result in exposure to a far greater proportion of the community than would otherwise occur. Indeed, it has been proposed that undocumented (or silent) infections are the source for almost 80% of documented infections; thus, it is critical to determine the silent and symptomatic infection rate in children. To overcome challenges for clinical study implementation imposed by current healthcare access restrictions, a surveillance study under design will enroll and prospectively observe eligible children, and their family members, that are current participants in our NIH-funded, ongoing, birth cohort studies. These children and their families are known to research staff and as part of their participation in HFHS studies, they have already been exposed to the procedures involved in a surveillance study. We are requesting support for the pediatric studies aligned with our Microbiota and Allergic Asthma Precision Prevention (MAAP2) (PI: Johnson, Ownby P01AI089473) to participate in the multi-center survey entitled Human Epidemiology and Response to SARS-CoV-2 (HEROS), Protocol # DAIT-COVID-19-001. Our primary objective is to report the incidence of SARS-CoV-2 infection (detection of virus in nasal secretions) over time in cohort children (index child) and household contacts (caregivers and siblings). A secondary objective is to compare SARS-CoV-2 infection status and antibody development for index children/siblings with atopic conditions (e.g. asthma, eczema) versus children without atopic conditions. As an exploratory aim, we will investigate whether SARS-CoV-2 infection (as determined by virus detected in nasal secretions) is associated with the presence of virus in stool. Our targeted enrollment is 300 families recruited over a 2-week period and followed for a minimum of 6 months. At predetermined intervals, biological samples (nasal swabs, peripheral blood, stool) will be collected by the caregiver at home using materials provided to the family. Symptom and exposure surveys will be completed remotely via a smart phone, on-line, or telephone at the time of biological sample collection. This timely, multi-site study can be rapidly implemented and realistically conducted without necessitating any visits to a clinical research center and will provide invaluable information on the infection burden of SARS-CoV-2 in children.

Principal Investigators: Christine Cole-Johnson, Ph.D.
Microbiota and Allergic Asthma Precision Prevention (MAAP2) Project 1, Project 3, Project 4
Principal Investigator: Edward Zoratti Project 2
(P01A1089473)

This application builds on the findings of our initial P01 designed to examine relationships between environmental factors, especially pets, the infant gut microbiota and pediatric allergic asthma. We have shown that: 1) dogs alter the microbial composition of dust in homes, 2) children born into homes with dogs have different developmental patterns of gut microbiota and of IgE, 3) a distinct pattern of gut microbial composition at 1 month of age is related to heightened risk of sensitization to multiple allergens at 2 years and of asthma at 4 years, and this pattern is influenced by numerous maternal characteristics, 4) sensitization to multiple food and inhalant allergens at 2 years is strongly related to asthma at 10 years, 5) the metabolic profiles of stools are related to later allergic sensitization 6) 12,13-DiHOME, a metabolite in stool, promotes development of Th2 lymphocytes and lowers development of Treg lymphocytes in an in vitro assay, and 7) in another study, the meconial microbiota is distinct in neonates born to mothers with asthma. Our complementary mouse studies have shown that: 1) gavaging with dust from homes with dogs reduces lung inflammation from allergen sensitization and from respiratory syncytial virus (RSV) infection, 2) dog dust gavaged mice have increases in Lactobacillus johnsonii in their ceca 3) oral administration of live L. johnsonii confers protection against pulmonary inflammation induced by allergen and RSV, 4) L. johnsonii alters the function of bone marrow- derived dendritic cells, 5) mice orally supplemented with L. johnsonii have altered serum metabolic profiles, and 6) mouse pups born to L. johnsonii-supplemented mothers are protected against allergen challenge and RSV infection. Collectively these findings showing the influence of maternal factors provide the basis for this application's focus on the maternal gut and vaginal microbiotas during pregnancy, and how these relate to infant gut microbial development and risk of allergic asthma. Project 1 focuses on the relationship of maternal environmental and dietary factors, including maternal and infant gut microbiotas, to the child's developing a high-risk for asthma phenotype by age 2 years. Project 2 proposes a detailed examination of relationships between maternal and child microbiota, breast milk composition and IgE development amongst a cohort of pregnancies in which the mother has current allergic asthma. Project 3 synergistically interacts with Projects 1& 2 and also uses specimens from 10-year-old allergic asthma cases and controls in the initial P01 birth cohort to examine gut microbes producing metabolites associated with a lowered risk of allergic inflammation and how they are transferred from mother and established in offspring. Project 4 will use mouse models to examine the relationships between manipulation of maternal microbiota and immune development in offspring. We anticipate that together these studies will show that interventions directed at the gut microbiota of mothers during pregnancy and of high-risk neonates after birth could reduce the risk of allergic asthma in childhood. Such findings would provide the foundations of a rational strategy to prevent allergic asthma.

Principal Investigator: Christine Cole-Johnson, Ph.D.
Microbiota and Allergic Asthma Precision Prevention (MAAP2) (P01AI089473)

This application builds on the findings of our initial P01 designed to examine relationships between environmental factors, especially pets, the infant gut microbiota and pediatric allergic asthma. We have shown that: 1) dogs alter the microbial composition of dust in homes, 2) children born into homes with dogs have different developmental patterns of gut microbiota and of IgE, 3) a distinct pattern of gut microbial composition at 1 month of age is related to heightened risk of sensitization to multiple allergens at 2 years and of asthma at 4 years, and this pattern is influenced by numerous maternal characteristics, 4) sensitization to multiple food and inhalant allergens at 2 years is strongly related to asthma at 10 years, 5) the metabolic profiles of stools are related to later allergic sensitization 6) 12,13-DiHOME, a metabolite in stool, promotes development of Th2 lymphocytes and lowers development of Treg lymphocytes in an in vitro assay, and 7) in another study, the meconial microbiota is distinct in neonates born to mothers with asthma. Our complementary mouse studies have shown that: 1) gavaging with dust from homes with dogs reduces lung inflammation from allergen sensitization and from respiratory syncytial virus (RSV) infection, 2) dog dust gavaged mice have increases in *Lactobacillus johnsonii* in their ceca 3) oral administration of live *L. johnsonii* confers protection against pulmonary inflammation induced by allergen and RSV, 4) *L. johnsonii* alters the function of bone marrow- derived dendritic cells, 5) mice orally supplemented with *L. johnsoni*i have altered serum metabolic profiles, and 6) mouse pups born to *L. johnsonii*-supplemented mothers are protected against allergen challenge and RSV infection. Collectively these findings showing the influence of maternal factors provide the basis for this application’s focus on the maternal gut and

vaginal microbiotas during pregnancy, and how these relate to infant gut microbial development and risk of allergic asthma. Project 1 focuses on the relationship of maternal environmental and dietary factors, including maternal and infant gut microbiotas, to the child's developing a high-risk for asthma phenotype by age 2 years. Project 2 proposes a detailed examination of relationships between maternal and child microbiota, breast milk composition and IgE development amongst a cohort of pregnancies in which the mother has current allergic asthma. Project 3 synergistically interacts with Projects 1 & 2 and also uses specimens from 10-year-old allergic asthma cases and controls in the initial P01 birth cohort to examine gut microbes producing metabolites associated with a lowered risk of allergic inflammation and how they are transferred from mother and established in offspring. Project 4 will use mouse models to examine the relationships between manipulation of maternal microbiota and immune development in offspring. We anticipate that together these studies will show that interventions directed at the gut microbiota of mothers during pregnancy and of high-risk neonates after birth could reduce the risk of allergic asthma in childhood. Such findings would provide the foundations of a rational strategy to prevent allergic asthma.

Principal Investigator: Christine Cole-Johnson, Ph.D.
Children's Respiratory and Environmental Workgroup (CREW) (UG3OD023282) Subcontract, Cooperative Agreement

The grant is part of $157 million in awards announced yesterday by the NIH that launches a seven-year initiative called Environmental Influences on Child Health Outcomes (ECHO). The ECHO program will investigate how exposure to a range of environmental factors in early development – from conception through early childhood – influences the health of children and adolescents.

Individual birth cohort studies have identified risk factors for developing childhood asthma, including environmental exposures in early life such as allergens, pollutants, patterns of infection and colonization with viruses and bacteria, and psychosocial stress. Despite such advances, further progress in understanding the root causes of asthma have been hampered by at least two factors. First, procedures and scientific methods are not standardized across cohorts, making it difficult to compare and validate findings. Second, asthma definitions across cohorts vary considerably. In fact, asthma is a syndrome; there are different subtypes of asthma with distinct clinical features (asthma phenotypes) and likely different etiologies (asthma endotypes). We hypothesize that host factors (genetics, epigenetics) interact with environmental exposures during the prenatal period and early childhood to cause specific endotypes of childhood asthma. We further propose that identification of endotypes and associated molecular biomarkers in early life can provide a new paradigm for asthma prevention. Unfortunately, single cohorts have limited ability to identify asthma endotypes due to small sample size and unique population characteristics. To overcome shortcomings of individual cohorts, investigators leading 12 asthma birth cohorts across the U.S. now propose the establishment of the Children's Respiratory Research and Environment Workgroup (CREW) consortium. This consortium proposes to identify asthma endotypes and overcome shortcomings of individual cohorts by: 1) providing a large (nearly 9000 births and long-term follow-up of 6000-7000 children and young adults) and diverse national data set, 2) harmonizing data related to asthma clinical indicators and early life environmental exposures, 3) developing standardized measures for prospective data collection across CREW cohorts and other ECHO studies, and 4) conducting targeted enrollment of additional subjects into existing cohorts. This approach will enable collection of samples that are optimized for a systems approach to understanding how environmental and host factors in early life promote the development of specific asthma endotypes. Collectively, the results of this comprehensive research to identify the root causes of asthma vs. resilience and health will go far beyond what can be accomplished by individual cohorts, and thus provide a foundation for future efforts aimed at personalized prevention of chronic childhood asthma.

Principal Investigator: Christine Cole-Johnson, Ph.D., Public Health Sciences and Brian Ahmedani, Ph.D., Center for Health Policy and Health Services
Trans-America Consortium of the Health Care Systems Research Network for the All of Us Research Program (OT2OD026550)

Clinicians throughout history have worked to tailor both prevention and treatment strategies to the individual patient's needs; it is a fundamental credo to the practice of medicine. However, the vast majority of evidence-based clinical practice is based on research results acquired from measuring the common treatment effect on the "average person" in a restricted patient population with limited data, which we now know does not necessarily apply to numerous patients in the real-world setting. Thus, some patients will

benefit from evidence-based treatments and preventative interventions, while others will be harmed by taking medications or undergoing processes and procedures that are at best non-effective and at worst cause serious side effects. However, since the initiation of pharmacogenomics in the mid-90s, the astounding pace of development of the technical and analytic tools to measure individual inherited and acquired biological variations at all physiological levels, as well as efficiently capture a patient's medical and risk factor history and personal preferences via electronic means, is at a scale never before known.(PMIDs: 26554403, 26804248,26802434,26686739, 26769233, 26702339, 26700443, 26764593, 25231862) The current concept of "Personalized Medicine" or "Precision Medicine" in which these tools can be deployed to sharply hone predictions about an individual's risk for disease or response to treatment, while still in its infancy, has immeasurable potential.(PMIDs:20551152,26014593,26810587) Further, the costs for next generation sequencing are expected to continue to decline as technology advances. (PMIDs: 24217348, 26195686) As resources are becoming increasingly constrained, it is important to devote scientific time, energy and dollars to questions that matter to the community and have strong potential for effectively improving medical care, public health and wellness. Hence the need, creation, and continuing development of the All of Us Research Program (AoURP). (http://www.pmwcintl.com/francis-collins-nih-qa/) The promise of Precision Medicine in the U.S. can be most effectively realized on a large scale in the next decades if a research infrastructure is established and accessible to scientists across the nation and includes a large and engaged study population with comprehensive health and lifestyle histories linked to biospecimens. Critically, this population must be diverse, representing minority and other subgroups underrepresented in biomedical research. (PMID:23571593) Further, as our investigators and others have recently published, the need to engage all stakeholders, including patients and providers, into both the research and "integration into practice" aspects of Precision Medicine as it progresses, is widely recognized. (PMID:27787499, 27669484, 20805700, 22962560,23780455, 24030437,26195686) Our Consortium objective is to recruit 93,000 participant partners into the AoURP, with a focus on African Americans, Arab Americans, Hispanics, rural residents, persons of low socioeconomic status (SES) and children, with the ability to target other groups of interest as needed. Now that we are rapidly ramping up engagement efforts in preparation for AoURP national launch, we will capitalize on an influx of appropriate resources and our experience in engaging, recruiting and retaining large numbers of participants in epidemiological and clinical cohorts, along with our patient-centered and process improvement approaches, to efficiently maximize recruitment and retention in the AoURP.

Principal Investigator: Lois Lamerato, Ph.D.
US Hospital Vaccine Effectiveness (VE) Network (U01P000974) Subcontract
US Influenza Vaccine Effectiveness Network (U01IP001034) Subcontract

Prevention of hospitalization has long been viewed as a major health benefit of the use of influenza vaccine. This was, in large part, the rationale for the initial vaccination programs targeting the elderly and those with underlying health conditions. However, in the last decade, questions have been raised about the value of such programs. Modern study designs to assess vaccine effectiveness (VE) have required laboratory confirmation of influenza infection, as well as documentation of vaccine receipt and the use of a test-negative design to control for differences in healthcare-seeking behavior between vaccinated and unvaccinated patients. There is a need for current estimates of VE in preventing influenza-associated hospitalization using these methods. We propose estimation of influenza vaccine effectiveness in preventing influenza hospitalization in two health systems in Michigan, where we have been conducting annual assessments of VE in various populations since 2008. We will conduct surveillance at two hospitals and will enroll adult in-patients with acute respiratory infection. Vaccination status will be reported and documented and considered with laboratory-confirmed influenza outcomes to estimate vaccine effectiveness for prevention of hospitalization. Analyses will use a test- negative design; those testing positive for influenza cases those testing negative are controls. Modifiers and confounders of vaccine effectiveness such as age, health status, high-risk health conditions, functional status, frailty, education, time from illness onset to specimen collection, calendar time, and propensity for vaccination will be assessed. In addition to our proposed influenza surveillance and VE assessment, we propose an estimation of the incidence of hospitalization in adults due to respiratory syncytial virus (RSV and other respiratory viruses. This will allow for the evaluation of bias in influenza VE assessment due to interaction between influenza vaccination, infection, and non-influenza respiratory viruses, and will establish a platform for the future evaluation of RSV vaccines. We will accomplish these additional objectives by expanding our surveillance to months before and after the typical influenza season and evaluating specimens by molecular methods for RSV and other respiratory viruses.

Principal Investigator: Christine Neslund-Dudas, Ph.D., Public Health Sciences, and Michael Simoff, M.D., Pulmonary Center for Research to Optimize Precision Lung Cancer Screening in Diverse Populations (UM1CA221939) Subcontract

Lung cancer, the most significant cause of cancer deaths in the US, is an urgent public health threat. It disproportionately affects populations that are already plagued by high poverty rates and low education levels. These populations experience both health disparities in the early diagnosis and treatment of cancer and are historically difficult to reach with cancer screening initiatives. While the results from the National Lung Screening Trial (NLST) indicated that low dose CT (LDCT) is an efficacious and cost-effective strategy for lung cancer screening (LCS), many uncertainties exist with respect to how patient, provider, health system, and societal factors may impact the quality, compliance, effectiveness, and the risk of harms associated with lung cancer screening, within community-based health systems who serve diverse populations. Spanning from Pennsylvania to Hawaii and including five heterogeneous health systems with diverse populations, our proposed PROSPR Research Center, the Center for Research to Optimize Precision Lung Cancer Screening (CPLS), brings together a team of experienced, interdisciplinary researchers and clinicians with long-standing collaborative ties that is well-positioned to pursue research related to the barriers and opportunities associated with the implementation of LCS programs within community settings. The health systems within CPLS include: Henry Ford Health System in Metro Detroit, Kaiser Permanente Colorado, Kaiser Permanente Hawaii, Marshfield Clinic Health System in rural Wisconsin, and University of Pennsylvania Health System. The ultimate goal of CPLS is to identify critical gaps in the LCS process and to design innovative multilevel interventions to reduce lung cancer mortality, particularly among underserved populations. To achieve this goal, CPLS will complete the following specific aims: 1) build a comprehensive data ecosystem by pooling and linking common data elements to capture the entire LCS process and to assess the patient, provide facility, health system, and societal factors that affect LCS; 2) leverage the CPLS data resource to conduct four high- impact, observational studies of the multilevel factors associated with the LCS process; 3) based on findings from Aims 1 and 2, develop and test interventions to address identifiable gaps in care that may lead to health disparities in LCS, 4) actively participate in Trans-PROSPR research initiatives and collaborate with external investigators via the use of publicly-available CPLS datasets. Our center focuses on the inclusion of diverse, underserved populations that are defined by multiple factors that may adversely impact access to, and utilization of, cancer screening. In response to both the Surgeon Generals strong emphasis on the need to reduce lung cancer mortality and the Cancer Moonshot Blue Ribbon Panels focus on reducing the disproportionately high cancer death rates in underserved populations, CPLS will serve as a model for high- impact, translational research to reduce disparities in cancer mortality.

Principal Investigator: Laila Poisson, Ph.D.
Molecular and Clinical Evaluation of the Glioma Patient Experience to Anticipate Modern Outcomes and Guide Patient Care (R01CA222146)

Landmark papers published recently by us, and others, mark the new era of molecular diagnoses and precision therapy for glioma. In the summer of 2016, the World Health Organization (WHO) published updated diagnosis criteria for glioma that include molecular markers, taking a first step toward a molecularly precise diagnosis. It is our long-term goal to capitalize on the longitudinal resources of brain tumor banks to rapidly assess molecular hypotheses for prognosis and treatment of glioma. With the significant contribution of 240 cases from Henry Ford Hospital (HFH), an effort to molecularly and clinically profile glioma was started by The Cancer Genome Atlas (TCGA) project. Capitalizing on our clinically annotated brain tumor bank at HFH, we will focus on therapeutic outcomes, recurrent disease, and extended survival, which were not captured in the TCGA project. For this work, we have constructed an interdisciplinary team of collaborators, with clinical and informatics expertise, to profile an additional 340 glioma cases (WHO grade II-IV). In total, we will assess 700 tumor specimens (FFPE/frozen) from the HFH tumor bank (2001-present), representing both primary and matched progressive disease (Aim 1). Molecular data will be generated by exome sequencing to assess DNA sequence and copy number variants, targeted Sanger sequencing to profile the TERT promoter, and DNA methylation array assays to profile the methylome. Clinical annotation from our tumor bank, including long-term follow-up and therapy regimens, will be added to each of the 550 profiled glioma cases. The resulting comprehensively annotated tumor bank will be an invaluable resource for queries of clinical-molecular associations and the progression of disease, made available to researchers at HFH and beyond. In this proposal we use

our database to address two analytical aims: (Aim 2) to carefully design statistical models of prognosis and therapy response among modern diagnosis classes using retrospective records; (Aim 3) to identify genomic differences, per patient, arising over the course of treatment and progression, which we expect will impact therapy decisions and inform standard treatments strategies. As part of the third aim, we will also explore the genomic patterns and clinical response of patients with exceptional survival, which may indicate differential molecular diagnosis or suggest therapeutic avenues for extending survival in others.

Principal Investigator: Benjamin Rybicki, Ph.D.
A New Prospective U.S. Cohort Set Within the Health Care System Institutions to Study Cancer (HHSN2612018000201)

Three mid-western integrated health care systems, HealthPartners (Minneapolis, MN), Henry Ford Health System (Detroit, MI), and Marshfield Clinic Health System (Marshfield, WI), here-forward known as the **Great Lakes Consortium for Cohort Studies in Cancer (GLC3)**, have over a decade of experience working together as part of the NCI funded Cancer Research Network (CRN)(1-21) and its parent consortium the Health Care Systems Research Network (HCSRN)(22-27). These three integrated health care systems (IHCS) have joined together in response to the call by NCI to establish a U.S. cohort of healthy adults. The NCI U.S. Cohort will be recruited, consented on-line and followed for cancer-related outcomes during the ten year period of the contract. Biospecimens and on-line questionnaires will be captured at baseline and at defined intervals which will be determined in a final protocol designed in collaboration between NCI, Information Technology support contractors, and participating integrated health care systems (IHCS). The overall goal of the NCI U.S. Cohort study is to enroll and follow 150,000 to 200,000 adult members of IHCS without cancer at the time of study enrollment. GLC3 proposes to recruit and enroll **20,000 health plan members (29% African American)** across all three sites.

Principal Investigator: Jennifer Straughen, Ph.D.
The Prenatal Origins of Autism Spectrum Disorder (W81XWH191508)

The proposed study will leverage existing data, resources, and biologic samples as well as physician partnerships to conduct a study of 177 ASD cases (62 with archived placental tissue) and 62 frequency matched controls born in Michigan between 2012 and 2017. ASD cases are extensively evaluated by a team of experts at the Henry Ford Health System Center for Autism and Developmental Disabilities (CADD) and have detailed diagnostic information including severity level in their electronic medical record. Neonatal angiogenic profile will be measured in archived dried blood spots from Michigan's Newborn Screening Program. Placental histopathology and angiogenic markers will be assessed in archived placental tissue from 62 cases and 62 typically developing controls frequency matched on year of birth, preterm status, and sex.

Impact: This proposal could provide evidence for the role of angiogenesis in the etiology of ASD while at the same time opening a door to neonatal risk assessment and earliest possible intervention. If successful, our findings may suggest approaches to minimize specific types of histopathology and/or changes in angiogenic profiles and mitigate their adverse effects in offspring. In addition, our findings may enable us to develop a clinically relevant placental screening tool that can be used for identification of children at highest risk of ASD so that interventions may begin as early as possible. Importantly, our collaboration with physicians at CADD who are currently diagnosing and treating ASD affected children and their families will facilitate the translation of research to practice.

Innovation: The proposed study is innovative not only in its focus on the placenta, but also its focus on processes that have not been traditionally examined in ASD research. The most innovative feature of the proposed study is its emphasis on markers of angiogenesis beginning in the prenatal period and extending into neonatal life. Despite its critical importance for neurodevelopment, ASD research to date has largely overlooked angiogenesis. This proposal is also innovative in that, if successful, it will simultaneously explain the sex specificity of ASD as well as the heterogeneous clinical expression of ASD symptoms. Furthermore, it will open the door to the development of noninvasive neonatal screening and diagnosis.

Principal Investigator: Ganesa Wegienka, Ph.D.
A Preconception Cohort Study of Environmental Chemicals, Fertility, and Miscarriage (R01ES029951)

Infertility and ***Spontaneous abortion*** (SAB) are significant public ***Health*** problems, affecting up to 25% of reproductive ***Age*** couples in the ***United States***. ***Health*** care costs attributable to ***Infertility*** and SAB exceed $5 billion per year, and several studies have shown an association between ***Infertility*** treatments and adverse pregnancy outcomes. Thus, identifying ***modifiable risk*** factors for ***subfertility*** and SAB is an important public health goal. The potential effects **of** exposure to endocrine-disrupting **Chemicals** (EDCs) on risk **of** ***subfertility*** and SAB are understudied. The few existing ***Human*** studies have limitations including small ***Sample Size***, enrollment after conception, retrospective **Study** design, suboptimal assessment **of** exposure and outcome, inadequate control for potential ***Confounding Variables***, and limited generalizability. The proposed **Study** will prospectively assess the relation **of** exposure to selected EDCs, including ***Phenols***, ***phthalates***, and per- and poly-fluoroalkyl substances (PFAS), to risk **of** ***subfertility*** and SAB in **A Preconception** subcohort **of** 950 ***Pregnancy*** planners. We will use ***Data*** from two NICHD-supported prospective cohorts **of** ***Pregnancy*** planners in ***North America*** and Denmark. With web-based recruitment and ***Data*** collection, we have enrolled over 17,000 women attempting pregnancy into these cohorts. In **A** subset **of** 200 participants, we have successfully pilot tested in-person collection **of** ***Urine*** and ***Blood*** specimens during the **Preconception** and ***early pregnancy*** periods. In this application, we propose to expand in-person biospecimen collection, increasing the number **of** women with preconception and ***early pregnancy Urine*** and ***Blood*** samples from 200 to 950. At each **of** our three biospecimen collection sites (Boston, Detroit, and Aarhus), we will enroll 250 women and collect three ***Urine*** samples and one blood sample (in **Preconception**) and three ***Urine*** samples and one ***Blood*** sample (in ***early pregnancy***). We will ship the samples to the ***CDC*** for the analysis **of** ***urinary phthalates***, ***urinary Phenols***, and serum PFAS. To increase cost efficiency, we will pool three ***Urine*** samples in each exposure window before assaying for phthalates and ***Phenols***; and we will ***Assay*** one **Preconception** ***Blood Specimen*** for PFAS, **A** persistent chemical, in analyses **of** ***subfertility*** and SAB. Finally, we will conduct **A** pilot **Study** among 100 U.S. participants to assess the feasibility **of** collecting ***Urine*** by mail, which would allow us to take advantage **of** our full geographically-diverse cohort in the future. Strengths **of** this application include the prospective design, **Preconception** enrollment of pregnancy planners, repeated ***Measurement*** **of** exposure during **Preconception** and ***early pregnancy***, excellent control for confounding via bimonthly prospective ***Data*** collection on **A** wide range **of** covariates, and use **of** the latest analytic methods for mixtures modeling. We have generated compelling preliminary ***Data*** to support our aims. The present ***Grant*** is cost-effective in leveraging already-established **Cohort** studies with ***Data*** collection and ***follow-up*** supported by other grants. The results generated will be translatable by directly informing future regulatory decisions about EDC standards in **A** manner that could reduce rates **of** ***Infertility*** and SAB

Principal Investigator: Ganesa Wegienka, Ph.D.
Epidemiology of Allergic Disease Endotypes (R01AI110450)

Pediatric allergy and asthma are a costly public health burden, but so far substantial research efforts have yielded no prevention strategies. A likely reason is that despite longstanding recognition by the medical community that the term ‘asthma’ refers to a collection of diseases, researchers have historically treated the syndrome as a single disease entity. Epidemiologically, the collapse of different phenotypes (observed disease patterns) and endotypes (phenotypes further delineated by pathophysiological processes), into a single category corrupts associations between risk factors and diseases. Thus, progress in allergic disease research has been hampered. Prior attempts have been made to identify such phenotypes and endotypes, but a combination of incomplete data and oversimplified statistical methods have limited progress. We propose to apply sophisticated latent class analyses in a large general risk cohort combined with immunological markers to finely discriminate asthma and allergy disease phenotypes and endotypes and then use this information to conduct risk factor analyses. Using this approach in our WHEALS birth cohort, we have already characterized four classes at age 2 years: 1) Low to No Sensitization; 2) Highly Sensitized; 3) Milk and Egg Dominated Sensitization; and 4) Peanut and/or Inhalant allergen – No Milk Sensitization. Total IgE levels varied between the groups, as did the rates of eczema and doctor diagnosis of asthma (at age 4 years). The Highly Sensitized had the greatest rates, the Low to No Sensitization had the lowest rates, and the other two classes had rates intermediate between the Low and High Sensitization groups. These data suggest the use of latent classes, rather than the use of the “traditional” definition of atopy (any allergen-specific IgE (sIgE) _0.35 IU/mL), more

specifically identifies those on a trajectory for allergic disease, yielding advancement in both allergic disease research and clinical care. Using the predominantly (62%) African American birth cohort WHEALS, we will: Aim 1) Determine which early life allergic disease phenotypes identified at age 2 years are associated with lung function (spirometry and methacholine challenge) at age 10 years; Aim 2) a) Identify the allergic disease endotypes for 10 year old children based on annual report of wheeze; lung function, eNO, obesity, cytokines, and white cell counts and extensive immunophenotyping [assessment of cellular markers to identify and quantify activation of regulatory T cells (Tregs), basophils and dendritic cells (DCs)] at age 10 years; and total IgE and sensitization (sIgE and skin prick tests) at ages 2 and 10 years; and, b) Estimate associations between early life risk factors (e.g., delivery type, pet exposure, etc.) and the identified Aim 2a endotypes; and, 3) Compare and contrast the risk factor associations with the endotypes in Aim 2 to the risk factor associations determined using "traditional" definitions of atopy and asthma (doctor diagnosis and medication use and/or symptoms in the last year). Analyses will be performed for all 900 WHEALS cohort children and separately for Black children and White children to assess racial differences.

Principal Investigator: Ganesa Wegienka, Ph.D.
Environmental Risk Factors for Uterine Fibroids: A Prospective Ultrasound Study (R01ES028235)
Study of Environment, Lifestyle, and Fibroids (SELF) (HHSN273201600003I) Subcontract

Uterine leiomyomata (UL), or fibroids, are the most common neoplasms of the uterus and are a major source of gynecologic morbidity. In the United States (U.S.), the lifetime risk of symptomatic UL is approximately 25-30%. UL are the leading indication for hysterectomy, and UL-related costs exceed $34.4 billion annually. Black women are disproportionately affected by UL, with a 3-fold greater risk of diagnosis, earlier age at diagnosis and surgery, and more symptomatic tumors on average than white women. Despite the large public health burden of UL, little is known about its natural history or pathogenesis. Animal data and cross-sectional human studies have provided compelling preliminary evidence of a role for vitamin D in UL development and growth. Exposure to heavy metals such as lead, mercury, and cadmium is widespread, with reproductive-aged women, African Americans, and those of lower socioeconomic status having higher exposure levels than other groups. Funded by the National Institute of Environmental Health Sciences (NIEHS), the Study of Environment, Lifestyle and Fibroids (SELF) is a multi-year prospective cohort study of UL determinants in black women from the Detroit area. In 2011-2012, SELF enrolled 1,696 black women aged 23-34 years who had never been diagnosed with UL. At baseline and every 20 months for a total of 5 years (4 total clinic visits), SELF participants complete interviews, have blood collected for biological measurements, and undergo transvaginal ultrasounds for precise identification and mapping of UL at each visit facilitating accurate determination of UL development and growth (cohort retention >85%). The final planned clinic visits are underway. In this application, we propose to extend follow-up of SELF for an additional five years. One more clinic visit with transvaginal ultrasound, biospecimen collection and detailed exposure assessments via interview will be conducted to achieve the following specific aims: 1) Describe the natural history of UL initiation and growth; calculate age-specific UL incidence; and evaluate changes in tumor characteristics (size, number, and location) over a 10-year period; 2) Assess whether vitamin D status influences UL incidence and growth over a 10-year period; and 3) Evaluate the influence of selected environmental toxicants on UL incidence and growth. Specifically, we will examine the influence of active and passive cigarette smoking on UL incidence and growth; assess exposure to a panel of 13 metals and metalloids (and their mixtures) measured in whole blood and UL incidence and growth over a 10-year period; and determine whether vitamin D status modifies the associations between environmental toxicants and UL incidence. With its prospective design, population of young black women, serial ultrasounds, repeated collection of data on exposures and covariates, and careful analysis of chemical mixtures, SELF is ideal for identifying environmental risk factors for UL. Using methods that overcome the limitations of prior studies, this will be the most definitive study of modifiable environmental risk factors of UL and is likely to have high impact on science, clinical care, and public health policy.

Principal Investigator: Ganesa Wegienka, Ph.D.
Comparing Options for Management: Patient-Centered Results in Uterine Fibroids (COMPARE-UF) (P50HS023418) Other Federal Service Agreement

The broad, long-term objective of this project is to enable patients with uterine fibroids (UF) to make informed decisions about management options based on the highest possible quality evidence. To help

achieve this objective, we propose a multi-center registry of a geographically, racially, ethnically, and clinically diverse group of women who have received medical or surgical treatment for UF, Comparing Options for Management: Patient-centered Results for Uterine Fibroids (COMPARE-UF), designed to address the following specific aims: AIM 1) Develop the infrastructure necessary to implement large-scale observational comparative effectiveness research (CER) studies of management options for women with UF, including (a) a governance structure, policies, and procedures conducive to collaborative research involving patients, clinicians, methodologists, and other stakeholders, (b) an experienced Research and Data Coordinating Center, and (c) nine geographically diverse Clinical Centers (CCs) representing a broad range of patients and providers. AIM 2) Use this infrastructure to implement 3 projects addressing high-priority evidence gaps related to the effect of different management strategies on patient-centered outcomes. These include PROJECT 1: Comparing management options for symptom relief PROJECT 2: Comparing management options for preserving reproductive function PROJECT 3: Comparing effectiveness in different subpopulations. AIM 3) Evaluate innovative methods for the design, conduct, and analysis of observational comparative effectiveness research in this population. AIM 4) Translate research results into improved patient care, through both traditional peer-reviewed publications and collaborations with stakeholders to integrate the research findings into evidence-based patient decision making tools, clinical practice guidelines, and quality measures.

Principal Investigator: Ganesa Wegienka, Ph.D.
Study of Ovarian Aging and Reserve in Young Women (SOAR) (R01HD088638) Subcontract

The average age for a woman to have her first child has been increasing for the last three decades in the United States, making our understanding of ovarian aging and its negative effect on the ovarian reserve, a measure of the capacity of the ovary to produce eggs capable of fertilization. Yet, we know very little about other factors in reproductive-age women that might affect the ovarian reserve, beyond aging itself. This proposal, titled Study of Ovarian Aging and Reserve in Young Women (SOAR), seeks to address the significant gap in our knowledge of factors, particularly modifiable factors, that affect ovarian reserve and might accelerate its decrease in young women. To achieve this goal, we will leverage the ongoing NIEHS Study of Environment, Lifestyle and Fibroids (SELF), which is following a cohort of 1,696 African-American women between the ages of 23-34 years over a five-year period. In this group of young women, we will assess changes in the ovarian reserve by tracking three different measures of the ovarian reserve: anti- Mullerian hormone (AMH), early follicular phase follicle-stimulating hormone (FSH), and antral follicle count (AFC). In addition to collecting survey data, we will also perform oral glucose tolerance testing (OGTT) and anthropometric and bioelectrical impedance analysis (BIA) measurements to more precisely determine the roles of glucose metabolism and obesity on the ovarian reserve. The results of our study will be clinically significant as we currently have limited longitudinal data for counseling women on risk factors for decreased ovarian reserve. Our study design is innovative in that we will use overlapping measures of the ovarian reserve and group-based trajectory modeling to determine correlates associated with decreased ovarian reserve. Specifically, we will determine the demographic, health-behavior, reproductive, and environmental factors associated with decreased AMH (as a measure of the ovarian reserve) over time (Aim 1), determine the association between various measures of obesity and decreased ovarian reserve (Aim 2), and determine the association between glucose dysregulation and decreased ovarian reserve (Aim 3). The proposed prospective longitudinal cohort study will determine the natural history and factors associated with the change in ovarian reserve over time. Further, it will add to the extremely limited data by generating the largest set of longitudinal data on AMH and ovarian reserve in the United States to date, which will benefit all women.

Principal Investigator: Ganesa Wegienka, Ph.D.
Study of Ovarian Aging and Reserve in Young Women (SOAR) (5R01ES029951) Subcontract

Infertility and spontaneous abortion (SAB) are significant public health problems, affecting up to 25% of reproductive age couples in the United States. Health care costs attributable to infertility and SAB exceed $5 billion per year, and several studies have shown an association between infertility treatments and adverse pregnancy outcomes. Thus, identifying modifiable risk factors for subfertility and SAB is an important public health goal. The potential effects of exposure to endocrine-disrupting chemicals (EDCs) on risk of subfertility and SAB are understudied. The few existing human studies have limitations including small sample size, enrollment after conception, retrospective study design, suboptimal assessment of exposure and outcome, inadequate control for potential confounding variables, and limited generalizability. The proposed study will prospectively assess the relation of exposure to selected EDCs,

including phenols, phthalates, and per- and poly-fluoroalkyl substances (PFAS), to risk of subfertility and SAB in a preconception subcohort of 950 pregnancy planners. We will use data from two NICHD-supported prospective cohorts of pregnancy planners in North America and Denmark. With web-based recruitment and data collection, we have enrolled over 17,000 women attempting pregnancy into these cohorts. In a subset of 200 participants, we have successfully pilot tested in-person collection of urine and blood specimens during the preconception and early pregnancy periods. In this application, we propose to expand in-person biospecimen collection, increasing the number of women with preconception and early pregnancy urine and blood samples from 200 to 950. At each of our three biospecimen collection sites (Boston, Detroit, and Aarhus), we will enroll 250 women and collect three urine samples and one blood sample (in preconception) and three urine samples and one blood sample (in early pregnancy). We will ship the samples to the CDC for the analysis of urinary phthalates, urinary phenols, and serum PFAS. To increase cost efficiency, we will pool three urine samples in each exposure window before assaying for phthalates and phenols; and we will assay one preconception blood specimen for PFAS, a persistent chemical, in analyses of subfertility and SAB. Finally, we will conduct a pilot study among 100 U.S. participants to assess the feasibility of collecting urine by mail, which would allow us to take advantage of our full geographically diverse cohort in the future. Strengths of this application include the prospective design, preconception enrollment of pregnancy planners, repeated measurement of exposure during preconception and early pregnancy, excellent control for confounding via bimonthly prospective data collection on a wide range of covariates and use of the latest analytic methods for mixtures modeling. We have generated compelling preliminary data to support our aims. The present grant is cost-effective in leveraging already-established cohort studies with data collection and follow-up supported by other grants. The results generated will be translatable by directly informing future regulatory decisions about EDC standards in a manner that could reduce rates of infertility and SAB to their functioning, but its role in regulating MDSC is unknown.

Publication List HFHS Sladen Library 2020

Administration

Berry R, **Brawner CA**, Kipa SG, **Stevens C**, **Bloom C**, and **Keteyian SJ**. Telemedicine Home-Based Cardiac Rehabilitation: A CASE SERIES. *J Cardiopulm Rehabil Prev* 2020; 40(4):245-248. PMID: 32301763. Full Text

Ebrahimzadeh E, Shams M, Rahimpour Jounghani A, Fayaz F, Mirbagheri M, Hakimi N, Rajabion L, and **Soltanian-Zadeh H**. Localizing confined epileptic foci in patients with an unclear focus or presumed multifocality using a component-based EEG-fMRI method. *Cognitive Neurodynamics* 2020; Epub ahead of print. PMID: Not assigned. Full Text

Lin JC, **Kavousi Y**, **Sullivan B**, and **Stevens C**. Analysis of Outpatient Telemedicine Reimbursement in an Integrated Healthcare System. *Ann Vasc Surg* 2020; 65:100-106. PMID: 31678131. Full Text

Maleki Balajoo S, Asemani D, Khadem A, and **Soltanian-Zadeh H**. Improved dynamic connection detection power in estimated dynamic functional connectivity considering multivariate dependencies between brain regions. *Hum Brain Mapp* 2020; Epub ahead of print. PMID: 32643845. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Regnante JM, Richie N, Fashoyin-Aje L, Hall LL, Highsmith Q, Louis J, Turner K, **Hoover S**, Lee SC, González E, Williams E, Adams H, 3rd, Obasaju C, Sargeant I, Spinner J, Reddick C, Gandee M, Geday M, Dang J, Watson R, and Chen MS, Jr. Operational strategies in US cancer centers of excellence that support the successful accrual of racial and ethnic minorities in clinical trials. *Contemp Clin Trials Commun* 2020; 17:100532. PMID: 32055746. Full Text

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**, **Nauriyal V**, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Xia H, Li S, Li X, Wang W, Bian Y, Wei S, Grove S, Wang W, Vatan L, Liu JR, McLean K, **Rattan R**, **Munkarah AR**, Guan JL, Kryczek I, and Zou W. Autophagic adaptation to oxidative stress alters peritoneal residential macrophage survival and ovarian cancer metastasis. *JCI Insight* 2020; 5(18). PMID: 32780724. Full Text

Allergy and Immunology

Choi T, Devries M, Bacharier L, Busse W, Camargo CA, Jr., Cohen R, Demuri GP, Evans MD, Fitzpatrick
AM, Gergen PJ, Grindle K, Gruchalla R, Hartert T, Hasegawa K, Khurana Hershey GK, Holt P, Homil K, Jartti T, Kattan M, Kercsmar C, **Kim H**, Laing IA, LeBeau P, Lee KE, Le Souëf PN, Liu A, Mauger DT, Ober C, Pappas T, Patel SJ, Phipatanakul W, Pongracic J, Seroogy C, Sly PD,

Tisler C, Wald ER, Wood R, Gangnon R, Jackson DJ, Lemanske RF, Jr., Gern JE, and Bochkov YA. Enhanced Neutralizing Antibody Responses to Rhinovirus C and Age-Dependent Patterns of Infection. *Am J Respir Crit Care Med* 2020; Epub ahead of print. PMID: 33357024. Full Text

Jackson DJ, Bacharier LB, Calatroni A, Gill MA, Hu J, Liu AH, Wheatley LM, Gern JE, Gruchalla RS, Khurana Hershey GK, Kattan M, Kercsmar CM, **Kim H**, O'Connor GT, Patel S, Pongracic JA, Wood RA, and Busse WW. Serum IL-6: A biomarker in childhood asthma? *J Allergy Clin Immunol* 2020; 145(6):1701-1704. PMID: 32004524. Full Text

Luria CJ, **Sitarik AR**, **Havstad S**, **Zoratti EM**, **Kim H**, **Wegienka GR**, **Joseph CLM**, and **CassidyBushrow AE**. Association between asthma symptom scores and perceived stress and trait anxiety in adolescents with asthma. *Allergy Asthma Proc* 2020; 41(3):210-217. PMID: 32375966. Request Article

Ober C, McKennan CG, Magnaye KM, Altman MC, Washington C, 3rd, Stanhope C, Naughton KA, Rosasco MG, Bacharier LB, Billheimer D, Gold DR, Gress L, Hartert T, **Havstad S**, Khurana Hershey GK, Hallmark B, Hogarth DK, Jackson DJ, **Johnson CC**, Kattan M, Lemanske RF, Lynch SV, Mendonca EA, Miller RL, Naureckas ET, O'Connor GT, Seroogy CM, **Wegienka G**, White SR, Wood RA, Wright AL, **Zoratti EM**, Martinez FD, Ownby D, Nicolae DL, **Levin AM**, and Gern JE. Expression quantitative trait locus fine mapping of the 17q12-21 asthma locus in African American children: a genetic association and gene expression study. *Lancet Respir Med* 2020; 8(5):482-492. PMID: 32380068. Full Text

Sheehan WJ, Krouse RZ, Calatroni A, Gergen PJ, Gern JE, Gill MA, Gruchalla RS, Khurana Hershey GK, Kattan M, Kercsmar CM, Lamm CI, Little FF, Makhija MM, Searing DA, **Zoratti E**, Busse WW, and Teach SJ. Aeroallergen Sensitization, Serum IgE, and Eosinophilia as Predictors of Response to Omalizumab Therapy during the Fall Season among Children with Persistent Asthma. *J Allergy Clin Immunol Pract* 2020; 8(9):3021-3028. PMID: 32376491. Full Text

Sitarik A, **Havstad S**, **Kim H**, **Zoratti EM**, **Ownby D**, **Johnson CC**, and **Wegienka G**. Racial Disparities in Allergic Outcomes Persist to Age 10 Years in Black and White Children. *Ann Allergy Asthma Immunol* 2020; 124(4):342-349. PMID: 31945477. Full Text

Zoratti EM, and O'Connor GT. New Therapeutic Strategies for Asthma. *Jama* 2020; 323(6):517-518. Full Text

Acho C, Chhina A, and Galusca D. Anesthetic Considerations for Patients on Renal Replacement Therapy. *Anesthesiol Clin* 2020; 38(1):51-66. PMID: 32008657. Full Text

Anesthesiology

Ahuja S, Mascha EJ, Yang D, Maheshwari K, Cohen B, Khanna AK, Ruetzler K, Turan A, and Sessler DI. Associations of Intraoperative Radial Arterial Systolic, Diastolic, Mean, and Pulse Pressures with Myocardial and Acute Kidney Injury after Noncardiac Surgery: A Retrospective Cohort Analysis. *Anesthesiology* 2020; 132(2):291-306. PMID: 31939844. Full Text

Al-Darzi W, **Alalwan Y**, **Askar F**, **Sadiq O**, **Venkat D**, **Gonzalez H**, **Galusca D**, **Yoshida A**, and **Jafri SM**. Risk Factors and Outcomes of Intracardiac Thrombosis During Orthotopic Liver Transplantation. *Transplant Proc* 2020; Epub ahead of print. PMID: 33246584. Full Text

Cata JP, **Guerra C**, Soto G, and Ramirez MF. Anesthesia Options and the Recurrence of

Cancer: What We Know so Far? *Local Reg Anesth* 2020; 13:57-72. PMID: 32765061. Full Text

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12):e0291. PMID: 33251520. Full Text

Deer TR, Esposito MF, McRoberts WP, Grider JS, Sayed D, Verrills P, Lamer TJ, Hunter CW, Slavin KV, Shah JM, Hagedorn JM, Simopoulos T, Gonzalez DA, Amirdelfan K, Jain S, Yang A, **Aiyer R**, Antony A, Azeem N, Levy RM, and Mekhail N. A Systematic Literature Review of Peripheral Nerve Stimulation Therapies for the Treatment of Pain. *Pain Med* 2020; 21(8):1590-1603. PMID: 32803220. Full Text

Deer TR, Grider JS, Lamer TJ, Pope JE, Falowski S, Hunter CW, Provenzano DA, Slavin KV, Russo M, Carayannopoulos A, Shah JM, Harned ME, Hagedorn JM, Bolash RB, Arle JE, Kapural L, Amirdelfan K, Jain S, Liem L, Carlson JD, Malinowski MN, Bendel M, Yang A, **Aiyer R**, Valimahomed A, Antony A, Craig J, Fishman MA, Al-Kaisy AA, Christelis N, Rosenquist RW, Levy RM, and Mekhail N. A Systematic Literature Review of Spine Neurostimulation Therapies for the Treatment of Pain. *Pain Med* 2020; 21(7):1421-1432. PMID: 32034422. Full Text

Deer TR, Hunter CW, Mehta P, Sayed D, Grider JS, Lamer TJ, Pope JE, Falowski S, Provenzano DA, Esposito MF, Slavin KV, Baranidharan G, Russo M, Jassal NS, Mogilner AY, Kapural L, Verrills P, Amirdelfan K, McRoberts WP, Harned ME, Chapman KB, Liem L, Carlson JD, Yang A, **Aiyer R**, Antony A, Fishman MA, Al-Kaisy AA, Christelis N, Levy RM, and Mekhail N. A Systematic Literature Review of Dorsal Root Ganglion Neurostimulation for the Treatment of Pain. *Pain Med* 2020; 21(8):1581-1589. PMID: 32803221. Full Text

Frisoli TM, **So CY**, **Guruswamy JG**, **Chebl AB**, **Lee JC**, and **Eng MH**. Vacuuming in Crowded Dangerous Spaces: Aspiration of Large Ascending Aortic Thrombus. *JACC: Case Reports* 2020; 2(12):1979-1983. PMID: Not assigned. Full Text

Guerra-Londono CE, **Han X**, and **Penning DH**. Postoperative Pulmonary Complications in the Morbidly Obese: The Role of Tidal Volume and the Type of Abdominal Surgery. *Respir Care* 2020; 65(12):19081915. PMID: 32694181. Full Text

Kim DD, and **Sibai N**. The Current State of Opioid Prescribing and Drug Enforcement Agency (DEA) Action Against Physicians: An Analysis of DEA Database 2004-2017. *Pain Physician* 2020; 23(3):E297e304. PMID: 32517406. Full Text

Ladny M, Smereka J, **Ahuja S**, Szarpak L, Ruetzler K, and Ladny JR. Effect of 5 different cervical collars on optic nerve sheath diameter: A randomized crossover trial. *Medicine (Baltimore)* 2020; 99(16):e19740. PMID: 32311968. Full Text

Maslanka M, Szarpak L, **Ahuja S**, Ruetzler K, and Smereka J. Novel airway device Vie Scope in several pediatric airway scenario: A randomized simulation pilot trial. *Medicine (Baltimore)* 2020; 99(28):e21084. PMID: 32664127. Full Text

Nanchal R, Subramanian R, Karvellas CJ, Hollenberg SM, Peppard WJ, Singbartl K, Truwit J, Al-Khafaji AH, Killian AJ, Alquraini M, Alshammari K, Alshamsi F, Belley-Cote E, Cartin-Ceba R, Dionne JC, **Galusca DM**, Huang DT, Hyzy RC, Junek M, Kandiah P, Kumar G, Morgan RL, Morris PE, Olson JC, Sieracki R, Steadman R, Taylor B, and Alhazzani W. Guidelines for the Management of Adult Acute and pAcute-on-Chronic Liver Failure in the ICU: Cardiovascular, Endocrine, Hematologic, Pulmonary, and Renal Considerations. *Crit Care Med* 2020;

48(3):e173-e191. PMID: 32058387. Full Text

Nemeh H, **Coba V**, Chulkov M, **Gupta A**, **Yeldo N**, **Chamogeorgakis T**, **Tanaka D**, **Allenspach L**, **Simanovski J**, and Shanti C. Lung Transplantation for the Treatment of Vaping Induced, Irreversible, End Stage Lung Injury. *Ann Thorac Surg* 2020; Epub ahead of print. PMID: 33130115. Full Text

Peleman JR, **Tarwade P**, **Han X**, **Penning DH**, and **Craig JR**. Hemodynamic Changes with 1:1000 Epinephrine on Wrung-Out Pledgets Before and During Sinus Surgery. *Ann Otol Rhinol Laryngol* 2020; Epub ahead of print. PMID: 32945177. Full Text

Ramadan AR, **Alsrouji OK**, **Cerghet M**, **Chopp M**, **Danoun O**, **Grover KM**, **Ismail M**, **Katramados AM**, **Mohamed GA**, **Mehta CB**, **Newman DS**, **Osman G**, **Reuther J**, **Sallowm Y**, **Zaman IF**, and **Barkley GL**. Tales of a department: How the COVID-19 pandemic transformed Detroit's Henry Ford Hospital, Department of Neurology - Part I: The surge. *BMJ Neurology Open* 2020; 2(1). PMID: Not assigned. Full Text

Ruetzler K, Smereka J, Abelairas-Gomez C, Frass M, Dabrowski M, Bialka S, Misiolek H, Plusa T, Robak O, Aniolek O, Ladny JR, Gorczyca D, **Ahuja S**, and Szarpak L. Comparison of the new flexible tip bougie catheter and standard bougie stylet for tracheal intubation by anesthesiologists in different difficult airway scenarios: a randomized crossover trial. *BMC Anesthesiol* 2020; 20(1):90. PMID: 32312225. Full Text

Szarpak L, Filipiak KJ, Mosteller L, Jaguszewski M, Smereka J, Ruetzler K, **Ahuja S**, and Ladny JR. Survival, neurological and safety outcomes after out of hospital cardiac arrests treated by using prehospital therapeutic hypothermia: A systematic review and meta-analysis. *Am J Emerg Med* 2020; Epub ahead of print. PMID: 32088060. Full Text

Tanaka KA, Mondal S, **Morita Y**, Williams B, Strauss ER, and Cicardi M. Perioperative Management of Patients With Hereditary Angioedema With Special Considerations for Cardiopulmonary Bypass. *Anesth Analg* 2020; 131(1):155-169. PMID: 32102012. Full Text

Behavioral Health Services/Psychiatry

Blumenfeld EM, **Gautam M**, **Akinyemi E**, and **Mahr G**. Suicidality in Factitious Disorder. *Prim Care Companion CNS Disord* 2020; 22(3). PMID: 32441497. Full Text

Chaudhary AMD, **Memon RI**, Dar SK, Bhullar DK, Dar KR, and Naveed S. Suicide during Transition of Care: a Review of Targeted Interventions. *Psychiatr Q* 2020; 91(2):417-450. PMID: 31960191. Full Text

Chawa MS, **Yeh HH**, **Gautam M**, **Thakrar A**, **Akinyemi EO**, and **Ahmedani BK**. The Impact of Socioeconomic Status, Race/Ethnicity, and Patient Perceptions on Medication Adherence in Depression Treatment. *Prim Care Companion CNS Disord* 2020; 22(6). PMID: 33306887. Request Article

Clark-Sienkiewicz SM, **Hecht LM**, **Pester B**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Racial Differences in Psychological Symptoms and Eating Behaviors Among Bariatric Surgery Candidates. *J Racial Ethn Health Disparities* 2020; Epub ahead of print. PMID: 32367444. Request Article

Clark-Sienkiewicz SM, and **Miller-Matero LR**. An Investigation of Racial Disparities in Weight

Loss Outcomes: Roux-en-Y Gastric Bypass Versus Sleeve Gastrectomy. *J Racial Ethn Health Disparities* 2020; 7(2):234-237. PMID: 31667712. Request Article

Gautam M, Kaur M, and **Mahr G**. COVID-19-Associated Psychiatric Symptoms in Health Care Workers: Viewpoint From Internal Medicine and Psychiatry Residents. *Psychosomatics* 2020; 61(5):579-581. PMID: 32439184. Full Text

Gautam M, **Thakrar A**, **Akinyemi E**, and **Mahr G**. Current and Future Challenges in the Delivery of Mental Healthcare during COVID-19. *SN Compr Clin Med* 2020; Epub ahead of print. PMID: 32838140. Full Text

Gritti ES, Meyer GJ, Bornstein RF, Marino DP, and **Marco JD**. Narcissism and Reactions to a Self-Esteem Insult: An Experiment Using Predictions from Self-Report and the Rorschach Task. *J Pers Assess* 2020; Epub ahead of print. PMID: 33270469. Request Article

Hecht LM, **Pester B**, **Braciszewski JM**, **Graham AE**, **Mayer K**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Socioeconomic and Racial Disparities in Bariatric Surgery. *Obes Surg* 2020; 30(6):2445-2449. PMID: 31927686. Full Text

Hecht LM, Schwartz N, **Miller-Matero LR**, **Braciszewski JM**, and Haedt-Matt A. Eating pathology and depressive symptoms as predictors of excessive weight gain during pregnancy. *J Health Psychol* 2020; Epub ahead of print. PMID: 32301343. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Jesse MT, Hansen B, Bruschwein H, Chen G, Nonterah C, Peipert JD, Dew MA, Thomas C, Ortega AD, Balliet W, Ladin K, Lerret S, Yaldo A, Coco T, and Mallea J. Findings and Recommendations from the
Organ Transplant Caregiver Initiative: Moving Clinical Care and Research Forward. *Am J Transplant* 2020; Epub ahead of print. PMID: 32946643. Full Text

Katato H, **Smith D**, and **Akinyemi E**. Residency Training in a Healthcare Crisis. *Acad Psychiatry* 2020; 44(6):683-684. PMID: 33058048. Full Text

Khan A, **Gautam M**, **Chawa M**, **Thakrar A**, and **Akinyemi E**. The Intersection of Suicide and Viral Outbreaks. *Prim Care Companion CNS Disord* 2020; 22(3). PMID: 32408398. Request Article

Lynch FL, **Peterson EL**, Lu CY, **Hu Y**, Rossom RC, Waitzfelder BE, Owen-Smith AA, Hubley S, **Prabhakar D**, **Keoki Williams L**, Beck A, Simon GE, and **Ahmedani BK**. Substance use disorders and risk of suicide in a general US population: a case control study. *Addict Sci Clin Pract* 2020; 15(1):14. PMID: 32085800. Full Text

Macki M, Mahajan A, Shatz R, **Air EL**, **Novikova M**, Fakih M, Elmenini J, **Kaur M**, **Bouchard KR**, **Funk BA**, and **Schwalb JM**. Prevalence of Alternative Diagnoses and Implications for Management in Idiopathic Normal Pressure Hydrocephalus Patients. *Neurosurgery* 2020; 87(5):999-1007. PMID: 32472677. Full Text

Memon RI, Naveed S, Faquih AE, Fida A, Abbas N, Chaudhary AMD, and Qayyum Z.

Effectiveness and Safety of Ketamine for Unipolar Depression: a Systematic Review. *Psychiatr Q* 2020; 91(4):1147-1192.
PMID: 32852658. Full Text

Miller-Matero LR, **Hamann A**, **LaLonde L**, **Martens KM**, Son J, **Clark-Sienkiewicz S**, **Sata M**, **Coleman JP**, **Hecht LM**, **Braciszewski JM**, and **Carlin AM**. Predictors of Alcohol Use after Bariatric Surgery. *J Clin Psychol Med Settings* 2020; Epub ahead of print. PMID: 33205321. Full Text

Mun M. Uncertainty is the New Norm, Adaptability is Essential. *Acad Med* 2020; 96(1):92. PMID: 32739933. Full Text

Mun M, and **Akinyemi E**. Representation on the Editorial Boards of Academic Psychiatry Journals: the Gender Difference. *Acad Psychiatry* 2020; 44(4):506. PMID: 32458311. Full Text

Mun M, **Gautam M**, **Maan R**, and **Krayem B**. An Increased Presence of Male Personalities in Dissociative Identity Disorder after Initiating Testosterone Therapy. *Case Rep Psychiatry* 2020; 2020:8839984. PMID: 33083080. Full Text

Owen-Smith A, Stewart C, Sesay MM, Strasser SM, Yarborough BJ, **Ahmedani B**, **Miller-Matero LR**, Waring SC, Haller IV, Waitzfelder BE, Sterling SA, Campbell CI, Hechter RC, Zeber JE, Copeland LA, Scherrer JF, Rossom R, and Simon G. Chronic pain diagnoses and opioid dispensings among insured individuals with serious mental illness. *BMC Psychiatry* 2020; 20(1):40. PMID: 32005200. Full Text

Patel S, **Gautam M**, and **Mahr G**. COVID-19 and Infection Control: A Perspective From the Psychiatric Ward. *Prim Care Companion CNS Disord* 2020; 22(3). PMID: 32441495. Request Article

Phillips JM, and **Longoria JN**. Addressing the neurodevelopmental needs of children and adolescents with congenital heart disease: A review of the existing intervention literature. *Child Neuropsychol* 2020; 26(4):433-459. PMID: 31672097. Request Article

Prabhakar D, **Peterson EL**, **Hu Y**, **Chawa S**, Rossom RC, Lynch FL, Lu CY, Waitzfelder BE, Owen-Smith AA, **Williams LK**, Beck A, Simon GE, and Ahmedani BK. Serious Suicide Attempts and Risk of Suicide Death. *Crisis* 2020; Epub ahead of print. PMID: 33151092. Request Article

Sablaban IM, and **Gautam M**. The diagnosis of severe obsessions in the setting of kratom withdrawal and treatment with lorazepam: Case report. *J Addict Dis* 2020; Epub ahead of print. PMID: 32924857. Request Article

Sablaban IM, and Sivananthan M. Attention-Deficit Hyperactivity Disorder-Associated Impulsive
Aggression Treated With Lamotrigine. *Am J Ther* 2020; Epub ahead of print. PMID: 32769396. Full Text

Sablaban IM, and **Sivananthan M**. Letter to the Editor: Treating Autism-Associated Sexual Compulsions with Naltrexone. *J Child Adolesc Psychopharmacol* 2020; 30(10):620. PMID: 33146546. Full Text

Vangala S, **Beebani G**, **Thiem R**, and **Dereczyk A**. Mania Associated With Supratherapeutic Tacrolimus Levels in a Patient With No Psychiatric History. *Psychosomatics* 2020; 61(6):769-

773. PMID: 32660875. Full Text

Wong A, and **Mun M**. A Case of Kratom Overdose in a Pediatric Patient. *Case Rep Psychiatry* 2020; 2020:8818095. PMID: 32855833. Full Text

Xiang X, **Ning Y**, and Kayser J. The Implications of COVID-19 for the Mental Health Care of Older Adults: Insights from Emergency Department Social Workers. *J Gerontol Soc Work* 2020; 63(6-7):662-664. PMID: 32543294. Request Article

Cardiology/Cardiovascular Research

Abedini NC, Guo G, Hummel SL, Bozaan D, Beasley M, **Cowger J**, and Chopra V. Factors influencing palliative care referral for hospitalised patients with heart failure: an exploratory, randomised, multiinstitutional survey of hospitalists and cardiologists. *BMJ Open* 2020; 10(12):e040857. PMID: 33323440. Full Text

Afana M, **Altawil M**, **Basir M**, **Alqarqaz M**, **Alaswad K**, **Eng M**, **O'Neill WW**, Lederman RJ, and Greenbaum AB. Transcaval access for the emergency delivery of 5.0 liters per minute mechanical circulatory support in cardiogenic shock. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 32902101. Full Text

Afana M, **Koenig GC**, Seth M, Sukul D, Frazier KM, Fielding S, Jensen A, and Gurm HS. Trends and outcomes of non-primary PCI at sites without cardiac surgery on-site: The early Michigan experience. *PLoS One* 2020; 15(8):e0238048. PMID: 32845908. Full Text

Al Rifai M, Blaha MJ, Ahmed A, Almasoudi F, Johansen MC, Qureshi W, Sakr S, Virani SS, **Brawner CA**, **Ehrman JK**, **Keteyian SJ**, and Al-Mallah MH. Cardiorespiratory Fitness and Incident Stroke Types: The FIT (Henry Ford ExercIse Testing) Project. *Mayo Clin Proc* 2020; 95(7):1379-1389. PMID: 32622446. Full Text

Al-Darzi W, **Alalwan Y**, **Askar F**, **Sadiq O**, **Venkat D**, **Gonzalez H**, **Galusca D**, **Yoshida A**, and **Jafri SM**. Risk Factors and Outcomes of Intracardiac Thrombosis During Orthotopic Liver Transplantation. *Transplant Proc* 2020; Epub ahead of print. PMID: 33246584. Full Text

Al-Darzi W, **Aurora L**, **Michaels A**, **Cowger J**, **Grafton G**, **Selektor Y**, **Tita C**, **Hannawi B**, **Lanfear D**, **Nemeh HW**, and **Williams CT**. Heart Transplant Recipients with Confirmed 2019 Novel Coronavirus Infection: The Detroit Experience. *Clin Transplant* 2020; 34(12):e14091. PMID: 32940925. Full Text

Al-Darzi WK, **Hana A**, **Lahiri MK**, **Dagher C**, **Greenberg JC**, **Alaswad K**, **Rabbani BT**, **McCord JK**, and **Reddy M**. Diffuse B Cell Lymphoma Leading to Complete Heart Block: Is This Transient or Permanent? *Am J Case Rep* 2020; 21:e925760. PMID: 33093439. Request Article

Al-Khadra Y, Alraies MC, Darmoch F, Pacha HM, Soud M, Kaki A, Rab T, Grines CL, Meraj P, **Alaswad K**, Kwok CS, Mamas M, and Kapadia S. Outcomes of nonemergent percutaneous coronary intervention requiring mechanical circulatory support in patients without cardiogenic shock. *Catheter Cardiovasc Interv* 2020; 95(3):503-512. PMID: 31254325. Full Text

Alaswad K, and **Alqarqaz M**. Complete Revascularization in STEMI: Why, How, and When? *JACC Cardiovasc Interv* 2020; 13(13):1583-1585. PMID: 32646700. Full Text

Ananthasubramaniam K. ASNC Image Guide Registry: Leading the way toward improving quality and patient care in nuclear cardiology. *J Nucl Cardiol* 2020; Epub ahead of print. PMID: 32394401. Full Text

Ananthasubramaniam K, and **Karthikeyan V**. Lurking in the shadows: Asymptomatic bilateral lung involvement with novel corona virus 2019 identified on myocardial perfusion SPECT CT: Implications for interpreting physicians. *J Nucl Cardiol* 2020; 27(4):1387-1390. PMID: 32529532. Full Text

Ando T, **Villablanca PA**, Takagi H, and Briasoulis A. Meta-Analysis of Hospital-Volume Relationship in Transcatheter Aortic Valve Implantation. *Heart Lung Circ* 2019; 29(7):e147-156. PMID: 32089491. Full Text

Arora L, Krishnan S, Subramani S, Sharma A, Hanada S, **Villablanca PA**, Nunez-Gil IJ, and Ramakrishna H. Functional Tricuspid Regurgitation: Analysis of Percutaneous Transcatheter Techniques and Current Outcomes. *J Cardiothorac Vasc Anesth* 2020; Epub ahead of print. PMID: 32247538. Full Text

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Atti V, Gwon Y, Narayanan MA, Garcia S, Sandoval Y, Brilakis ES, **Basir MB**, Turagam MK, Khandelwal A, Mena-Hurtado C, Mamas MA, Abbott JD, Bhatt DL, and Velagapudi P. Multivessel Versus Culprit-Only Revascularization in STEMI and Multivessel Coronary Artery Disease: Meta-Analysis of Randomized Trials. *JACC Cardiovasc Interv* 2020; 13(13):1571-1582. PMID: 32646699. Full Text

Aurora L, **Nona P**, and **Ananthasubramaniam K**. A Pregnant Patient with Elevated Heart Rate. *Am J Med* 2020; Epub ahead of print. PMID: 33181101. Full Text

Aurora L, **Peterson E**, **Gui H**, **Zeld N**, **McCord J**, Pinto Y, **Cook B**, **Sabbah HN**, **Keoki Williams L**, Snider J, and **Lanfear DE**. Suppression Tumorigenicity 2 (ST2) Turbidimetric Immunoassay Compared to Enzyme-Linked Immunosorbent Assay in Predicting Survival in Heart Failure Patients with Reduced Ejection Fraction. *Clin Chim Acta* 2020; 510:767-771. PMID: 32926842. Request Article

Azzalini L, **Alaswad K**, Uretsky BF, Agostoni P, Galassi AR, Harada Ribeiro M, Filho EM, MoralesVictorino N, Attallah A, **Gupta A**, Zivelonghi C, Montorfano M, Bellini B, and Carlino M. Multicenter experience with the antegrade fenestration and reentry technique for chronic total occlusion recanalization. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 32320133. Full Text

Azzalini L, Tzanis G, Mashayekhi K, Uretsky BF, Ojeda S, Pan M, Rinfret S, Avran A, **Alaswad K**, Yamane M, Karmpaliotis D, Brilakis ES, Carlino M, and Ybarra LF. Solving Challenging Situations and Complications in Everyday Percutaneous Coronary Intervention Using Chronic Total Occlusion Techniques. *J Invasive Cardiol* 2020; 32(3):E63-e72. PMID: 32123144. Request Article

Bajwa F, **Jafri SM**, and **Ananthasubramaniam K**. A Review of Selected Adult Congenital Heart
Diseases Encountered in Daily Practice. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID:

32778034. Request Article

Bajwa F, Koenig G, Hegab S, Parikh S, and Ananthasubramaniam K. A Case Series of Epicardial Lipomatosis Masquerading as Extracardiac Pathology on Echocardiography: Role of Multimodality Imaging in Clarifying Misdiagnosis. *CASE (Phila)* 2020; 4(5):389-392. PMID: 33117935. Full Text

Basir MB. Beyond the coronary arteries, should we be shifting our focus to mechanical circulatory support in patients with acute myocardial infarction and cardiogenic shock? *Cardiovasc Revasc Med* 2020; 21(7):849-850. PMID: 32387218. Full Text

Basir MB, **Eng MH**, **Villablanca P**, Anderson MB, **Zaidan M**, **Wang DD**, **Alaswad K**, **O'Neill WW**, and **Alqarqaz M**. Alternative Access for Mechanical Circulatory Support. *Structural Heart* 2020; 4(6):458-467. PMID: Not assigned. Full Text

Basir MB, **Lemor A**, and **O'Neill W**. Reply: Cardiogenic Shock Management Will Never Be All or None. *JACC Cardiovasc Interv* 2020; 13(15):1837-1838. PMID: 32763081. Full Text

Bayes-Genis A, Liu PP, **Lanfear DE**, de Boer RA, Gonzalez A, Thum T, Emdin M, and Januzzi JL. Omics phenotyping in heart failure: the next frontier. *Eur Heart J* 2020; 41(36):3477-3484. PMID: 32337540. Full Text

Berry R, **Brawner CA**, Kipa SG, **Stevens C**, **Bloom C**, and **Keteyian SJ**. Telemedicine Home-Based Cardiac Rehabilitation: A CASE SERIES. *J Cardiopulm Rehabil Prev* 2020; 40(4):245-248. PMID: 32301763. Full Text

Blumer V, Greene SJ, Ortiz M, Kittipibul V, Hernandez GA, Fudim M, **Lemor A**, Mentz RJ, and Vest AR. In-hospital outcomes after bariatric surgery in patients with heart failure. *Am Heart J* 2020; 230:59-62. PMID: 32991845. Full Text

Brawner CA, **Ehrman JK**, and **Keteyian SJ**. Are International Standards for Exercise Capacity Ready for Prime Time? *Mayo Clin Proc* 2020; 95(2):218-220. PMID: 32029079. Full Text

Brener MI, Burkhoff D, **Basir MB**, and **Alqarqaz M**. Pressure-Volume Analysis Illustrating Left Ventricular Unloading by a Percutaneous Transvalvular Left Ventricular to Aortic Pump. *Circ Heart Fail* 2020; 13(4):e006788. PMID: 32295408. Full Text

Butera B, **Klingler D**, **McCord JK**, and **Ananthasubramaniam K**. Interpreting technetium-99m pyrophosphate cardiac scans to diagnose transthyretin cardiac amyloidosis: Need for due diligence. *J Nucl Cardiol* 2020; Epub ahead of print. PMID: 32390109. Full Text

Butler J, Khan MS, Anker SD, Fonarow GC, Kim RJ, Nodari S, O'Connor CM, Pieske B, Pieske-Kraigher E, **Sabbah HN**, Senni M, Voors AA, Udelson JE, Carr J, Gheorghiade M, and Filippatos G. Effects of Elamipretide on Left Ventricular Function in Patients with Heart Failure with Reduced Ejection Fraction: The PROGRESS-HF Phase 2 Trial. *J Card Fail* 2020; 26(5):429-437. PMID: 32068002. Full Text

Chamogeorgakis T, **Cowger J**, **Apostolou D**, **Tanaka D**, and **Nemeh H**. Right Ventricular Device HeartWare Implant to the Right Atrium with Fixation to the Chest Wall in Patient with Biventricular Support. *Asaio j* 2020; 66(8):e102-e104. PMID: 32740361. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Chehab O, Morsi RZ, Kanj A, Rachwan RJ, Pahuja M, Mansour S, Tabaja H, Ahmad U, Zein SE, **Raad M**, Saker A, Alvarez P, and Briasoulis A. Incidence and clinical outcomes of nosocomial infections in patients presenting with STEMI complicated by cardiogenic shock in the United States. *Heart Lung* 2020; 49(6):716-723. PMID: 32866743. Full Text

Choi AD, Geske JB, Lopez-Mattei JC, Parwani P, **Wang DD**, Winchester DE, Sengupta PP, Zoghbi WA, Shaw LJ, Chandrashekhar YS, and Blankstein R. Cardiovascular Imaging Through the Prism of Modern Metrics. *JACC Cardiovasc Imaging* 2020; 13(5):1256-1269. PMID: 32381247. Full Text

Choi AD, Thomas DM, **Lee J**, Abbara S, Cury RC, Leipsic JA, Maroules C, Nagpal P, Steigner ML, **Wang DD**, Williams MC, Zeb I, Villines TC, and Blankstein R. 2020 SCCT Guideline for Training Cardiology and Radiology Trainees as Independent Practitioners (Level II) and Advanced Practitioners (Level III) in Cardiovascular Computed Tomography: A Statement from the Society of Cardiovascular Computed Tomography. *JACC Cardiovasc Imaging* 2020; 14(1):272-287. PMID: 33168479. Full Text

Chu DJ, Al Rifai M, Virani SS, **Brawner CA**, Nasir K, and Al-Mallah MH. The relationship between cardiorespiratory fitness, cardiovascular risk factors and atherosclerosis. *Atherosclerosis* 2020; 304:44-52. PMID: 32590246. Full Text

Cook B, **McCord J**, **Hudson M**, **Al-Darzi W**, **Moyer M**, **Jacobsen G**, and **Nowak R**. Baseline high sensitivity cardiac troponin I level below limit of quantitation rules out acute myocardial infarction in the emergency department. *Crit Pathw Cardiol* 2020; Epub ahead of print. PMID: 32639243. Full Text

Cormican D, McHugh S, Boisen M, Winter D, **So CY**, **Villablanca PA**, and Ramakrishna H. The Low Risk Transcatheter Aortic Valve Replacement Trials-An Analysis. *J Cardiothorac Vasc Anesth* 2020; 34(11):3133-3138. PMID: 32144060. Full Text

Dabbagh MF, **Aurora L**, **D'Souza P**, **Weinmann AJ**, **Bhargava P**, and **Basir MB**. Cardiac Tamponade Secondary to COVID-19. *JACC Case Rep* 2020; 2(9):1326-1330. PMID: 32328588. Full Text

Davies RE, Prasad M, **Alaswad K**, Riley RF, Meraj P, Thompson C, Maran A, Karmpaliotis D, McCabe JM, Kirtane AJ, and Lombardi WL. Training in high-risk coronary procedures and interventions: Recommendations for core competencies. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 32915494. Full Text

DeVore AD, Granger BB, Fonarow GC, Al-Khalidi HR, Albert NM, Lewis EF, Butler J, Pina IL, Heidenreich PA, Allen LA, Yancy CW, Cooper LB, Felker GM, Kaltenbach LA, McRae AT, **Lanfear DE**, Harrison RW, Kociol RD, Disch M, Ariely D, Miller JM, Granger CB, and Hernandez AF. Care Optimization Through Patient and Hospital Engagement Clinical Trial for Heart Failure: Rationale and design of CONNECT-HF. *Am Heart J* 2020; 220:41-50. PMID: 31770656. Full Text

Drake DH, De Bonis M, Covella M, Agricola E, Zangrillo A, **Zimmerman KG**, and Cobey FC. Echocardiography in Pandemic: Front-Line Perspective, Expanding Role of Ultrasound, and Ethics of Resource Allocation. *J Am Soc Echocardiogr* 2020; 33(6):683-689. PMID: 32503707. Full Text

Edla S, Atti V, Kumar V, Tripathi B, **Neupane S**, Nalluri N, Abela G, Rosman H, and Mehta RH. Comparison of nationwide trends in 30-day readmission rates after carotid artery stenting and carotid endarterectomy. *J Vasc Surg* 2020; 71(4):1222-1232.e1229. PMID: 31564583. Full Text

Ehrman JK, Fernandez AB, Myers J, Oh P, Thompson PD, and **Keteyian SJ**. Aortic Aneurysm:
DIAGNOSIS, MANAGEMENT, EXERCISE TESTING, AND TRAINING. *J Cardiopulm Rehabil Prev* 2020; 40(4):215-223. PMID: 32604251. Full Text

Eng MH. Foreword. *Interv Cardiol Clin* 2021; 10(1):xiii. PMID: 33223112. Full Text

Eng MH, Kherallah RY, Guerrero M, Greenbaum AB, **Frisoli T**, **Villablanca P**, **Wang DD**, **Lee J**, **Wyman J**, and **O'Neill WW**. Complete percutaneous apical access and closure: Short and intermediate term outcomes. *Catheter Cardiovasc Interv* 2020; 96(2):481-487. PMID: 31957915. Full Text

Fernando RJ, Shah R, Yang Y, Goeddel LA, **Villablanca PA**, Gil IJN, and Ramakrishna H. Transcatheter Mitral Valve Repair and Replacement: Analysis of Recent Data and Outcomes. *J Cardiothorac Vasc Anesth* 2020; 34(10):2793-2806. PMID: 32151510. Full Text

Fleg JL, **Keteyian SJ**, Peterson PN, Benzo R, Finkelstein J, Forman DE, Gaalema DE, Cooper LS, Punturieri A, Joseph L, Shero S, and Zieman S. Increasing Use of Cardiac and Pulmonary Rehabilitation in Traditional and Community Settings: OPPORTUNITIES TO REDUCE HEALTH CARE DISPARITIES. *J Cardiopulm Rehabil Prev* 2020; 40(6):350-355. PMID: 33074849. Full Text

Fram G, **Wang DD**, **Malette K**, **Villablanca P**, **Kang G**, **So K**, **Basir MB**, **Khan A**, **McKinnon JE**, **Zervos M**, and **O'Neill WW**. Cardiac Complications Attributed to Hydroxychloroquine: A systematic review of the Literature Pre-COVID-19. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID: 33059567. Full Text

Frisoli TM, **So CY**, **Guruswamy JG**, **Chebl AB**, **Lee JC**, and **Eng MH**. Vacuuming in Crowded Dangerous Spaces: Aspiration of Large Ascending Aortic Thrombus. *JACC: Case Reports* 2020; 2(12):1979-1983. PMID: Not assigned. Full Text

Garan AR, Kanwar M, Thayer KL, Whitehead E, Zweck E, Hernandez-Montfort J, Mahr C, Haywood JL, Harwani NM, Wencker D, Sinha SS, Vorovich E, Abraham J, **O'Neill W**, Burkhoff D, and Kapur NK. Complete Hemodynamic Profiling With Pulmonary Artery Catheters in Cardiogenic Shock Is Associated With Lower In-Hospital Mortality. *JACC Heart Fail* 2020; 8(11):903-913. PMID: 33121702. Full Text

Gibbs J, deFilippi C, Peacock F, Mahler S, **Nowak R**, Christenson R, Apple F, **Jacobsen G**, and **McCord J**. The utility of risk scores when evaluating for acute myocardial infarction using high-sensitivity cardiac troponin I. *Am Heart J* 2020; 227:1-8. PMID: 32634671. Full Text

Gibbs J, and **McCord J**. Chest Pain Evaluation in the Emergency Department: Risk Scores and HighSensitivity Cardiac Troponin. *Curr Cardiol Rep* 2020; 22(7):49. PMID: 32472247. Full Text

Goldsweig AM, Tak HJ, Alraies MC, Park J, Smith C, Baker J, Lin L, Patel N, **O'Neill WW**, and **Basir MB**. Mechanical circulatory support following out-of-hospital cardiac arrest: Insights from the National Cardiogenic Shock Initiative. *Cardiovasc Revasc Med* 2020; Epub ahead of print. PMID: 33358390. Full Text

Gorgis S, **Dabbagh MF**, **Mishra K**, **Ahluwalia G**, **Hana A**, **Fram G**, **Dhillon D**, **Lemor A**, **Khan A**, **Miller D**, **Kaatz S**, **O'Neill WW**, and **Wang DD**. Unprotected discharge: absence of stroke prevention strategies in patients with atrial fibrillation admitted for bleeding. *J Interv Card Electrophysiol* 2020; Epub ahead of print. PMID: 33119818. Full Text

Greenbaum AB, Khan JM, Rogers T, Babaliaros VC, **Eng MHK**, **Wang DD**, **Paone G**, and Lederman RJ. First-in-human transcatheter pledget-assisted suture tricuspid annuloplasty for severe tricuspid insufficiency. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 32385950. Full Text

Guerrero M, Vemulapalli S, Xiang Q, **Wang DD**, Eleid M, Cabalka AK, Sandhu G, Salinger M, Russell H, Greenbaum A, Kodali S, George I, Dvir D, Whisenant B, Russo MJ, Pershad A, Fang K, Coylewright M, Shah P, Babaliaros V, Khan JM, Tommaso C, Saucedo J, Kar S, Makkar R, Mack M, Holmes D, Leon M, Bapat V, Thourani VH, Rihal C, **O'Neill W**, and Feldman T. Thirty-Day Outcomes of Transcatheter Mitral Valve Replacement for Degenerated Mitral Bioprostheses (Valve-in-Valve), Failed Surgical Rings (Valvein-Ring), and Native Valve With Severe Mitral Annular Calcification (Valve-in-Mitral Annular Calcification) in the United States: Data From the Society of Thoracic Surgeons/American College of Cardiology/Transcatheter Valve Therapy Registry. *Circ Cardiovasc Interv* 2020; 13(3):e008425. PMID: 32138529. Full Text

Guerrero M, **Wang DD**, Pursnani A, Eleid M, Khalique O, Urena M, Salinger M, Kodali S, Kaptzan T, Lewis B, Kato N, Cajigas HM, Wendler O, Holzhey D, Pershad A, Witzke C, Alnasser S, Tang GHL, Grubb K, Reisman M, Blanke P, Leipsic J, Williamson E, Pellikka PA, Pislaru S, Crestanello J, Himbert D, Vahanian A, Webb J, Hahn RT, Leon M, George I, Bapat V, **O'Neill W**, and Rihal C. A Cardiac Computed Tomography-Based Score to Categorize Mitral Annular Calcification Severity and Predict Valve Embolization. *JACC Cardiovasc Imaging* 2020; 13(9):1945-1957. PMID: 32417332. Full Text

Gupta A. Substrate Imaging to Guide Primary Prevention Implantable Cardioverter-Defibrillator in Ischemic Cardiomyopathy: Fanciful or Realistic Aim? *JACC Cardiovasc Imaging* 2020; 13(8):1767-1770. PMID: 32653542. Full Text

Gupta A, **Fouad L**, **Basir M**, **Neupane S**, **Zaidan M**, **Koenig G**, **Alqarqaz M**, **Villablanca PA**, **O'Neill WW**, and **Alaswad K**. Safety and effectiveness of MANTA vascular closure device after large-bore mechanical circulatory support: Real-world experience. *Cardiovasc Revasc Med* 2020; 21(7):875-878. PMID: 32327356. Full Text

Gupta T, Weinreich M, Kolte D, Khera S, **Villablanca PA**, Bortnick AE, Wiley JM, Menegus MA, Kirtane AJ, Bhatt DL, Garcia MJ, Latib A, and Weisz G. Comparison of Incidence and Outcomes of Cardiogenic Shock Complicating Posterior (Inferior) Versus Anterior ST-Elevation Myocardial Infarction. *Am J Cardiol* 2020; 125(7):1013-1019. PMID: 31955831. Full Text

Hanson ID, Tagami T, Mando R, Kara Balla A, Dixon SR, Timmis S, Almany S, Naidu SS, Baran D, **Lemor A**, **Gorgis S**, **O'Neill W**, and **Basir MB**. SCAI shock classification in acute myocardial infarction: Insights from the National Cardiogenic Shock Initiative. *Catheter Cardiovasc Interv* 2020; 96(6):11371142. PMID: 32672388. Full Text

Hernandez GA, **Lemor A**, Clark D, Blumer V, Burstein D, Byrne R, Fowler R, Frischhertz B, Sandhaus E, Schlendorf K, Zalawadiya S, Lindenfeld J, and Menachem JN. Heart transplantation and in-hospital outcomes in adult congenital heart disease patients with Fontan: A decade nationwide analysis from 2004 to 2014. *J Card Surg* 2020; 35(3):603-608. PMID: 31971277. Full Text

Hernandez-Suarez DF, Ranka S, Kim Y, Latib A, Wiley J, Lopez-Candales A, Pinto DS, Gonzalez MC, Ramakrishna H, Sanina C, Nieves-Rodriguez BG, Rodriguez-Maldonado J, Feliu Maldonado R, Rodriguez-Ruiz IJ, da Luz Sant'Ana I, Wiley KA, Cox-Alomar P, **Villablanca PA**, and Roche-Lima A. Machine-learning-based in-hospital mortality prediction for transcatheter mitral valve repair in the United States. *Cardiovasc Revasc Med* 2020; Epub ahead of print. PMID: 32591310. Full Text

Isseh IN, **Basir MB**, and **Alaswad K**. Percutaneous Biventricular Hemodynamic Support Using Biatrial Extracorporeal Membrane Oxygenation. *JACC: Case Reports* 2020; 2(10):1475-1479. PMID: Not assigned. Full Text

Jain V, **Gupta K**, Bhatia K, Bansal A, Arora S, **Khandelwal AK**, Rosenberg JR, Levisay JP, Tommaso CL, Ricciardi MJ, and Qamar A. Management of STEMI during the COVID-19 pandemic: Lessons learned in 2020 to prepare for 2021. *Trends Cardiovasc Med* 2020; Epub ahead of print. PMID: 33338636. Full Text

Jena N, and Ananthasubramaniam K. Ghost Catheter Fibrin Sleeve: Case Report and Literature Review. *CASE (Phila)* 2020; 4(5):405-409. PMID: 33117939. Full Text

Kaafarani M, Saw J, Daniels M, **Song T**, **Rollet M**, Kesinovic S, Lamorgese T, **Kubiak K**, Qi Z, **Pantelic M**, **O'Neill W**, and **Wang DD**. Role of CT imaging in left atrial appendage occlusion for the WATCHMAN™ device. *Cardiovasc Diagn Ther* 2020; 10(1):45-58. PMID: 32175227. Full Text

Kadavath S, Mohan J, Ashraf S, Kassier A, Hawwass D, Madan N, Salehi N, Bernardo M, **Mawri S**, Rehman KA, Ya'qoub L, Strobel A, Dixon SR, Siraj A, Messenger J, Spears JR, Lopez-Candales A, Madder R, Bailey SR, **Alaswad K**, Kim MC, Safian RD, and Alraies MC. Cardiac Catheterization Laboratory Volume Changes During COVID-19-Findings from a Cardiovascular Fellows Consortium. *Am J Cardiol* 2020; 130(168-169). PMID: 32665133. Full Text

Kang G, **Lee J**, **Song T**, **Pantelic M**, **Reeser N**, **Keimig T**, **Nadig J**, **Villablanca P**, **Frisoli T**, **Eng M**, **O'Neill W**, and **Wang DD**. Three-Dimensional CT Planning for Cerebral Embolic Protection in Structural Interventions. *JACC Cardiovasc Imaging* 2020; 13(12):2673-2676. PMID: 32563641. Full Text

Kang G, **So CY**, **Lee J**, **Villablanca P**, and **O'Neill WW**. Transcatheter Aortic Valve Replacement with a Retro-Annular Circumflex Artery. *Structural Heart* 2020; 4(5):442-444. PMID: Not assigned. Full Text

Kang G, **So CY**, **Villablanca PA**, **Frisoli TM**, **Wang DD**, **O'Neill BP**, and **O'Neill WW**. Balloon-Assisted Valve Tracking: Atraumatic Retrieval of a Ventricularized Transcatheter Aortic Valve Prosthesis. *JACC Cardiovasc Interv* 2020; 13(21):2576-2578. PMID: 32861635. Full Text

Kanwar MK, McIlvennan CK, Lohmueller LC, Bailey SH, Rogers JG, Teuteberg J, and **Cowger J**. Defining Optimal Outcomes in Patients with Left Ventricular Assist Devices. *Asaio j* 2020;

Epub ahead of print. PMID: 32701625. Full Text

Ketcham SW, Adie SK, **Malliett A**, **Abdul-Aziz AA**, **Bitar A**, **Grafton G**, and **Konerman MC**. Coronavirus Disease-2019 in Heart Transplant Recipients in Southeastern Michigan: A Case Series. *J Card Fail* 2020; 26(6):457-461. PMID: 32417380. Full Text

Kohli K, Wei ZA, Sadri V, Easley TF, Pierce EL, Zhang YN, **Wang DD**, Greenbaum AB, Lisko JC, Khan JM, Lederman RJ, Blanke P, Oshinski JN, Babaliaros V, and Yoganathan AP. Framework for Planning TMVR using 3-D Imaging, In Silico Modeling, and Virtual Reality. *Structural Heart* 2020; 4(4):336-341. PMID: Not assigned. Full Text

Kormos RL, Antonides CFJ, Goldstein DJ, **Cowger JA**, Starling RC, Kirklin JK, Rame JE, Rosenthal D, Mooney ML, Caliskan K, Messe SR, Teuteberg JJ, Mohacsi P, Slaughter MS, Potapov EV, Rao V, Schima H, Stehlik J, Joseph S, Koenig SC, and Pagani FD. Updated definitions of adverse events for trials and registries of mechanical circulatory support: A consensus statement of the mechanical circulatory support academic research consortium. *J Heart Lung Transplant* 2020; 39(8):735-750. PMID: 32386998. Full Text

Korsholm K, Berti S, Iriart X, Saw J, **Wang DD**, Cochet H, Chow D, Clemente A, De Backer O, Moller Jensen J, and Nielsen-Kudsk JE. Expert Recommendations on Cardiac Computed Tomography for Planning Transcatheter Left Atrial Appendage Occlusion. *JACC Cardiovasc Interv* 2020; 13(3):277-292. PMID: 31678086. Full Text

Lanfear DE, **Luzum JA**, **She R**, **Gui H**, Donahue MP, O'Connor CM, Adams KF, Sanders-van Wijk S, **Zeld N**, Maeder MT, **Sabbah HN**, Kraus WE, Brunner-La Rocca HP, **Li J**, and **Williams LK**. Polygenic Score for Beta-Blocker Survival Benefit in European Ancestry Patients with Reduced Ejection Fraction Heart Failure. *Circ Heart Fail* 2020; 13(12):e007012. PMID: 33012170. Full Text

Lanfear DE, **Neaton KR**, Lu C, Liu Y, and Dent-Acosta RE. A Phase 4, Open-Label, Single-Arm Study Assessing the Efficacy and Safety of Ivabradine in African American Patients with Heart Failure and Reduced Ejection Fraction. *Cardiol Ther* 2020; 9(2):561-568. PMID: 32808163. Full Text

Lee J, Chen T, and Gill E. Interventional echocardiography: Opportunities and challenges in an emerging field. *Echocardiography* 2020; Epub ahead of print. PMID: 33095471. Full Text
Lemor A, **Basir MB**, Patel K, Kolski B, Kaki A, Kapur N, Riley R, Finley J, Goldsweig A, Aronow HD, Belford PM, Tehrani B, Truesdell AG, Lasorda D, Bharadwaj A, Hanson I, LaLonde T, **Gorgis S**, and **O'Neill W**. Multivessel Versus Culprit-Vessel Percutaneous Coronary Intervention in Cardiogenic Shock. *JACC Cardiovasc Interv* 2020; 13(10):1171-1178. PMID: 32360256. Full Text

Lemor A, **Gorgis S**, **Villablanca PA**, **Basir MB**, **Voeltz M**, **Alaswad K**, and **O'Neill W**. Regional Variation in Procedural and Clinical Outcomes Among Patients With ST Elevation Myocardial Infarction With Cardiogenic Shock. *Am J Cardiol* 2020; 125(11):1612-1618. PMID: 32279842. Full Text

Lemor A, Hernandez GA, **Basir MB**, **Patel S**, **Villablanca PA**, **Alaswad K**, and **O'Neill W**. Impact of Prior Coronary Artery Bypass Grafting in Patients ≥75 Years Old Presenting With Acute Myocardial Infarction (From the National Readmission Database). *Am J Cardiol* 2020; 135:9-16. PMID: 32866445. Full Text

Lemor A, Hosseini Dehkordi SH, **Basir MB**, **Villablanca PA**, Jain T, **Koenig GC**, **Alaswad K**, Moses JW, Kapur NK, and **O'Neill W**. Impella versus extracorporeal membrane oxygenation for acute myocardial infarction cardiogenic shock. *Cardiovasc Revasc Med* 2020; 21(12):1465-1471. PMID: 32605901. Full Text

Lemor A, **Michaels A**, **Al-Darzi W**, Hernandez GA, **Nasr Y**, **Villablanca P**, Blumer V, **Tita C**, **Williams CT**, **Selektor Y**, **Lanfear DE**, Lindenfeld J, and **Cowger J**. National Landscape of Hospitalizations in Patients with Left Ventricular Assist Device. Insights from the National Readmission Database 2010-2015. *Asaio j* 2020; 66(10):1087-1094. PMID: 33136594. Full Text

Lemor A, Patel N, **Jain T**, Baber U, Hernandez G, **Villablanca P**, **Basir MB**, **Alaswad K**, Mehran R, Dangas G, Sharma SK, and Kini A. Trends and Outcomes of Intravascular Imaging-guided Percutaneous Coronary Intervention in the United States. *Crit Pathw Cardiol* 2020; 19(2):69-74. PMID: 31895248. Full Text

Lemor A, **Villablanca PA**, Hosseini Dehkordi SH, **Mand R**, Hernandez GA, Jain T, Blumer VL, **Lee J**, **Eng M**, Guerrero M, **Wang DD**, Palacios I, and **O'Neill W**. Comparison of Outcomes of Alcohol Septal Ablation or Septal Myectomy for Hypertrophic Cardiomyopathy in Patients ≤65 Years Versus >65 Years. *Am J Cardiol* 2020; 127:128-134. PMID: 32402483. Full Text

Loehn T, **O'Neill WW**, Lange B, Pfluecke C, Schweigler T, Mierke J, Waessnig N, Mahlmann A, Youssef A, Speiser U, Strasser RH, and Ibrahim K. Long term survival after early unloading with Impella CP((R)) in acute myocardial infarction complicated by cardiogenic shock. *Eur Heart J Acute Cardiovasc Care* 2020; 9(2):149-157. PMID: 30456984. Full Text

Loungani RS, Teerlink JR, Metra M, Allen LA, Butler J, Carson PE, Chen CW, Cotter G, Davison BA, Eapen ZJ, Filippatos GS, Gimpelewicz C, Greenberg B, Holbro T, Januzzi JL, Jr., **Lanfear DE**, Pang PS, Piña IL, Ponikowski P, Miller AB, Voors AA, and Felker GM. Cause of Death in Patients With Acute Heart Failure: Insights From RELAX-AHF-2. *JACC Heart Fail* 2020; Epub ahead of print. PMID: 33189635. Full Text

Lupercio F, Giancaterino S, **Villablanca PA**, Han F, Hoffmayer K, Ho G, Raissi F, Krummen D, Birgersdotter-Green U, Feld G, Reeves R, Mahmud E, and Hsu JC. P2Y12 inhibitors with oral anticoagulation for percutaneous coronary intervention with atrial fibrillation: a systematic review and meta-analysis. *Heart* 2020; 106(8):575-583. PMID: 32034008. Full Text

Maskoun W, **Raad M**, **Khan A**, Mando R, and Homsi M. Biventricular implantable cardioverterdefibrillator device placement in patients with hostile tricuspid valve anatomy: two case reports and review of the literature. *Europace* 2020; 22(10):1520-1525. PMID: 32830224. Full Text

McCord J, **Hana A**, **Cook B**, **Hudson MP**, **Miller J**, Akoegbe G, Mueller C, **Moyer M**, Jacobsen G, and **Nowak R**. The Role of Cardiac Testing with the 0/1-Hour High-Sensitivity Cardiac Troponin Algorithm Evaluating for Acute Myocardial Infarction. *Am Heart J* 2020; Epub ahead of print. PMID: 33373603. Full Text

McCullough PA, Kelly RJ, Ruocco G, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, Carter H, Singh B, McCullough SP, Bhambi BK, Palazzuoli A, De Ferrari GM, Milligan G, Safder T, Tecson KM, **Wang DD**, **McKinnon JE**, **O'Neill WW**, **Zervos M**, and Risch HA. Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection. *Am J Med* 2020; 134(1):16-22. PMID: 32771461. Full Text

Mentz RJ, DeVore AD, Tasissa G, Heitner JF, Pina IL, Lala A, Cole RT, **Lanfear D**, Patel CB, Ginwalla M, Old W, Salacata AS, Bigelow R, Fonarow GC, and Hernandez AF. PredischaRge initiation of Ivabradine in the ManagEment of Heart Failure: Results of the PRIME-HF Trial. *Am Heart J* 2020; 223:98-105. PMID: 32217365. Full Text

Michaels A, **Aurora L**, **Peterson E**, **Liu B**, Pinto YM, **Sabbah HN**, **Williams K**, and **Lanfear DE**. Risk Prediction in Transition: MAGGIC Score Performance at Discharge and Incremental Utility of Natriuretic Peptides. *J Card Fail* 2020; 26(1):52-60. PMID: 31751788. Full Text

Mirza KK, Xie R, **Cowger J**, Kirklin JK, Meyns B, Gustafsson F, Shaw SM, and Goldstein DJ. Comparative analysis of regional outcomes and adverse events after continuous-flow left ventricular assist device implantation: An IMACS analysis. *J Heart Lung Transplant* 2020; 39(9):904-914. PMID: 32487472. Full Text

Nayak A, Hu Y, Ko YA, Mehta A, Liu C, Pennington J, Xie R, **Cowger J**, Kirklin JK, Kormos RL, Simon MA, and Morris AA. Gender Differences in Mortality After Left Ventricular Assist Device Implant: A Causal Mediation Analysis Approach. *Asaio j* 2020; Epub ahead of print. PMID: 33060408. Full Text

Neupane S, **Basir M**, Tan C, **Sultan A**, **Tabaku M**, **Alqarqaz M**, **Khandelwal A**, **Gupta A**, Don C, and **Alaswad K**. Feasibility and safety of orbital atherectomy for the treatment of in-stent restenosis secondary to stent under-expansion. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 31985132. Full Text

Neupane S, **Gupta A**, **Basir M**, and **Alaswad K**. Chronic total occlusion percutaneous coronary interventions: identifying patients at risk of complications. *Expert Rev Cardiovasc Ther* 2020; 18(5):269275. PMID: 32345070. Request Article

Nikolakopoulos I, Choi JW, **Alaswad K**, Khatri JJ, Krestyaninov O, Khelimskii D, Yeh RW, Jaffer FA, Toma C, Patel M, Mahmud E, Lembo NJ, Parikh M, Kirtane AJ, Ali ZA, Gkargkoulas F, Uretsky B, Sheikh AM, Vemmou E, Xenogiannis I, Rangan BV, Garcia S, Abdullah S, Banerjee S, Burke MN, Brilakis ES, and Karmpaliotis D. Equipment utilization in chronic total occlusion percutaneous coronary interventions: Insights from the PROGRESS-CTO registry. *Catheter Cardiovasc Interv* 2020; Epub ahead of print. PMID: 32597031. Full Text

Nowak RM, Christenson RH, **Jacobsen G**, **McCord J**, Apple FS, Singer AJ, Limkakeng A, Jr., Peacock WF, and deFilippi CR. Performance of Novel High-Sensitivity Cardiac Troponin I Assays for 0/1-Hour and 0/2- to 3-Hour Evaluations for Acute Myocardial Infarction: Results From the HIGH-US Study. *Ann Emerg Med* 2020; 76(1):1-13. PMID: 32046869. Full Text

O'Neill BP, Negrotto S, Yu D, Lakhter V, Depta J, McCabe JM, Dube S, Vaikom M, **Wang DD**, Patil P, Lindman B, Iglessis-Azuaje I, Fredi J, Lu X, and **O'Neill WW**. Caval Valve Implantation for Tricuspid Regurgitation: Insights From the United States Caval Valve Registry. *J Invasive Cardiol* 2020; 32(12):470475. PMID: 33087585. Request Article

O'Neill WW, and Burkhoff D. Letter by O'Neill and Burkhoff Regarding Article, "The Evolving Landscape of Impella Use in the United States Among Patients Undergoing Percutaneous Coronary Intervention With Mechanical Circulatory Support". *Circulation* 2020; 142(6):e78-e79. PMID: 32776844. Full Text

Othman H, Seth M, Zein R, Rosman H, Lalonde T, Yamasaki H, **Alaswad K**, Menees D, Mehta RH, Gurm H, and Daher E. Percutaneous Coronary Intervention for Chronic Total Occlusion-The Michigan Experience: Insights From the BMC2 Registry. *JACC Cardiovasc Interv* 2020;

13(11):1357-1368. PMID: 32417095. Full Text

Patel S, **Jamoor K**, **Khan A**, and **Maskoun W**. Late onset complete heart block after transcatheter aortic valve replacement treated with permanent his-bundle pacing. *Pacing Clin Electrophysiol* 2020; Epub ahead of print. PMID: 32940376. Full Text

Qintar M, and Chhatriwalla AK. Update on the Current Status and Indications for Transcatheter Edge-to-Edge Mitral Valve Repair. *Curr Cardiol Rep* 2020; 22(11):135. PMID: 32910371. Full Text

Qureshi AM, Turner ME, **O'Neill W**, Denfield SW, Aghili N, Badiye A, Gandhi R, Tehrani B, Chang G, Oyama JK, Sinha S, Brozzi N, and Morray B. Percutaneous Impella RP use for refractory right heart failure in adolescents and young adults-A multicenter U.S. experience. *Catheter Cardiovasc Interv* 2020; 96(2):376-381. PMID: 32129576. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Ram P, Shah M, Lo KBU, Agarwal M, **Patel B**, Tripathi B, Arora S, Patel N, Jorde UP, and Banerji S. Etiologies and predictors of readmission among obese and morbidly obese patients admitted with heart failure. *Heart Fail Rev* 2020; Epub ahead of print. PMID: 32002731. Full Text

Ramos-Rodriguez AJ, Cancel-Artau KJ, **Lemor A**, Carrasquillo OY, Lozano-Franco M, Santiago-Vazquez M, Barrera-Llaurador J, and Martin-Garcia RF. The in-hospital burden of dermatomyositis on patients with acute myocardial infarction: A nationwide cross-sectional analysis from 2004 to 2015. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 33022307. Full Text

Ranka S, Mohananey D, Agarwal N, Verma BR, **Villablanca P**, Mewhort HE, and Ramakrishna H. Chronic Thromboembolic Pulmonary Hypertension-Management Strategies and Outcomes. *J Cardiothorac Vasc Anesth* 2020; 34(9):2513-2523. PMID: 31883688. Full Text

Reid A, Ben Zekry S, Turaga M, Tarazi S, Bax JJ, **Wang DD**, Piazza N, Bapat VN, Ihdayhid AR,
Cavalcante JL, Blanke P, and Leipsic J. Neo-LVOT and Transcatheter Mitral Valve Replacement: Expert Recommendations. *JACC Cardiovasc Imaging* 2020; Epub ahead of print. PMID: 33248959. Full Text

Reshef E, **Sabbah HN**, and Nussinovitch U. Effects of protective controlled coronary reperfusion on left ventricular remodeling in dogs with acute myocardial infarction: A pilot study. *Cardiovasc Revasc Med* 2020; 21(12):1579-1584. PMID: 32417208. Full Text

Ritchey MD, Maresh S, McNeely J, Shaffer T, Jackson SL, **Keteyian SJ**, **Brawner CA**, Whooley MA, Chang T, Stolp H, Schieb L, and Wright J. Tracking Cardiac Rehabilitation Participation and Completion Among Medicare Beneficiaries to Inform the Efforts of a National Initiative. *Circ Cardiovasc Qual Outcomes* 2020; 13(1):e005902. PMID: 31931615. Full Text

Roukoz H, Bhan A, Ravichandran A, Ahmed MM, Bhat G, **Cowger J**, Abdullah M, Dhawan R, Trivedi JR, Slaughter MS, and Gopinathannair R. Continued versus Suspended Cardiac Resynchronization Therapy after Left Ventricular Assist Device Implantation. *Sci Rep* 2020; 10(1):2573. PMID: 32054868. Full Text

Sabbah HN. Targeting the Mitochondria in Heart Failure: A Translational Perspective. *JACC Basic Transl Sci* 2020; 5(1):88-106. PMID: 32043022. Full Text

Sabbah HN. Barth syndrome cardiomyopathy: targeting the mitochondria with elamipretide. *Heart Fail Rev* 2020; Epub ahead of print. PMID: 33001359. Full Text

Sabbah HN, **Zhang K**, **Gupta RC**, and Emanuele M. Effects of Intravenous Infusion of Vepoloxamer on Left Ventricular Function in Dogs with Advanced Heart Failure. *Cardiovasc Drugs Ther* 2020; 34(2):153164. PMID: 32146638. Full Text

Sabbah HN, **Zhang K**, **Gupta RC**, **Jiang X**, and **Singh-Gupta V**. Effects of Angiotensin-Neprilysin Inhibition in Canines with Experimentally-Induced Cardiorenal Syndrome. *J Card Fail* 2020; 26(11):987997. PMID: 32841710. Full Text

Sabbah HN, **Zhang K**, **Gupta RC**, **Xu J**, **Singh-Gupta V**, Ma M, Stauber K, Nguyen N, and Adams J. Intravenous Infusion of the β(3)-Adrenergic Receptor Antagonist APD418 Improves Left Ventricular Systolic Function in Dogs with Systolic Heart Failure: β(3)-Adrenergic Receptor Antagonist in Heart Failure. *J Card Fail* 2020; Epub ahead of print. PMID: 33352205. Full Text
Salih M, Ali SM, Jena N, and **Ananthasubramaniam K**. Review of ultrasound contrast agents in current clinical practice with special focus on DEFINITY(®) in cardiac imaging. *Future Cardiol* 2020; Epub ahead of print. PMID: 32897099. Full Text

Salih M, Ibrahim R, Tirunagiri D, Al-Ani H, and **Ananthasubramaniam K**. Loeffler's Endocarditis and Hypereosinophilic Syndrome. *Cardiol Rev* 2020; Epub ahead of print. PMID: 32520731. Full Text

Samsky MD, DeVore AD, McIlvennan CK, Granger CB, Granger BB, Hernandez AF, Felker GM, Fonarow GC, Albert NM, Piña IL, **Lanfear D**, and Allen LA. Heart Failure Clinical Trial Operations During the COVID-19 Pandemic: Results from a Multicenter Survey. *Circ Heart Fail* 2020; 13(9):e007456. PMID: 32700547. Full Text

Samsky MD, Krucoff MW, Morrow DA, Abraham WT, Aguel F, Althouse AD, Chen E, Cigarroa JE, DeVore AD, Farb A, Gilchrist IC, Henry TD, Hochman JH, Kapur NK, Morrow V, Ohman EM, **O'Neill WW**, Piña IL, Proudfoot AG, Sapirstein JS, Seltzer JH, Senatore F, Shinnar M, Simonton CA, Tehrani BN, Thiele H, Truesdell AG, Waksman R, and Rao SV. Cardiac safety research consortium "shock II" think tank report: Advancing practical approaches to generating evidence for the treatment of cardiogenic shock. *Am Heart J* 2020; 230:93-97. PMID: 33011148. Full Text

Sandau KE, Lee CS, Faulkner KM, Pozehl B, Eckman P, Garberich R, Weaver CE, Joseph SM, Hall S, Carey SA, Chaudhry SP, Schroeder SE, Hoffman RO, 3rd, Feldman D, Birati EY, Soni M, Marble JF, Jurgens CY, Hoglund B, and **Cowger JA**. Health-Related Quality of Life in Patients With a Left Ventricular Assist Device (QOLVAD) Questionnaire: Initial Psychometrics of a New Instrument. *J Cardiovasc Nurs* 2020; Epub ahead of print. PMID: 33306621. Full Text

Saxena A, Garan AR, Kapur NK, **O'Neill WW**, Lindenfeld J, Pinney SP, Uriel N, Burkhoff D, and Kern M. Value of Hemodynamic Monitoring in Patients With Cardiogenic Shock Undergoing Mechanical Circulatory Support. *Circulation* 2020; 141(14):1184-1197. PMID: 32250695. Full Text

Schuger C, Daubert JP, Zareba W, Rosero S, Yong P, McNitt S, and Kutyifa V. Reassessing the role of Antitachycardia Pacing in Fast Ventricular Arrhythmias in Primary Prevention

Implantable Cardioverter Defibrillator Recipients: Results from MADIT-RIT. *Heart Rhythm* 2020; Epub ahead of print. PMID: 33232811. Full Text

Shah PB, Welt FGP, Mahmud E, Phillips A, Kleiman NS, Young MN, Sherwood M, Batchelor W, **Wang DD**, Davidson L, Wyman J, Kadavath S, Szerlip M, Hermiller J, Fullerton D, and Anwaruddin S. Triage Considerations for Patients Referred for Structural Heart Disease Intervention During the Coronavirus Disease 2019 (COVID-19) Pandemic: An ACC /SCAI Consensus Statement. *Catheter Cardiovasc Interv* 2020; 96(3):659-663. PMID: 32251546. Full Text

Shah PB, Welt FGP, Mahmud E, Phillips A, Kleiman NS, Young MN, Sherwood M, Batchelor W, **Wang DD**, Davidson L, **Wyman J**, Kadavath S, Szerlip M, Hermiller J, Fullerton D, and Anwaruddin S. Triage Considerations for Patients Referred for Structural Heart Disease Intervention During the COVID-19 Pandemic: An ACC/SCAI Position Statement. *JACC Cardiovasc Interv* 2020; 13(12):1484-1488. PMID: 32250751. Full Text

Simonato M, Whisenant B, Barbosa Ribeiro H, Webb JG, Kornowski R, Guerrero M, Wijeysundera H, Søndergaard L, De Backer O, **Villablanca P**, Rihal C, Eleid M, Kempfert J, Unbehaun A, Erlebach M, Casselman F, Adam M, Montorfano M, Ancona M, Saia F, Ubben T, Meincke F, Napodano M, Codner P, Schofer J, Pelletier M, Cheung A, Shuvy M, Palma JH, Gaia DF, Duncan A, Hildick-Smith D, Veulemans V, Sinning JM, Arbel Y, Testa L, de Weger A, Eltchaninoff H, Hemery T, Landes U, Tchetche D, Dumonteil N, Rodés-Cabau J, Kim WK, Spargias K, Kourkoveli P, Ben-Yehuda O, Campante Teles R, Barbanti M, Fiorina C, Thukkani A, Mackensen GB, Jones N, Presbitero P, Petronio AS, Allali A, Champagnac D, Bleiziffer S, Rudolph T, Iadanza A, Salizzoni S, Agrifoglio M, Nombela-Franco L, Bonaros N, Kass M, Bruschi G, Amabile N, Chhatriwalla A, Messina A, Hirji SA, Andreas M, Welsh R, Schoels W, Hellig F, Windecker S, Stortecky S, Maisano F, Stone GW, and Dvir D. Transcatheter Mitral Valve Replacement After Surgical Repair or Replacement: Comprehensive Mid-Term Evaluation of Valvein-Valve and Valve-in-Ring Implantation from the VIVID Registry. *Circulation* 2020; Epub ahead of print. PMID: 32975133. Full Text

So CY, **Kang G**, **Lee JC**, and **Eng MH**. The Retro-antegrade Approach to Paravalvular Leak Closure After Transcatheter Aortic Valve Replacement. *EuroIntervention* 2020; 16(9):e763-764. PMID: 32176617. Request Article

So CY, **Kang G**, **Villablanca PA**, **Eng MH**, **O'Neill WW**, and **Frisoli TM**. Red Cell Shearing between Transcatheter Heart Valves? Acute Hemolysis after Emergency TAVR-in-TAVR. *Structural Heart* 2020; 4(4):345-346. PMID: Not assigned. Full Text

So CY, **Kang G**, **Wang DD**, **Villablanca PA**, **Lee JC**, **Eng MH**, **O'Neill WW**, and **Frisoli TM**. The "Snareand-Anchor" Technique to Rescue Frozen Mechanical Mitral Valve Leaflet After Transcatheter Aortic Valve Replacement. *JACC Cardiovasc Interv* 2020; 13(9):e77-e78. PMID: 32061606. Full Text

So CY, **Wang DD**, **Kang G**, **Villablanca PA**, **Frisoli T**, and **O'Neill WW**. Vacuuming the LAA: Left Atrial Appendage Thrombectomy Using AngioVac to Facilitate Percutaneous Mitral Balloon Valvuloplasty. *Structural Heart* 2020; 4(3):243-244. PMID: Not assigned. Full Text

Strobel RJ, **Harrington SD**, Hill C, Thompson MP, Cabrera L, Theurer P, Wilton P, Gandhi D, DeLucia A, 3rd, **Paone G**, Wu X, Zhang M, Krein SL, Prager RL, and Likosky DS. Evaluating The Impact of Pneumonia Prevention Recommendations Following Cardiac Surgery. *Ann Thorac Surg* 2020; 110(3):903-910. PMID: 32035918. Full Text

Sutton NR, Seth M, **Lingam N**, and Gurm HS. Radial Access Use for Percutaneous Coronary Intervention in Dialysis Patients. *Circ Cardiovasc Interv* 2020; 13(1):e008418. PMID: 31914789. Full Text

Swain L, Reyelt L, Bhave S, Qiao X, Thomas CJ, Zweck E, Crowley P, Boggins C, Esposito M, Chin M,Karas RH, **O'Neill W**, and Kapur NK. Transvalvular Ventricular Unloading Before Reperfusion in Acute Myocardial Infarction. *J Am Coll Cardiol* 2020; 76(6):684-699. PMID: 32762903. Full Text

Tahhan AS, Vaduganathan M, Greene SJ, Alrohaibani A, **Raad M**, Gafeer M, Mehran R, Fonarow GC, Douglas PS, Bhatt DL, and Butler J. Enrollment of Older Patients, Women, and Racial/Ethnic Minority Groups in Contemporary Acute Coronary Syndrome Clinical Trials: A Systematic Review. *JAMA Cardiol* 2020; 5(6):714-722. PMID: 32211813. Full Text

Tajti P, Xenogiannis I, Gargoulas F, Karmpaliotis D, **Alaswad K**, Jaffer FA, Patel MP, Burke MN, Garcia S, Krestyaninov O, Koutouzis M, Jaber W, and Brilakis ES. Technical and procedural outcomes of the retrograde approach to chronic total occlusion interventions. *EuroIntervention* 2020; 16(11):e891-e899. PMID: 31638578. Request Article

Teerlink JR, Diaz R, Felker GM, McMurray JJV, Metra M, Solomon SD, Adams KF, Anand I, AriasMendoza A, Biering-Sørensen T, Böhm M, Bonderman D, Cleland JGF, Corbalan R, Crespo-Leiro MG, Dahlström U, Echeverria Correa LE, Fang JC, Filippatos G, Fonseca C, Goncalvesova E, Goudev AR, Howlett JG, **Lanfear DE**, Lund M, Macdonald P, Mareev V, Momomura SI, O'Meara E, Parkhomenko A, Ponikowski P, Ramires FJA, Serpytis P, Sliwa K, Spinar J, Suter TM, Tomcsanyi J, Vandekerckhove H, Vinereanu D, Voors AA, Yilmaz MB, Zannad F, Sharpsten L, Legg JC, Abbasi SA, Varin C, Malik FI, and Kurtz CE. Omecamtiv mecarbil in chronic heart failure with reduced ejection fraction: GALACTIC-HF baseline characteristics and comparison with contemporary clinical trials. *Eur J Heart Fail* 2020; 22(11):2160-2171. PMID: 32985088. Full Text

Teerlink JR, Diaz R, Felker GM, McMurray JJV, Metra M, Solomon SD, Adams KF, Anand I, AriasMendoza A, Biering-Sørensen T, Böhm M, Bonderman D, Cleland JGF, Corbalan R, Crespo-Leiro MG, Dahlström U, Echeverria LE, Fang JC, Filippatos G, Fonseca C, Goncalvesova E, Goudev AR, Howlett G, **Lanfear DE**, Li J, Lund M, Macdonald P, Mareev V, Momomura SI, O'Meara E, Parkhomenko A, Ponikowski P, Ramires FJA, Serpytis P, Sliwa K, Spinar J, Suter TM, Tomcsanyi J, Vandekerckhove H, Vinereanu D, Voors AA, Yilmaz MB, Zannad F, Sharpsten L, Legg JC, Varin C, Honarpour N, Abbasi SA, Malik FI, and Kurtz CE. Cardiac Myosin Activation with Omecamtiv Mecarbil in Systolic Heart Failure. *N Engl J Med* 2020; Epub ahead of print. PMID: 33185990. Full Text

Tehrani BN, **Basir MB**, and Kapur NK. Acute myocardial infarction and cardiogenic shock: Should we unload the ventricle before percutaneous coronary intervention? *Prog Cardiovasc Dis* 2020; 63(5):607622. PMID: 32920027. Full Text

Teuteberg JJ, Cleveland JC, Jr., **Cowger J**, Higgins RS, Goldstein DJ, Keebler M, Kirklin JK, Myers SL, Salerno CT, Stehlik J, Fernandez F, Badhwar V, Pagani FD, and Atluri P. The Society of Thoracic Surgeons Intermacs 2019 Annual Report: The Changing Landscape of Devices and Indications. *Ann Thorac Surg* 2020; 109(3):649-660. PMID: 32115073. Full Text

Thayer KL, Zweck E, Ayouty M, Garan AR, Hernandez-Montfort J, Mahr C, Morine KJ, Newman S, Jorde L, Haywood JL, Harwani NM, Esposito ML, Davila CD, Wencker D, Sinha SS, Vorovich E, Abraham J, **O'Neill W**, Udelson J, Burkhoff D, and Kapur NK. Invasive Hemodynamic Assessment and Classification of In-Hospital Mortality Risk Among Patients

With Cardiogenic Shock. *Circ Heart Fail* 2020; 13(9):e007099. PMID: 32900234. Full Text

Ton VK, Xie R, Hernandez-Montfort JA, Meyns B, Nakatani T, Yanase M, Shaw S, Pettit S, Netuka I, Kirklin J, Goldstein DJ, and **Cowger J**. Short- and long-term adverse events in patients on temporary circulatory support before durable ventricular assist device: An IMACS registry analysis. *J Heart Lung Transplant* 2020; 39(4):342-352. PMID: 32029401. Full Text

Vemmou E, **Alaswad K**, Khatri JJ, Nikolakopoulos I, Karacsonyi J, Xenogiannis I, Karmpaliotis D, Garcia S, Burke MN, and Brilakis ES. Patient Radiation Dose During Chronic Total Occlusion Percutaneous Coronary Intervention: Insights From the PROGRESS-CTO Registry. *Circ Cardiovasc Interv* 2020; 13(10):e009412. PMID: 32972204. Full Text

Verma S, **Peterson EL**, **Liu B**, **Sabbah HN**, **Williams LK**, and **Lanfear DE**. Effectiveness of beta blockers in patients with and without a history of myocardial infarction. *Eur J Clin Pharmacol* 2020; 76(8):1161-1168. PMID: 32440720. Full Text

Villablanca PA, **Lee J**, **Wang DD**, **Frisoli T**, **So CY**, **Kang G**, **O'Neill WW**, and **Eng MH**. Transseptal puncture through an Amplatzer Atrial Septal Occluder for edge-to-edge repair with MitraClip NTr system. *Cardiovasc Revasc Med* 2020; 21(11S):63-64. PMID: 32224042. Full Text

Villablanca PA, **Lemor A**, So CY, **Kang G**, **Jain T**, Gupta T, Ando T, Mohananey D, Ranka S, Hernandez-Suarez DF, Michel P, **Frisoli T**, **Wang DD**, **Eng M**, **O'Neill W**, and Ramakrishna H. Increased Risk of Perioperative Ischemic Stroke in Patients Who Undergo Noncardiac Surgery with Preexisting Atrial Septal Defect or Patent Foramen Ovale. *J Cardiothorac Vasc Anesth* 2020; 34(8):2060-2068. PMID: 32127264. Full Text

Webb JG, Hensey M, Szerlip M, Schäfer U, Cohen GN, Kar S, Makkar R, Kipperman RM, Spargias K, **O'Neill WW**, Ng MKC, Fam NP, Rinaldi MJ, Smith RL, Walters DL, Raffel CO, Levisay J, Latib A, Montorfano M, Marcoff L, Shrivastava M, Boone R, Gilmore S, Feldman TE, and Lim DS. 1-Year Outcomes for Transcatheter Repair in Patients With Mitral Regurgitation From the CLASP Study. *JACC Cardiovasc Interv* 2020; 13(20):2344-2357. PMID: 33092709. Full Text

Whelton SP, McAuley PA, Dardari Z, Orimoloye OA, **Brawner CA**, **Ehrman JK**, **Keteyian SJ**, Al-Mallah M, and Blaha MJ. Association of BMI, Fitness, and Mortality in Patients With Diabetes: Evaluating the Obesity Paradox in the Henry Ford Exercise Testing Project (FIT Project) Cohort. *Diabetes Care* 2020; 43(3):677-682. PMID: 31949085. Full Text

Whisenant B, Kapadia SR, Eleid MF, Kodali SK, McCabe JM, Krishnaswamy A, Morse M, Smalling RW, Reisman M, Mack M, **O'Neill WW**, Bapat VN, Leon MB, Rihal CS, Makkar RR, and Guerrero M. OneYear Outcomes of Mitral Valve-in-Valve Using the SAPIEN 3 Transcatheter Heart Valve. *JAMA Cardiol* 2020; 5(11):1245-1252. PMID: 32745164. Full Text

Winchester DE, Osborne A, Peacock WF, Bhatt DL, Dehmer GJ, Diercks D, Masoudi FA, **McCord J**, eKontos M, and Levy PD. Closing Gaps in Essential Chest Pain Care Through Accreditation. *J Am Coll Cardiol* 2020; 75(19):2478-2482. PMID: 32408982. Full Text

Wisniewski A, **Zimmerman M**, Crews T, Jr., Haulbrook A, Fitzgerald DC, and Sistino JJ. Reducing the Impact of Perfusion Medical Waste on the Environment. *J Extra Corpor Technol* 2020; 52(2):135-141. PMID: 32669740. Full Text

Xenogiannis I, **Alaswad K**, Krestyaninov O, Khelimskii D, Khatri JJ, Choi JW, Jaffer FA, Patel M, Mahmud E, Doing AH, Dattilo P, Koutouzis M, Tsiafoutis I, Uretsky B, Jefferson BK, Patel T, Jaber W, Samady H, Sheikh AM, Yeh RW, Tamez H, Elbaruny B, Love MP, Abi Rafeh N, Maalouf A, Fadi AJ, Toma C, Shah AR, Chandwaney RH, Omer M, Megaly MS, Vemmou E, Nikolakopoulos I, Rangan BV, Garcia S, Abdullah S, Banerjee S, Burke MN, Karmpaliotis D, and Brilakis ES. Impact of adherence to the hybrid algorithm for initial crossing strategy selection in chronic total occlusion percutaneous coronary intervention. *Rev Esp Cardiol (Engl Ed)* 2020; Epub ahead of print. PMID: 33189636. Full Text

Ya'qoub L, and **Eng MH**. Bioprosthetic valve infective endocarditis: why is it important? *Heart* 2020; 106(18):1378-1379. PMID: 32546509. Full Text

Zein R, Seth M, Othman H, Rosman HS, Lalonde T, **Alaswad K**, Menees D, Daher E, Mehta RH, and Gurm HS. Association of Operator and Hospital Experience With Procedural Success Rates and Outcomes in Patients Undergoing Percutaneous Coronary Interventions for Chronic Total Occlusions: Insights From the Blue Cross Blue Shield of Michigan Cardiovascular Consortium. *Circ Cardiovasc Interv* 2020; 13(8)e008863. PMID: 32791954. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Center for Health Policy and Health Services Research

Boggs JM, Lindrooth RC, Battaglia C, Beck A, Ritzwoller DP, **Ahmedani BK**, Rossom RC, Lynch FL, Lu CY, Waitzfelder BE, Owen-Smith AA, Simon GE, and Anderson HD. Association between suicide death and concordance with benzodiazepine treatment guidelines for anxiety and sleep disorders. *Gen Hosp Psychiatry* 2020; 62:21-27. PMID: 31765794. Full Text

Boudreau DM, Lapham G, Johnson EA, Bobb JF, Matthews AG, McCormack J, Liu D, Campbell CI, Rossom RC, Binswanger IA, Yarborough BJ, Arnsten JH, Cunningham CO, Glass JE, Murphy MT, Zare M, Hechter RC, **Ahmedani B**, **Braciszewski JM**, Horigian VE, Szapocznik J, Samet JH, Saxon AJ, Schwartz RP, and Bradley KA. Documented opioid use disorder and its treatment in primary care patients across six U.S. health systems. *J Subst Abuse Treat* 2020; 112s:41-48. PMID: 32220410. Full Text

Chawa MS, **Yeh HH**, **Gautam M**, **Thakrar A**, **Akinyemi EO**, and **Ahmedani BK**. The Impact of Socioeconomic Status, Race/Ethnicity, and Patient Perceptions on Medication Adherence in Depression Treatment. *Prim Care Companion CNS Disord* 2020; 22(6). PMID: 33306887. Request Article

Clark-Sienkiewicz SM, **Hecht LM**, **Pester B**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Racial Differences in Psychological Symptoms and Eating Behaviors Among Bariatric Surgery Candidates. *J Racial Ethn Health Disparities* 2020; Epub ahead of print. PMID: 32367444. Request Article

Clark-Sienkiewicz SM, and **Miller-Matero LR**. An Investigation of Racial Disparities in Weight Loss Outcomes: Roux-en-Y Gastric Bypass Versus Sleeve Gastrectomy. *J Racial Ethn Health Disparities* 2020; 7(2):234-237. PMID: 31667712. Request Article

Cook JM, Zeber JE, Simiola V, Rossom R, Scherrer JF, Owen-Smith AA, **Ahmedani BK**, Zolfaghari K, and Copeland LA. Comparisons Between Patients Diagnosed with PTSD in

Primary Care Versus Mental Health Care in Five Large Civilian Health Care Systems. *J Clin Psychol Med Settings* 2020; Epub ahead of print. PMID: 32048114. Full Text

Daida YG, Boscarino JA, Moorman AC, **Lu M**, **Rupp LB**, **Gordon SC**, Teshale EH, Schmidt MA, and Spradling PR. Mental and physical health status among chronic hepatitis B patients. *Qual Life Res* 2020; 29(6):1567-1577. PMID: 31938963. Full Text

Gordon SC, **Wu KH**, Lindor K, Bowlus CL, Rodriguez CV, Anderson H, Boscarino JA, **Trudeau S**, **Rupp LB**, Haller IV, Romanelli RJ, VanWormer JJ, Schmidt MA, Daida YG, Sahota A, Vincent J, **Zhang T**, **Li J**, and **Lu M**. Ursodeoxycholic Acid Treatment Preferentially Improves Overall Survival Among African Americans With Primary Biliary Cholangitis. *Am J Gastroenterol* 2020; 115(2):262-270. PMID: 31985529. Full Text

Hecht LM, **Pester B**, **Braciszewski JM**, **Graham AE**, **Mayer K**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Socioeconomic and Racial Disparities in Bariatric Surgery. *Obes Surg* 2020; 30(6):2445-2449. PMID: 31927686. Full Text

Hecht LM, Schwartz N, **Miller-Matero LR**, **Braciszewski JM**, and Haedt-Matt A. Eating pathology and depressive symptoms as predictors of excessive weight gain during pregnancy. *J Health Psychol* 2020; Epub ahead of print. PMID: 32301343. Full Text

Hu J, and **Nerenz DR**. Performance of Multihospital Health Systems' Flagship Hospitals in the CMS Star Rating Program. *J Hosp Med* 2020; 15(7):407-410. PMID: 32584246. Full Text

Lu M, Bowlus CL, Lindor K, Rodriguez-Watson CV, Romanelli RJ, Haller IV, Anderson H, VanWormer JJ, Boscarino JA, Schmidt MA, Daida YG, Sahota A, Vincent J, **Li J**, Trudeau S, **Rupp LB**, and **Gordon SC**. Validity of an Automated Algorithm to Identify Cirrhosis Using Electronic Health Records in Patients with Primary Biliary Cholangitis. *Clin Epidemiol* 2020; 12:1261-1267. PMID: 33204167. Full Text

Lynch FL, **Peterson EL**, Lu CY, **Hu Y**, Rossom RC, Waitzfelder BE, Owen-Smith AA, Hubley S, **Prabhakar D**, **Keoki Williams L**, Beck A, Simon GE, and **Ahmedani BK**. Substance use disorders and risk of suicide in a general US population: a case control study. *Addict Sci Clin Pract* 2020; 15(1):14. PMID: 32085800. Full Text

Mak J, **Shires DA**, Zhang Q, Prieto LR, **Ahmedani BK**, Kattari L, Becerra-Culqui TA, Bradlyn A, Flanders WD, Getahun D, Giammattei SV, Hunkeler EM, Lash TL, Nash R, Quinn VP, Robinson B, Roblin D, Silverberg MJ, Slovis J, Tangpricha V, Vupputuri S, and Goodman M. Suicide Attempts Among a Cohort of Transgender and Gender Diverse People. *Am J Prev Med* 2020; 59(4):570-577. PMID: 32798005. Full Text

Maye M, Sanchez VE, Stone-MacDonald A, and Carter AS. Early Interventionists' Appraisals of
Intervention Strategies for Toddlers with Autism Spectrum Disorder and Their Peers in Inclusive Childcare Classrooms. *J Autism Dev Disord* 2020; 50(11):4199-4208. PMID: 32193762. Full Text

Merced K, Imel ZE, Baldwin SA, Fischer H, Yoon T, Stewart C, Simon G, **Ahmedani B**, Beck A, Daida Y, Hubley S, Rossom R, Waitzfelder B, Zeber JE, and Coleman KJ. Provider Contributions to Disparities in Mental Health Care. *Psychiatr Serv* 2020; 71(8):765-771. PMID: 32340593. Full Text

Miller-Matero LR, **Hamann A**, **LaLonde L**, **Martens KM**, Son J, **Clark-Sienkiewicz S**, **Sata M**,

Coleman JP, **Hecht LM**, **Braciszewski JM**, and **Carlin AM**. Predictors of Alcohol Use after Bariatric Surgery. *J Clin Psychol Med Settings* 2020; Epub ahead of print. PMID: 33205321. Full Text

Nerenz DR, Cella D, Fabian L, Nuccio E, Bott J, Austin JM, Simon S, Needleman J, and Johnson K. The NQF Scientific Methods Panel: Enhancing the Review and Endorsement Process for Performance Measures. *Am J Med Qual* 2020; 35(6):458-464. PMID: 32223651. Full Text

Owen-Smith A, Stewart C, Sesay MM, Strasser SM, Yarborough BJ, **Ahmedani B**, **Miller-Matero LR**, rWaring SC, Haller IV, Waitzfelder BE, Sterling SA, Campbell CI, Hechter RC, Zeber JE, Copeland LA, Scherrer JF, Rossom R, and Simon G. Chronic pain diagnoses and opioid dispensings among insured individuals with serious mental illness. *BMC Psychiatry* 2020; 20(1):40. PMID: 32005200. Full Text

Parghi N, Chennapragada L, Barzilay S, Newkirk S, **Ahmedani B**, Lok B, and Galynker I. Assessing the predictive ability of the Suicide Crisis Inventory for near-term suicidal behavior using machine learning approaches. *Int J Methods Psychiatr Res* 2020; Epub ahead of print. PMID: 33166430. Full Text

Prabhakar D, **Peterson EL**, **Hu Y**, **Chawa S**, Rossom RC, Lynch FL, Lu CY, Waitzfelder BE, Owen-Smith AA, **Williams LK**, Beck A, Simon GE, and Ahmedani BK. Serious Suicide Attempts and Risk of Suicide Death. *Crisis* 2020; Epub ahead of print. PMID: 33151092. Full Text

Shashikumar SA, Waken RJ, Luke AA, **Nerenz DR**, and Joynt Maddox KE. Association of Stratification by Proportion of Patients Dually Enrolled in Medicare and Medicaid With Financial Penalties in the HospitalAcquired Condition Reduction Program. *JAMA Intern Med* 2020; Epub ahead of print. PMID: 33346779. Full Text

Spradling PR, Xing J, **Rupp LB**, Moorman AC, **Gordon SC**, **Lu M**, Teshale EH, Boscarino JA, Schmidt MA, Daida YG, and Holmberg SD. Low Uptake of Direct-acting Antiviral Therapy Among Hepatitis C Patients With Advanced Liver Disease and Access to Care, 2014-2017. *J Clin Gastroenterol* 2020; 55(1):77-83. PMID: 32250999. Full Text

Yarborough BJH, Stumbo SP, **Ahmedani B**, Rossom R, Coleman K, Boggs JM, and Simon GE. Suicide Behavior Following PHQ-9 Screening Among Individuals With Substance Use Disorders. *J Addict Med* 2020; Epub ahead of print. PMID: 32657957. Full Text

Aurora L, **Peterson E**, **Gui H**, **Zeld N**, **McCord J**, Pinto Y, **Cook B**, **Sabbah HN**, **Keoki Williams L**, Snider J, and **Lanfear DE**. Suppression Tumorigenicity 2 (ST2) Turbidimetric Immunoassay Compared to Enzyme-Linked Immunosorbent Assay in Predicting Survival in Heart Failure Patients with Reduced Ejection Fraction. *Clin Chim Acta* 2020; 510:767-771. PMID: 32926842. Request Article

Bick AG, Weinstock JS, Nandakumar SK, Fulco CP, Bao EL, Zekavat SM, Szeto MD, Liao X, Leventhal MJ, Nasser J, Chang K, Laurie C, Burugula BB, Gibson CJ, Lin AE, Taub MA, Aguet F, Ardlie K, Mitchell BD, Barnes KC, Moscati A, Fornage M, Redline S, Psaty BM, Silverman EK, Weiss ST, Palmer ND, Vasan RS, Burchard EG, Kardia SLR, He J, Kaplan RC, Smith NL, Arnett DK, Schwartz DA, Correa A, de Andrade M, Guo X, Konkle BA, Custer B, Peralta JM, **Gui H**, Meyers DA, McGarvey ST, Chen IY,Shoemaker MB, Peyser PA, Broome JG, Gogarten SM, Wang FF, Wong Q, Montasser ME, Daya M, Kenny EE, North KE, Launer LJ, Cade BE, Bis JC, Cho MH, Lasky-Su J, Bowden DW, Cupples LA, Mak ACY, Becker LC, Smith JA, Kelly

TN, Aslibekyan S, Heckbert SR, Tiwari HK, Yang IV, Heit JA, Lubitz SA, Johnsen JM, Curran JE, Wenzel SE, Weeks DE, Rao DC, Darbar D, Moon JY, Tracy RP, Buth EJ, Rafaels N, Loos RJF, Durda P, Liu Y, Hou L, Lee J, Kachroo P, Freedman BI, Levy D, Bielak LF, Hixson JE, Floyd JS, Whitsel EA, Ellinor PT, Irvin MR, Fingerlin TE, Raffield LM, Armasu SM, Wheeler MM, Sabino EC, Blangero J, Williams LK, Levy BD, Sheu WH, Roden DM, Boerwinkle E, Manson JE, Mathias RA, Desai P, Taylor KD, Johnson AD, Auer PL, Kooperberg C, Laurie CC, Blackwell TW, Smith AV, Zhao H, Lange E, Lange L, Rich SS, Rotter JI, Wilson JG, Scheet P, Kitzman JO, Lander ES, Engreitz JM, Ebert BL, Reiner AP, Jaiswal S, Abecasis G, Sankaran VG, Kathiresan S, and Natarajan P. Inherited causes of clonal haematopoiesis in 97,691 whole genomes. *Nature* 2020; 586(7831):763-768. PMID: 33057201. Full Text

Cocco MP, **White E**, **Xiao S**, Hu D, Mak A, Sleiman P, **Yang M**, **Bobbitt KR**, **Gui H**, **Levin AM**, **Hochstadt S**, **Whitehouse K**, **Rynkowski D**, Barczak AJ, Abecasis G, Blackwell TW, Kang HM, Nickerson DA, Germer S, Ding J, **Lanfear DE**, Gilliland F, Gauderman WJ, Kumar R, Erle DJ, Martinez F, Hakonarson H, Burchard EG, and **Williams LK**. Asthma and its relationship to mitochondrial copy number: Results from the Asthma Translational Genomics Collaborative (ATGC) of the Trans-Omics for Precision Medicine (TOPMed) program. *PLoS One* 2020; 15(11):e0242364. PMID: 33237978. Full Text

Gui H, **Levin AM**, Hu D, Sleiman P, **Xiao S**, Mak AC, **Yang M**, Barczak AJ, Huntsman S, Eng C, **Hochstadt S**, **Zhang E**, **Whitehouse K**, **Simons S**, **Cabral W**, **Takriti S**, Abecasis G, Blackwell TW, Kang HM, Nickerson DA, Germer S, **Lanfear DE**, Gilliland F, Gauderman WJ, Kumar R, Erle DJ, Martinez FD, Hakonarson H, Burchard EG, and **Williams LK**. Mapping the 17q12-21.1 Locus for Variants Associated with Early-onset Asthma in African Americans. *Am J Respir Crit Care Med* 2020; Epub ahead of print. PMID: 32966749. Full Text

Lanfear DE, **Luzum JA**, **She R**, **Gui H**, Donahue MP, O'Connor CM, Adams KF, Sanders-van Wijk S, **Zeld N**, Maeder MT, **Sabbah HN**, Kraus WE, Brunner-La Rocca HP, **Li J**, and **Williams LK**. Polygenic Score for Beta-Blocker Survival Benefit in European Ancestry Patients with Reduced Ejection Fraction Heart Failure. *Circ Heart Fail* 2020; 13(12):e007012. PMID: 33012170. Full Text

Mak ACY, Sajuthi S, Joo J, **Xiao S**, Sleiman PM, White MJ, Lee EY, Saef B, Hu D, **Gui H**, Keys KL, Lurmann F, Jain D, Abecasis G, Kang HM, Nickerson DA, Germer S, Zody MC, Winterkorn L, Reeves C, Huntsman S, Eng C, Salazar S, Oh SS, Gilliland FD, Chen Z, Kumar R, Martinez FD, Wu AC, Ziv E, Hakonarson H, Himes BE, **Williams LK**, Seibold MA, and Burchard EG. Lung Function in African American Children with Asthma Is Associated with Novel Regulatory Variants of the KIT Ligand KITLG/SCF and Gene-By-Air-Pollution Interaction. *Genetics* 2020; 215(3):869-886. PMID: 32327564. Full Text

Prabhakar D, **Peterson EL**, **Hu Y**, **Chawa S**, Rossom RC, Lynch FL, Lu CY, Waitzfelder BE, Owen-Smith AA, **Williams LK**, Beck A, Simon GE, and Ahmedani BK. Serious Suicide Attempts and Risk of Suicide Death. *Crisis* 2020; Epub ahead of print.:1-8. PMID: 33151092. Request Article

Verma S, **Peterson EL**, **Liu B**, **Sabbah HN**, **Williams LK**, and **Lanfear DE**. Effectiveness of beta blockers in patients with and without a history of myocardial infarction. *Eur J Clin Pharmacol* 2020; 76(8):1161-1168. PMID: 32440720. Full Text

Clinical Quality and Safety

Drake DH, De Bonis M, Covella M, Agricola E, Zangrillo A, **Zimmerman KG**, and Cobey FC. Echocardiography in Pandemic: Front-Line Perspective, Expanding Role of Ultrasound, and

Ethics of Resource Allocation. *J Am Soc Echocardiogr* 2020; 33(6):683-689. PMID: 32503707. Full Text

Dermatology

Abdel-Malek ZA, Jordan C, Ho T, Upadhyay PR, Fleischer A, and **Hamzavi I**. The Enigma and Challenges of Vitiligo Pathophysiology and Treatment. *Pigment Cell Melanoma Res* 2020; 33(6):778-787. PMID: 32198977. Full Text

Abou Shaar R, **Zia S**, **Alhamar M**, **Romano T**, **Shaw B**, **Keller C**, and **Friedman BJ**. Salivary gland hyalinizing clear cell carcinoma with cutaneous metastasis: a rare and deceptive tumor. *J Cutan Pathol* 2020; 48(1):86-89. PMID: 32640078. Full Text

Adelman M, **Lyons AB**, **Seale L**, and **Friedman BJ**. Use of p16 immunohistochemical stain to help differentiate inflamed melanocytic nevi from metastatic melanoma in the setting of immunotherapy. *J Am Acad Dermatol* 2019; 82(4):e117-e119. PMID: 31765681. Full Text

Alam M, Harikumar V, Ibrahim SA, Kang BY, Maher IA, Cartee TV, Sobanko JF, Kibbi N, Owen JL, Reynolds KA, Bolotin D, Waldman AH, Minkis K, Petersen B, Council ML, Nehal KS, Xu YG, Jiang SB, Somani AK, Bichakjian CK, Huang CC, Eisen DB, **Ozog DM**, Lee EH, Samie FH, Neuhaus IM, Bordeaux JS, Wang JV, Leitenberger JJ, Mann MW, Lawrence N, Zeitouni NC, Golda N, Behshad R, Ibrahim SF, Yu SS, Shin TM, Stebbins WG, and Worley B. Principles for developing and adapting clinical practice guidelines and guidance for pandemics, wars, shortages, and other crises and emergencies: the PAGE criteria. *Arch Dermatol Res* 2020; Epub ahead of print. PMID: 33206210. Full Text

Alam M, Harikumar V, Kang BY, Ibrahim SA, Kibbi N, Owen JL, Maher IA, Cartee TV, Sobanko JF, Reynolds KA, Bolotin D, Waldman AH, Minkis K, Petersen B, Council ML, Nehal KS, Xu YG, Jiang SB, Somani AK, Bichakjian CK, Huang CC, Eisen DB, **Ozog DM**, Lee EH, Samie FH, Neuhaus IM, Bordeaux JS, Wang JV, Leitenberger JJ, Mann MW, Lawrence N, Zeitouni NC, Golda N, Behshad R, Ibrahim SF, Yu SS, Shin TM, Stebbins WG, and Worley B. Development of international clinical practice guidelines: benefits, limitations, and alternative forms of international collaboration. *Arch Dermatol Res* 2020; Epub ahead of print. PMID: 33216212. Full Text

Bissonnette R, **Gold LS**, Rubenstein DS, Tallman AM, and Armstrong A. Tapinarof in the treatment of psoriasis: A review of the unique mechanism of action of a novel therapeutic AhR modulating agent (TAMA). *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 33157177. Full Text

Braunberger TL, Adelman M, **Shwayder TA**, Clarke LE, and **Friedman BJ**. Proliferative nodule resembling angiomatoid Spitz tumor with degenerative atypia arising within a giant congenital nevus. *J Cutan Pathol* 2020; 47(12):1200-1204. PMID: 32776331. Full Text

Buechler CR, **Veenstra J**, and **Gold LS**. Topical Therapies for Psoriasis in Phase 3 Trials. *Current Dermatology Reports* 2020; 9(4):331-338. PMID: Not assigned. Request Article

Chapman S, Adelman M, Sullivan A, Mancuso J, and **Lim HW**. Apremilast-associated drug reaction with eosinophilia and systemic symptoms. *JAAD Case Rep* 2020; 6(4):302-304. PMID: 32258304. Full Text

Cohen L, Brodsky MA, **Zubair R**, **Kohli I**, **Hamzavi IH**, and Sadeghpour M. Cutaneous Interaction with Visible Light: What Do We Know. *J Am Acad Dermatol* 2020; Epub ahead of

print. PMID: 32289393. Full Text

Danby SG, Draelos ZD, **Gold LFS**, Cha A, Vlahos B, Aikman L, Sanders P, Wu-Linhares D, and Cork MJ. Vehicles for atopic dermatitis therapies: more than just a placebo. *J Dermatolog Treat* 2020; Epub ahead of print. PMID: 32654550. Full Text

Del Rosso JQ, Kircik LH, Stein Gold L, and Thiboutot D. Androgens, Androgen Receptors, and the Skin: From the Laboratory to the Clinic With Emphasis on Clinical and Therapeutic Implications. *J Drugs Dermatol* 2020; 19(3):30-35. PMID: 32550699. Request Article

Eichenfield L, Hebert A, **Gold LS**, Cartwright M, Fragasso E, Moro L, and Mazzetti A. Open-label, longterm extension study to evaluate the safety of clascoterone (CB-03-01) cream, 1% twice daily, in patients with acne vulgaris. *J Am Acad Dermatol* 2020; 83(2):477-485. PMID: 32348828. Full Text

Ellis MM, **Jones LR**, **Siddiqui F**, **Sunkara PR**, and **Ozog DM**. The Efficacy of Surgical Excision Plus Adjuvant Multimodal Therapies in the Treatment of Keloids: A Systematic Review and Meta-Analysis. *Dermatol Surg* 2020; 46(8):1054-1059. PMID: 32224709. Full Text

Elmets CA, Korman NJ, Prater EF, Wong EB, Rupani RN, Kivelevitch D, Armstrong AW, Connor C, Cordoro KM, Davis DMR, Elewski BE, Gelfand JM, Gordon KB, Gottlieb AB, Kaplan DH, Kavanaugh A, Kiselica M, Kroshinsky D, Lebwohl M, Leonardi CL, Lichten J, **Lim HW**, Mehta NN, Paller AS, Parra SL, Pathy AL, Siegel M, Stoff B, Strober B, Wu JJ, Hariharan V, and Menter A. Joint AAD-NPF Guidelines of care for the management and treatment of psoriasis with topical therapy and alternative medicine modalities for psoriasis severity measures. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: Full Text

Ezzedine K, Vance TM, **Hamzavi IH**, and Qureshi AA. Vitiligo: Targeted Therapies Add Color to Disease Pathophysiology. *J Invest Dermatol* 2020; 140(8):1498-1500. PMID: 32709274. Full Text

Fatima S, **Braunberger T**, **Mohammad TF**, **Kohli I**, and **Hamzavi IH**. The Role of Sunscreen in Melasma and Postinflammatory Hyperpigmentation. *Indian J Dermatol* 2020; 65(1):5-10. PMID: 32029932. Full Text

Fatima S, **D'sa H**, **Chaffins ML**, **Menon M**, and **Friedman BJ**. An Elderly Male with a Chronic Rash on the Right Foot. *Indian J Dermatol* 2020; 65(3):222-224. PMID: 32565566. Full Text

Fransen F, Spuls P, Alam M, Badawi A, Boixeda P, Haedersdal M, **Hamzavi I**, Hedelund L, Kelly KM, Kono T, Laubach HJ, Manuskiatti W, Marini L, Nouri K, Paasch U, Passeron T, Prinsen C, Verner I, and Wolkerstorfer A. Generic outcome set for the international registry on Laser trEAtments in Dermatology (LEAD): a protocol for a Delphi study to achieve consensus on what to measure. *BMJ Open* 2020; 10(6)e038145. PMID: 32595165. Full Text

Freeman EE, McMahon DE, Hruza GJ, Irvine AD, Spuls PI, Smith CH, Mahil SK, Castelo-Soccio L, Cordoro KM, Lara-Corrales I, Naik HB, Alhusayen R, Ingram JR, Feldman SR, Balogh EA, Kappelman MD, Wall D, Meah N, Sinclair R, Beylot-Barry M, Fitzgerald M, French LE, **Lim HW**, Griffiths CEM, and Flohr C. International Collaboration and Rapid Harmonization across Dermatologic COVID-19 Registries. *J Am Acad Dermatol* 2020; 83(3):e261-e266. PMID: 32562840. Full Text

Freeman EE, McMahon DE, Lipoff JB, Rosenbach M, Kovarik C, Desai SR, Harp J, Takeshita J, French LE, **Lim HW**, Thiers BH, Hruza GJ, and Fox LP. The spectrum of COVID-19-

associated dermatologic manifestations: an international registry of 716 patients from 31 countries. *J Am Acad Dermatol* 2020; 83(4):1118-1129. PMID: 32622888. Full Text

Friedman BJ, **Robinson G**, and **Kohen L**. Dermoscopic Features of Spitz Tumor With LMNA-NTRK1 Fusion. *Dermatol Pract Concept* 2021; 11(1):e2020101. PMID: 33354405. Request Article

Fu C, Peng P, Loschko J, Feng L, Pham P, Cui W, Lee KP, Krug AB, and **Jiang A**. Plasmacytoid dendritic cells cross-prime naive CD8 T cells by transferring antigen to conventional dendritic cells through exosomes. *Proc Natl Acad Sci U S A* 2020; 117(38):23730-23741. PMID: 32879009. Full Text

Fu C, **Zhou L**, **Mi QS**, and **Jiang A**. DC-Based Vaccines for Cancer Immunotherapy. *Vaccines (Basel)* 2020; 8(4). PMID: 33255895. Full Text

Gold LS, Bhatia N, Tallman AM, and Rubenstein DS. A Phase IIb, Randomized Clinical Trial of Tapinarof Cream for the Treatment of Plaque Psoriasis: Secondary Efficacy and Patient-Reported Outcomes. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32446832. Full Text

Gold LS, Del Rosso JQ, Kircik L, Bhatia ND, Hooper D, Nahm WK, and Stuart I. Minocycline 1.5% foam for the topical treatment of moderate to severe papulopustular rosacea: Results of 2 phase 3, randomized, clinical trials. *J Am Acad Dermatol* 2020; 82(5):1166-1173. PMID: 32004648. Full Text

Gold LS, Hansen JB, Patel D, Veverka KA, and Strober B. PGAxBSA composite versus PASI: Comparison across disease severities and as therapeutic response measure for Cal/BD foam in plaque psoriasis. *J Am Acad Dermatol* 2020; 83(1):131-138. PMID: 32430142. Full Text

Hamel R, **Mohammad TF**, Chahine A, Joselow A, Garrett V, Radosta S, Boh E, Alora-Palli M, Mistur RL, Baron ED, Cooper KD, and **Lim HW**. Comparison of racial distribution of photodermatoses in USA academic dermatology clinics: a multicenter retrospective analysis of 1080 patients over a 10-year period. *Photodermatol Photoimmunol Photomed* 2020; 36(3):233-240. PMID: 32104953. Full Text

Hamzavi IH, **Lyons AB**, **Kohli I**, **Narla S**, **Parks-Miller A**, Gelfand JM, **Lim HW**, and **Ozog D**. Ultraviolet germicidal irradiation: possible method for respirator disinfection to facilitate reuse during COVID-19 pandemic. *J Am Acad Dermatol* 2020; 82(6):1511-1512. PMID: 32246972. Full Text

Harikumar V, Worley B, Ibrahim SA, Kang BY, Maher IA, Cartee TV, Sobanko JF, Kibbi N, Owen JL, Reynolds KA, Bolotin D, Waldman AH, Minkis K, Petersen B, Council ML, Nehal KS, Xu YG, Jiang SB, Somani AK, Huang CC, Eisen DB, **Ozog DM**, Lee EH, Samie FH, Neuhaus IM, Leitenberger JJ, Mann MW, Lawrence N, Zeitouni NC, Golda N, Behshad R, Ibrahim SF, Yu SS, Shin TM, Stebbins WG, and Alam M. Broad versus narrow clinical practice guidelines: avoiding rules for the high risk 1. *Arch Dermatol Res* 2020; Epub ahead of print. PMID: 33175206. Full Text

Hebert A, Thiboutot D, **Stein Gold L**, Cartwright M, Gerloni M, Fragasso E, and Mazzetti A. Efficacy and Safety of Topical Clascoterone Cream, 1%, for Treatment in Patients With Facial Acne: Two Phase 3 Randomized Clinical Trials. *JAMA Dermatol* 2020; 156(6):621-630. PMID: 32320027. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Horton L, **Torres AE**, **Narla S**, **Lyons AB**, **Kohli I**, Gelfand JM, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. Spectrum of virucidal activity from ultraviolet to infrared radiation. *Photochem Photobiol Sci* 2020; 19(10):1262-1270. PMID: 32812619. Request Article

Huang L, **Li GH**, **Yu Q**, **Xu Y**, **Cvetkovski S**, **Wang X**, **Parajuli N**, **Udo-Inyang I**, Kaplan D, **Zhou L**, Yao Z, and **Mi QS**. Smad2/4 Signaling Pathway Is Critical for Epidermal Langerhans Cell Repopulation Under Inflammatory Condition but Not Required for Their Homeostasis at Steady State. *Front Immunol* 2020; 11:912. PMID: 32457763. Full Text

Iyengar S, **Yeager DG**, Cohen JL, and **Ozog DM**. Update and Review of Bleeding Considerations in Dermatologic Surgery: Anticoagulants and Antiplatelets. *Dermatol Surg* 2020; 46(2):192-201. PMID: 31743247. Full Text

Iyengar S, **Yeager DG**, Cohen JL, and **Ozog DM**. Update and Review of Bleeding Considerations in Dermatologic Surgery: Hemostatic Techniques and Treatment Strategies for Bleeding Complications. *Dermatol Surg* 2020; 46(2):203-212. PMID: 31592926. Full Text

Kashlan R, **Lyons AB**, Hivnor C, and **Ozog DM**. N95 Respirators for Dermatologic Surgery and Laser Procedures During COVID-19 and Beyond. *Dermatol Surg* 2020; 46(11):1441-1442. PMID: 33105244. Full Text

Kohli I, **Braunberger TL**, **Nahhas AF**, Mirza FN, Mokhtari M, **Lyons AB**, Kollias N, Ruvolo E, **Lim HW**, and **Hamzavi IH**. Long-wavelength Ultraviolet A1 and Visible Light Photoprotection: A Multimodality Assessment of Dose and Response. *Photochem Photobiol* 2020; 96(1):208-214. PMID: 31464341. Request Article

Kohli I, Kastner S, Thomas M, Nahhas AF, **Braunberger TL**, **Mohammad TF**, Nicholson CL, Canfield D, Kollias N, **Lim HW**, **Hamzavi IH**, and Patwardhan SV. Quantitative measurement of skin surface oiliness and shine using differential polarized images. *Arch Dermatol Res* 2020; Epub ahead of print. PMID: 32270323. Full Text

Kohli I, **Lyons AB**, Golding B, **Narla S**, **Torres AE**, **Parks-Miller A**, **Ozog D**, **Lim HW**, and **Hamzavi IH**. UVC Germicidal Units: Determination of Dose Received and Parameters to be Considered for N95 Respirator Decontamination and Reuse. *Photochem Photobiol* 2020; 96(5):1083-1087. PMID: 32767758. Full Text

Krutmann J, Passeron T, Gilaberte Y, Granger C, Leone G, Narda M, Schalka S, Trullas C, Masson P, and **Lim HW**. Photoprotection of the future: challenges and opportunities. *J Eur Acad Dermatol Venereol* 2020; 34(3):447-454. PMID: 31898355. Full Text

Lebwohl M, Kircik L, Lacour JP, Liljedahl M, Lynde C, Mørch MH, Papp KA, Perrot JL, **Gold LS**, Takhar A, Thaçi D, Warren RB, and Wollenberg A. Twice-weekly topical calcipotriene / betamethasone dipropionate foam as proactive management of plaque psoriasis increases time in remission and is well tolerated over 52 weeks (PSO-LONG trial). *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32950546. Full Text

Lebwohl MG, Papp KA, **Stein Gold L**, Gooderham MJ, Kircik LH, Draelos ZD, Kempers SE,

Zirwas M, Smith K, Osborne DW, Trotman ML, Navale L, Merritt C, Berk DR, and Welgus H. Trial of Roflumilast Cream for Chronic Plaque Psoriasis. *N Engl J Med* 2020; 383(3):229-239. PMID: 32668113. Full Text

Levoska MA, **Griffith JL**, **Nagai S**, **Collins K**, and **Lim HW**. A multi-disciplinary approach utilizing filters for surgical procedures in erythropoietic protoporphyria. *J Am Acad Dermatol* 2020; 83(5):e329-e330. PMID: 32068036. Full Text

Li D, **Peng H**, **Qu L**, Sommar P, Wang A, Chu T, Li X, **Bi X**, **Liu Q**, Sérézal IG, Rollman O, Lohcharoenkal W, Zheng X, Angelstig SE, Grünler J, Pivarcsi A, Sonkoly E, Catrina SB, Xiao C, Ståhle M, **Mi QS**, Zhou L, and Landén NX. miR-19a/b and miR-20a promote wound healing by regulating the inflammatory response of keratinocytes. *J Invest Dermatol* 2020; Epub ahead of print. PMID: 32949564. Full Text

Lim HW, Feldman SR, Van Voorhees AS, and Gelfand JM. Recommendations for phototherapy during the COVID-19 pandemic. *J Am Acad Dermatol* 2020; 83(1):287-288. PMID: 32339700. Full Text

Luke J, Cornelius L, and **Lim HW**. Dermatology Resident Selection: Shifting Toward Holistic Review? *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 33245933. Full Text

Luther CA, **Griffith JL**, **Kurland E**, Al Shabeeb R, Eleryan M, Redbord K, and **Ozog DM**. The Infection Rate of Intralesional Triamcinolone and The Safety of Compounding in Dermatology for Intradermal and Subcutaneous Injection: A Retrospective Chart Review. *J Am Acad Dermatol* 2020; 83(4):1044-1048. PMID: 32442698. Full Text

Lyons AB, Ghia D, Abdallah M, Abdel-Malek Z, Esmat S, Ezzedine K, Grimes P, Harris JE, Lui H, Manga P, **Mi QS**, Pandya A, Parsad D, Passeron T, Picardo M, Seneschal J, Silpa-Archa N, Taieb A, Xiang F, **Lim HW**, and **Hamzavi IH**. Proceeding Report of the Second Vitiligo International Symposium (VIS)- November 9-10, 2018, Detroit, Michigan, USA. *Pigment Cell Melanoma Res* 2020; 33(4):637-641. PMID: 31984599. Full Text

Lyons AB, and **Hamzavi IH**. Ultraviolet C Induced Skin Reaction from Ultraviolet Germicidal Irradiation of N95 Respirators During the COVID-19 Pandemic. *Photodermatol Photoimmunol Photomed* 2020; Epub ahead of print. PMID: 32974955. Full Text

Lyons AB, Kaddurah H, Peacock A, Zubair R, Vellaichamy G, Norwick P, **Ramesh M**, **Jacobsen G**, and **Hamzavi IH**. Hidradenitis suppurativa and risk for development of Clostridium difficile colitis. *Int J Dermatol* 2020; 59(6):e218-e219. PMID: 32010962. Full Text

Lyons AB, **Kohli I**, Nahhas AF, **Braunberger TL**, **Mohammad TF**, Nicholson CL, Nartker NT, **Modi K**, Matsui MS, **Lim HW**, and **Hamzavi IH**. Trichloroacetic acid model to accurately capture the efficacy of treatments for postinflammatory hyperpigmentation. *Arch Dermatol Res* 2020; 312(10):725-730. PMID: 32253506. Full Text

Lyons AB, **Narla S**, **Torres AE**, **Parks-Miller A**, **Kohli I**, **Ozog DM**, **Lim HW**, and **Hamzavi IH**. Skin and eye protection against ultraviolet C from ultraviolet germicidal irradiation devices during the COVID-19 pandemic. *Int J Dermatol* 2020; Epub ahead of print. PMID: 33259055. Full Text

Lyons AB, Peacock A, McKenzie SA, **Jacobsen G**, Naik HB, Shi VY, **Hamzavi IH**, and Hsiao JL. Retrospective Cohort Study of Pregnancy Outcomes in Hidradenitis Suppurativa. *Br J Dermatol* 2020; 183(5):945-947. PMID: 32333790. Full Text

Lyons AB, Peacock A, McKenzie SA, **Jacobsen G**, Naik HB, Shi VY, **Hamzavi IH**, and Hsiao JL. Evaluation of Hidradenitis Suppurativa Disease Course During Pregnancy and Postpartum. *JAMA Dermatol* 2020; 156(6):681-685. PMID: 32347884. Full Text

Lyons AB, Shabeeb N, Nicholson CL, **Braunberger TL**, Peacock A, and **Hamzavi IH**. Emerging medical treatments for hidradenitis suppurativa. *J Am Acad Dermatol* 2020; 83(2):554-562. PMID: 32289386. Full Text

Lyons AB, Trullas C, **Kohli I**, **Hamzavi IH**, and **Lim HW**. Photoprotection Beyond Ultraviolet Radiation: A Review of Tinted Sunscreens. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32335182. Full Text

Ma Z, Li L, Livingston MJ, Zhang D, **Mi Q**, Zhang M, Ding HF, Huo Y, Mei C, and Dong Z. p53/microRNA214/ULK1 axis impairs renal tubular autophagy in diabetic kidney disease. *J Clin Invest* 2020; 130(9):5011-5026. PMID: 32804155. Full Text

Madan E, Peixoto ML, **Dimitrion P**, Eubank TD, Yekelchyk M, Talukdar S, Fisher PB, **Mi QS**, Moreno E, and Gogna R. Cell Competition Boosts Clonal Evolution and Hypoxic Selection in Cancer. *Trends Cell Biol* 2020; 30(12):967-978. PMID: 33160818. Full Text

Menter A, Cordoro KM, Davis DMR, Kroshinsky D, Paller AS, Armstrong AW, Connor C, Elewski BE, Gelfand JM, Gordon KB, Gottlieb AB, Kaplan DH, Kavanaugh A, Kiselica M, Kivelevitch D, Korman NJ, Lebwohl M, Leonardi CL, Lichten J, **Lim HW**, Mehta NN, Parra SL, Pathy AL, Farley Prater EA, Rupani RN, Siegel M, Stoff B, Strober BE, Wong EB, Wu JJ, Hariharan V, and Elmets CA. Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis in pediatric patients. *J Am Acad Dermatol* 2020; 82(1):161-201. PMID: 31703821.
Full Text

Menter A, Gelfand JM, Connor C, Armstrong AW, Cordoro KM, Davis DMR, Elewski BE, Gordon KB, Gottlieb AB, Kaplan DH, Kavanaugh A, Kiselica M, Kivelevitch D, Korman NJ, Kroshinsky D, Lebwohl M, Leonardi CL, Lichten J, **Lim HW**, Mehta NN, Paller AS, Parra SL, Pathy AL, Prater EF, Rahimi RS, Rupani RN, Siegel M, Stoff B, Strober BE, Tapper EB, Wong EB, Wu JJ, Hariharan V, and Elmets CA. Joint AAD-NPF Guidelines of Care for the Management of Psoriasis with Systemic Non-Biological Therapies. *J Am Acad Dermatol* 2020; 82(6):1445-1486. PMID: 32119894. Full Text

Narla S, Azzam M, Townsend S, Vellaichamy G, Marzano AV, Alavi A, Lowes MA, and **Hamzavi IH**. Identifying key components and therapeutic targets of the immune system in hidradenitis suppurativa with an emphasis on neutrophils. *Br J Dermatol* 2020; Epub ahead of print. PMID: 32893875. Full Text

Narla S, **Kohli I**, **Hamzavi IH**, and **Lim HW**. Visible light in photodermatology. *Photochem Photobiol Sci* 2020; 19(1):99-104. PMID: 31922171. Request Article

Narla S, **Lyons AB**, **Kohli I**, **Torres AE**, **Parks-Miller A**, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. The Importance of the Minimum Dosage Necessary for UVC Decontamination of N95 Respirators during the COVID-19 Pandemic. *Photodermatol Photoimmunol Photomed* 2020; 36(4):324-325. PMID: 32291807. Full Text

Narla S, Oska S, **Lyons AB**, **Lim HW**, and **Hamzavi IH**. Association of myalgias with compounded topical Janus kinase inhibitor use in vitiligo. *JAAD Case Rep* 2020; 6(7):637-639.

PMID: 32613059. Full Text

Narla S, Price KN, Sachdeva M, Shah M, Shi V, **Hamzavi I**, Alavi A, and Lowe MA. Proceeding report of the fourth Symposium on Hidradenitis Suppurativa Advances (SHSA) 2019. *J Am Acad Dermatol* 2020; 84(1):120-129. PMID: 32497690. Full Text

Narla S, and Silverberg JI. Multimorbidity and mortality risk in hospitalized adults with chronic inflammatory skin disease in the United States. *Arch Dermatol Res* 2020; 312(7):507-512. PMID: 32047999. Full Text

Narla S, and Silverberg JI. The inpatient burden and comorbidities of pyoderma gangrenosum in adults in the United States. *Arch Dermatol Res* 2020; Epub ahead of print. PMID: 32620994. Full Text

Nguyen TV, Damiani G, Orenstein LAV, **Hamzavi I**, and Jemec G. Hidradenitis Suppurativa: An Update on Epidemiology, Phenotypes, Diagnosis, Pathogenesis, Comorbidities and Quality of Life. *J Eur Acad Dermatol Venereol* 2020; Epub ahead of print. PMID: 32460374. Full Text

Orenstein LAV, Nguyen TV, Damiani G, Sayed C, Jemec GBE, and **Hamzavi I**. Medical and Surgical Management of Hidradenitis Suppurativa: A Review of International Treatment Guidelines and Implementation in General Dermatology Practice. *Dermatology* 2020; 236(5):393-412. PMID: 32408306. Full Text

Oska S, **Zarbo A**, and **Jahnke MN**. Sleep-related rhythmic movement disorder: A case report of head banging alopecia. *Pediatr Dermatol* 2020; 37(2):350-351. PMID: 31930572. Full Text

Oska S, **Zarbo A**, **Yeager D**, **Friedman BJ**, and **Shwayder T**. Melanoma arising in a patient with ataxiatelangiectasia: A call for full skin examinations in this patient population. *Pediatr Dermatol* 2020; 37(4):767-768. PMID: 32413934. Full Text

Ozog D, **Parks-Miller A**, **Kohli I**, **Lyons AB**, **Narla S**, **Torres AE**, **Levesque M**, **Lim HW**, and **Hamzavi IH**. The Importance of Fit-Testing in Decontamination of N95 Respirators: A Cautionary Note. *J Am Acad Dermatol* 2020; 83(2):672-674. PMID: 32389714. Full Text

Ozog DM. Commentary on Treatment of Hypertrophic Burn and Traumatic Scars With 2940 mm Fractional Ablative Er: YAG. *Dermatol Surg* 2020; 46(6):794-795. PMID: 32452977. Full Text

Ozog DM, Sexton JZ, **Narla S**, Pretto-Kernahan CD, Mirabelli C, **Lim HW**, **Hamzavi IH**, **Tibbetts RJ**, and **Mi QS**. The Effect of Ultraviolet C Radiation Against Different N95 Respirators Inoculated with SARSCoV-2. *Int J Infect Dis* 2020; 100:224-229. PMID: 32891736. Full Text

Paller AS, **Gold LS**, Soung J, Tallman AM, Rubenstein DS, and Gooderham M. Efficacy and PatientReported Outcomes from a Phase IIb, Randomized Clinical Trial of Tapinarof Cream for the Treatment of Adolescents and Adults with Atopic Dermatitis. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32502588. Full Text

Patel N, **Konda S**, and **Lim HW**. Dupilumab for the Treatment of Chronic Actinic Dermatitis. *Photodermatol Photoimmunol Photomed* 2020; 36(5):398-400. PMID: 32320500. Full Text

Powell A, Nelson KN, **Awosika O**, Rengifo-Pardo M, and Ehrlich A. Burning Mouth Syndrome

and Contact Dermatitis. *Dermatitis* 2020; 31(4):238-243. PMID: 32091459. Full Text

Price KN, **Lyons AB**, **Hamzavi IH**, Hsiao JL, and Shi VY. Facilitating Clinical Trials Participation of Low Socioeconomic Status Patients. *Dermatology* 2020; Epub ahead of print. PMID: 33321504. Full Text

Richard EG, and **Lim HW**. In Memoriam. *Photodermatol Photoimmunol Photomed* 2020; 36(3):171. PMID: 32401395. Full Text

Robinson G, McMichael A, Wang SQ, and **Lim HW**. Sunscreen and frontal fibrosing alopecia: A review. *J Am Acad Dermatol* 2020; 82(3):723-728. PMID: 31654665. Full Text

Robinson G, Townsend S, and **Jahnke MN**. Molluscum Contagiosum: Review and Update on Clinical Presentation, Diagnosis, Risk, Prevention, and Treatment. *Current Dermatology Reports* 2020; 9(1):8392. PMID: Not assigned. Request Article

Rosmarin D, Pandya AG, Lebwohl M, Grimes P, **Hamzavi I**, Gottlieb AB, Butler K, Kuo F, Sun K, Ji T, Howell MD, and Harris JE. Ruxolitinib cream for treatment of vitiligo: a randomised, controlled, phase 2 trial. *Lancet* 2020; 396(10244):110-120. PMID: 32653055. Full Text

Smith J, **Ezekwe N**, **Pourang A**, and **Hamzavi I**. Multifocal Myositis and Elevated CPK associated with the use of Ustekinumab for Hidradenitis Suppurativa. *Br J Dermatol* 2020; Epub ahead of print. PMID: 33370450. Full Text

Soliman YS, **Lim HW**, and **Kerr HA**. Recalcitrant, delayed pressure urticaria treated with long-term intravenous immunoglobulin. *JAAD Case Rep* 2020; 6(3):176-177. PMID: 32099887. Full Text

Stein Gold L, Alonso-Llamazares J, Lacour JP, Warren RB, Tyring SK, Kircik L, Yamauchi P, and Lebwohl M. PSO-LONG: Design of a Novel, 12-Month Clinical Trial of Topical, Proactive Maintenance with Twice-Weekly Cal/BD Foam in Psoriasis. *Adv Ther* 2020; 37(11):4730-4753. PMID: 32965655. Full Text

Stein Gold L, Bagel J, Allenby K, and Sidgiddi S. Betamethasone dipropionate spray 0.05% alleviates troublesome symptoms of plaque psoriasis. *Cutis* 2020; 105(2):97-102;e101. PMID: 32186532. Request Article

Teran VA, **McHargue CA**, and Gru AA. Photodistributed Rash Progressing to Erythroderma: Answer. *Am J Dermatopathol* 2020; 42(6):463-465. PMID: 32433320. Full Text

Thiboutot D, Anderson R, Cook-Bolden F, Draelos Z, Gallo R, Granstein R, Kang S, Macsai M, **Gold LS**, and Tan J. Standard Management Options for Rosacea: the 2019 Update by the National Rosacea Society Expert Committee. *J Am Acad Dermatol* 2020; 82(6):1501-1510. PMID: 32035944. Full Text

Tisack A, **Jiang A**, and **Veenstra J**. Crusted, ulcerated plaques on the scalp and face. *Clin Exp Dermatol* 2020; 46(1):199-202. PMID: 32959399. Full Text

Torres AE, and **Lim HW**. Photobiomodulation for the management of hair loss. *Photodermatol Photoimmunol Photomed* 2020; Epub ahead of print. PMID: 33377535. Full Text

Torres AE, **Lyons AB**, **Hamzavi IH**, and **Lim HW**. Response to Commentary on "Role of Phototherapy in the Era of Biologics". *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32950547. Full Text

Torres AE, **Lyons AB**, **Narla S**, **Kohli I**, **Parks-Miller A**, **Ozog D**, **Hamzavi IH**, and **Lim HW**. UltravioletC and other methods of decontamination of filtering facepiece N-95 respirators during the COVID-19 pandemic. *Photochem Photobiol Sci* 2020; Epub ahead of print. PMID: 32412033. Full Text

Torres AE, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. Notes and Comments on "Proposed Approach for Reusing Surgical Masks in COVID-19 Pandemic". *J Am Acad Dermatol* 2020; 83(3):e227. PMID: 32446829. Full Text

Torres AEE, **Lyons AB**, **Hamzavi IH**, and **Lim HW**. Role of phototherapy in the era of biologics. *J Am Acad Dermatol* 2020; Epub ahead of print. PMID: 32339702. Full Text

Umeh ON, **Beekman R**, **D'sa H**, and **Friedman BJ**. Elderly Man With Progressive Nail Atrophy: Challenge. *Am J Dermatopathol* 2020; Epub ahead of print. PMID: 32932300. Full Text

van Geel N, **Hamzavi I**, **Kohli I**, Wolkerstorfer A, **Lim HW**, Bae JM, Lui H, Harris JE, Pandya AG, Thng Tien Guan S, Abdallah M, Esmat S, Seneschal J, Speeckaert R, Grine L, Kang HY, Raboobee N, Xiang LF, Bekkenk M, Picardo M, and Taieb A. Standardizing serial photography for assessing and monitoring vitiligo: A core set of international recommendations for essential clinical and technical specifications. *J Am Acad Dermatol* 2020; 83(6):1639-1646. PMID: 31678332. Full Text

Van Voorhees AS, **Stein Gold L**, Lebwohl M, Strober B, Lynde C, Tyring S, Cauthen A, Sofen H, Zhang Z, Paris M, and Wang Y. Efficacy and safety of apremilast in patients with moderate to severe plaque psoriasis of the scalp: Results of a phase 3b, multicenter, randomized, placebo-controlled, double-blind study. *J Am Acad Dermatol* 2020; 83(1):96-103. PMID: 32032692. Full Text

Veenstra J, Buechler CR, **Robinson G**, **Chapman S**, Adelman M, Tisack A, Dimitrion P, **Todter E**, **Kohen L**, and **Lim HW**. Antecedent Immunosuppressive Therapy for Immune-Mediated Inflammatory Diseases in the Setting of a COVID-19 Outbreak. *J Am Acad Dermatol* 2020; 83(6):1696-1703. PMID: 32735965. Full Text

Vellaichamy G, **Chadha A**, **Hamzavi IH**, and **Lim HW**. Polymorphic Light Eruption Sine Eruptione: A Variant of Polymorphous Light Eruption. *Photodermatol Photoimmunol Photomed* 2020; 36(5):396-397. PMID: 32323883. Full Text

Vellaichamy G, Townsend SM, **Lyons AB**, and **Hamzavi IH**. T-cell/histiocyte-rich large B-cell lymphoma in a 27-year-old with hidradenitis suppurativa, psoriasis, and vitiligo: Implications for screening. *JAAD Case Rep* 2020; 6(12):1252-1253. PMID: 33294556. Full Text

Vickers C, **Oberlin D**, and **Shwayder TA**. A girl with loose anagen hair syndrome and concurrent uncombable hair syndrome. *JAAD Case Rep* 2020; 6(2):92-95. PMID: 32051838. Full Text

Worden A, **Yoho DJ**, **Houin H**, **Moquin K**, **Hamzavi I**, **Saab I**, and **Siddiqui A**. Factors Affecting Healing in the Treatment of Hidradenitis Suppurativa. *Ann Plast Surg* 2020; 84(4):436-440. PMID: 31688123. Full Text

Wright E, **Kurland E**, and **Lim HW**. Solar urticaria caused by visible light in a 33-year-old male refractory to treatment with omalizumab. *Photodermatol Photoimmunol Photomed* 2020;

36(4):316-317. PMID: 32141097. Full Text

Xu Y, **Dimitrion P**, **Cvetkovski S**, **Zhou L**, and **Mi QS**. Epidermal resident γδ T cell development and function in skin. *Cell Mol Life Sci* 2020; Epub ahead of print. PMID: 32803399. Full Text

Yao Y, **Liu Q**, **Adrianto I**, **Wu X**, **Glassbrook J**, **Khalasawi N**, **Yin C**, **Yi Q**, Dong Z, Geissmann F, **Zhou L**, and **Mi QS**. Histone deacetylase 3 controls lung alveolar macrophage development and homeostasis. *Nat Commun* 2020; 11(1):3822. PMID: 32732898. Full Text

Yu Q, **Parajuli N**, **Yi Q**, **Mishina Y**, Elder JT, **Zhou L**, and **Mi QS**. ALK3 is not required for the embryonic development, homeostasis and repopulation of epidermal Langerhans cells in steady and inflammatory states. *J Invest Dermatol* 2020; Epub ahead of print. PMID: 33359325. Full Text

Zarbo A, **Inamdar K**, and **Friedman BJ**. Tender Nodules on the Extremities: Answer. *Am J Dermatopathol* 2020; 42(11):889. PMID: 33086227. Full Text

Zhou L, **Adrianto I**, **Wang J**, **Wu X**, **Datta I**, and **Mi QS**. Single-Cell RNA-Seq Analysis Uncovers Distinct Functional Human NKT Cell Sub-Populations in Peripheral Blood. *Front Cell Dev Biol* 2020; 8:384. PMID: 32528956. Full Text

Zouboulis CC, Benhadou F, Byrd AS, Chandran NS, Giamarellos-Bourboulis EJ, Fabbrocini G, Frew JW, Fujita H, González-López MA, Guillem P, Gulliver WPF, **Hamzavi I**, Hayran Y, Hórvath B, Hüe S, Hunger RE, Ingram JR, Jemec GBE, Ju Q, Kimball AB, Kirby JS, Konstantinou MP, Lowes MA, MacLeod AS, Martorell A, Marzano AV, Matusiak Ł, Nassif A, Nikiphorou E, Nikolakis G, Nogueira da Costa A, Okun MM, Orenstein LAV, Pascual JC, Paus R, Perin B, Prens EP, Röhn TA, Szegedi A, Szepietowski JC, Tzellos T, Wang B, and van der Zee HH. What causes hidradenitis suppurativa? - 15 years after. *Exp Dermatol* 2020; 29(12):1154-1170. PMID: 33058306. Full Text

Diagnostic Radiology

Aggarwal A, Lazarow F, Anzai Y, Elsayed M, Ghobadi C, Dandan OA, **Griffith B**, Straus CM, and Kadom N. Maximizing Value While Volumes are Increasing. *Curr Probl Diagn Radiol* 2020; Epub ahead of print. PMID: 32222265. Full Text

Alanee S, **Deebajah M**, **Taneja K**, **Cole D**, **Pantelic M**, **Peabody J**, **Williamson SR**, **Gupta N**, **Dabaja A**, and **Menon M**. Post prostatectomy Pathologic Findings of Patients with Clinically Significant Prostate Cancer and no Significant PI-RADS Lesions on Preoperative Magnetic Resonance Imaging. *Urology* 2020; 146:183-188. PMID: 32946907. Full Text

Alexander C, Caras A, Miller WK, **Tahir R**, **Mansour TR**, Medhkour A, and **Marin H**. M2 segment thrombectomy is not associated with increased complication risk compared to M1 segment: A metaanalysis of recent literature. *J Stroke Cerebrovasc Dis* 2020; 29(9):105018. PMID: 32807433. Full Text

Bevins NB, Silosky MS, Badano A, Marsh RM, **Flynn MJ**, and Walz-Flannigan AI. Practical application of AAPM Report 270 in display quality assurance: A report of Task Group 270. *Med Phys* 2020; 47(9):e920e928. PMID: 32681556. Full Text

Boregowda U, Gandhi D, Jain N, **Khanna K**, and Gupta N. Comprehensive Literature Review and Evidence evaluation of Experimental Treatment in COVID 19 Contagion. *Clinical Medicine*

Insights: Circulatory, Respiratory and Pulmonary Medicine 2020; 14. PMID: Not assigned. Full Text

Cho R, **Myers DT**, **Onwubiko IN**, and **Williams TR**. Extraosseous multiple myeloma: imaging spectrum in the abdomen and pelvis. *Abdom Radiol (NY)* 2020; Epub ahead of print. PMID: 32870348. Full Text

Dai Z, **Carver E**, **Liu C**, **Lee J**, **Feldman A**, **Zong W**, **Pantelic M**, **Elshaikh M**, and **Wen N**. Segmentation of the Prostatic Gland and the Intraprostatic Lesions on Multiparametic Magnetic Resonance Imaging Using Mask Region-Based Convolutional Neural Networks. *Adv Radiat Oncol* 2020; 5(3):473-481. PMID: 32529143. Full Text

Davatzikos C, Barnholtz-Sloan JS, Bakas S, Colen R, Mahajan A, Quintero CB, Font JC, Puig J, Jain R, Sloan AE, Badve C, Marcus DS, Choi YS, Lee SK, Chang JH, **Poisson LM**, **Griffith B**, Dicker AP, Flanders AE, Booth TC, Rathore S, Akbari H, Sako C, Bilello M, Shukla G, Kazerooni AF, Brem S, Lustig R, Mohan S, Bagley S, Nasrallah M, and O'Rourke DM. AI-based Prognostic Imaging Biomarkers for Precision Neurooncology: the ReSPOND Consortium. *Neuro Oncol* 2020; 22(6):886-888. PMID: 32152622. Full Text

Dehghani A, **Soltanian-Zadeh H**, and Hossein-Zadeh GA. Global Data-Driven Analysis of Brain
Connectivity during Emotion Regulation by EEG Neurofeedback. *Brain Connect* 2020; 10(6):302-315. PMID: 32458692. Request Article

Ebrahimzadeh E, Shams M, Rahimpour Jounghani A, Fayaz F, Mirbagheri M, Hakimi N, Rajabion L, and **Soltanian-Zadeh H**. Localizing confined epileptic foci in patients with an unclear focus or presumed multifocality using a component-based EEG-fMRI method. *Cognitive Neurodynamics* 2020; Epub ahead of print. PMID: Not assigned. Full Text

Elsayed M, Kadom N, Ghobadi C, Strauss B, Al Dandan O, Aggarwal A, Anzai Y, **Griffith B**, Lazarow F, Straus CM, and Safdar NM. Virtual and augmented reality: potential applications in radiology. *Acta Radiol* 2020; 61(9):1258-1265. PMID: 31928346. Full Text

Gadde R, **Arora K**, Felicella MM, Arora S, Cheng L, **Park H**, **Gupta NS**, Salamat MS, and **Williamson SR**. Cystic Trophoblastic Tumor in a Primary Central Nervous System Post-Chemotherapy Germ Cell Tumor: The First Case Report. *Int J Surg Pathol* 2020; 28(8):925-928. PMID: 32498578. Full Text

Gandhi D, Boregowda U, Sharma P, Ahuja K, Jain N, **Khanna K**, and Gupta N. A review of commonly performed bariatric surgeries: Imaging features and its complications. *Clin Imaging* 2020; 72:122-135. PMID: 33232899. Full Text

Griffith B, Rozenshtein A, Lewis M, Ali K, Thompson D, Makkar JS, Verma N, and Anderson JC. Shrinking IR Applicant Pool: Self-Selection at Work? *J Vasc Interv Radiol* 2020; 31(5):859-861. PMID: 32245719. Full Text

Hadied MO, **Patel PY**, **Cormier P**, **Poyiadji N**, **Salman M**, **Klochko C**, **Nadig J**, **Song T**, **Peterson E**, and **Reeser N**. Interobserver and Intraobserver Variability in the CT Assessment of COVID-19 Based on RSNA Consensus Classification Categories. *Acad Radiol* 2020; 27(11):1499-1506. PMID: 32948442. Full Text

Hosseini MP, Tran TX, Pompili D, Elisevich K, and **Soltanian-Zadeh H**. Multimodal data analysis of epileptic EEG and rs-fMRI via deep learning and edge computing. *Artif Intell Med*

2020; 104:101813. PMID: 32498996. Full Text

Jamali-Dinan SS, **Soltanian-Zadeh H**, **Bowyer SM**, Almohri H, Dehghani H, Elisevich K, and NazemZadeh MR. A Combination of Particle Swarm Optimization and Minkowski Weighted K-Means Clustering: Application in Lateralization of Temporal Lobe Epilepsy. *Brain Topogr* 2020; 33(4):519-532. PMID: 32347472. Full Text

Jarvik JG, Meier EN, James KT, Gold LS, Tan KW, Kessler LG, Suri P, Kallmes DF, Cherkin DC, Deyo RA, Sherman KJ, **Halabi SS**, Comstock BA, Luetmer PH, Avins AL, Rundell SD, **Griffith B**, Friedly JL, Lavallee DC, Stephens KA, Turner JA, Bresnahan BW, and Heagerty PJ. The Effect of Including Benchmark Prevalence Data of Common Imaging Findings in Spine Image Reports on Health Care Utilization Among Adults Undergoing Spine Imaging: A Stepped-Wedge Randomized Clinical Trial. *JAMA Netw Open* 2020; 3(9)e2015713. PMID: 32886121. Full Text

Kang G, **Lee J**, **Song T**, **Pantelic M**, **Reeser N**, **Keimig T**, **Nadig J**, **Villablanca P**, **Frisoli T**, **Eng M**, **O'Neill W**, and **Wang DD**. Three-Dimensional CT Planning for Cerebral Embolic Protection in Structural Interventions. *JACC Cardiovasc Imaging* 2020; 13(12):2673-2676. PMID: 32563641. Full Text

Kaur J, **Davoodi-Bojd E**, **Fahmy LM**, **Zhang L**, **Ding G**, Hu J, **Zhang Z**, **Chopp M**, and **Jiang Q**. Magnetic Resonance Imaging and Modeling of the Glymphatic System. *Diagnostics (Basel)* 2020; 10(6). PMID: 32471025. Full Text

Khalil LS, **Meta FS**, **Tramer JS**, **Klochko CL**, **Scher C**, **Van Holsbeeck M**, **Kolowich PA**, **Makhni EC**, **Moutzouros V**, and **Okoroha KR**. Elbow Torque is Reduced in Asymptomatic College Pitchers with Elbow Laxity: A Dynamic Ultrasound Study. *Arthroscopy* 2020; Epub ahead of print. PMID: 33359823. Full Text

Khanna K, Mofakham FA, Gandhi D, and Jain N. Desmoid fibromatosis of the pancreas--A case report with radiologic-pathologic correlation. *Radiol Case Rep* 2020; 15(11):2324-2328. PMID: 32994833. Full Text

Lee M, Trpkovski M, and **Hans SS**. Aneurysm of the aberrant splenic artery arising from the superior mesenteric artery. *J Vasc Surg Cases Innov Tech* 2020; 6(3):324-325. PMID: 33367188. Full Text

Leschied JR, and **Soliman SB**. Pediatric Musculoskeletal Trauma: Special Considerations. *Semin Roentgenol* 2020; 56(1):70-78. PMID: 33422185. Full Text

Mahan MC, **Yu CC**, **Shields R**, **van Holsbeeck M**, and Zaltz I. Impingement-Free Hip Flexion in Asymptomatic Young Adult Women. *J Bone Joint Surg Am* 2020; 102(21S Suppl 1):22-26. PMID: 32453117. Full Text

Maleki Balajoo S, Asemani D, Khadem A, and **Soltanian-Zadeh H**. Improved dynamic connection detection power in estimated dynamic functional connectivity considering multivariate dependencies between brain regions. *Hum Brain Mapp* 2020; Epub ahead of print. PMID: 32643845. Full Text

Mallon S, **Patel S**, Wright J, and **Griffith B**. Ectopic parathyroid adenoma in the pyriform sinus: Case report. *Applied Radiology* 2020; 49(3):48J-48L. PMID: Not assigned. Request Article

Mehdizavareh MH, Hemati S, and **Soltanian-Zadeh H**. Enhancing performance of subject-specific models via subject-independent information for SSVEP-based BCIs. *PLoS One* 2020; 15(1):e0226048. PMID: 31935220. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Norbash AM, Moore AV, Jr., Recht MP, Brink JA, Hess CP, **Won JJ**, Jain S, Sun X, **Brown M**, and Enzmann D. Early-Stage Radiology Volume Effects and Considerations with the Coronavirus Disease 2019 (COVID-19) Pandemic: Adaptations, Risks, and Lessons Learned. *J Am Coll Radiol* 2020; 17(9):1086-1095. PMID: 32717183. Full Text

Oravec D, **Zauel R**, **Flynn MJ**, and **Yeni YN**. Vertebral stiffness measured via tomosynthesis-based digital volume correlation is strongly correlated with reference values from micro-CT-based DVC. *Med Eng Phys* 2020; 84:169-173. PMID: 32977915. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3)E397-E399. PMID: 32496518. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**, **Spizarny D**, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Poyiadji N, **Klochko C**, **LaForce J**, **Brown ML**, and **Griffith B**. COVID-19 and Radiology Resident Imaging Volumes-Differential Impact by Resident Training Year and Imaging Modality. *Acad Radiol* 2020; 28(1):106-111. PMID: 33046369. Full Text

Poyiadji N, **Klochko C**, **Palazzolo J**, **Brown ML**, and **Griffith B**. Impact of the COVID-19 pandemic on radiology physician work RVUs at a large subspecialized radiology practice. *Clin Imaging* 2020; 73:38-42. PMID: 33302235. Full Text

Poyiadji N, **Shahin G**, **Noujaim D**, **Stone M**, **Patel S**, and **Griffith B**. COVID-19-associated Acute Hemorrhagic Necrotizing Encephalopathy: Imaging Features. *Radiology* 2020; 296(2)E119-e120. PMID: 32228363. Full Text

Reaume M, Duong T, **Song T**, and **Diaz-Mendoza J**. The pulmonary nodule following lung transplantation. *Clin Imaging* 2020; 72:37-41. PMID: 33202293. Full Text

Rozenshtein A, **Griffith BD**, Slanetz PJ, DeBenedectis CM, Gould JE, Kohr JR, Mohammed TL, Paladin AM, Rochon PJ, Sheth M, Wiggins Iii EF, and Swanson JO. "What Program Directors Think" V: Results of the 2019 Spring Survey of the Association of Program Directors in Radiology (APDR). *Acad Radiol* 2020; Epub ahead of print. PMID: 32778482. Full Text

Saad H, **Myers DT**, **Song TK**, and **Nadig J**. Radiologic Manifestations of Pulmonary Vein Ablation Complications: A Pictorial Review. *J Thorac Imaging* 2020; Epub ahead of print. PMID: 32960836. Full Text

Siegal DS, **Wessman B**, **Zadorozny J**, **Palazzolo J**, **Montana A**, Rawson JV, Norbash A, and **Brown ML**. Operational Radiology Recovery in Academic Radiology Departments After the COVID-19 Pandemic: Moving Toward Normalcy. *J Am Coll Radiol* 2020; 17(9):1101-1107. PMID: 32682744. Full Text

Sisodiya SM, Whelan CD, Hatton SN, Huynh K, Altmann A, Ryten M, Vezzani A, Caligiuri ME, Labate A, Gambardella A, Ives-Deliperi V, Meletti S, Munsell BC, Bonilha L, Tondelli M, Rebsamen M, Rummel C, Vaudano AE, Wiest R, Balachandra AR, Bargalló N, Bartolini E, Bernasconi A, Bernasconi N, Bernhardt B, Caldairou B, Carr SJA, Cavalleri GL, Cendes F, Concha L, Desmond PM, Domin M, Duncan JS, Focke NK, Guerrini R, Hamandi K, Jackson GD, Jahanshad N, Kälviäinen R, Keller SS, Kochunov P, Kowalczyk MA, Kreilkamp BAK, Kwan P, Lariviere S, Lenge M, Lopez SM, Martin P, Mascalchi M, Moreira JCV, Morita-Sherman ME, Pardoe HR, Pariente JC, Raviteja K, Rocha CS, Rodríguez-Cruces R, Seeck M, Semmelroch M, Sinclair B, **Soltanian-Zadeh H**, Stein DJ, Striano P, Taylor PN, Thomas RH, Thomopoulos SI, Velakoulis D, Vivash L, Weber B, Yasuda CL, Zhang J, Thompson PM, and McDonald CR. The ENIGMA-Epilepsy working group: Mapping disease from large data sets. *Hum Brain Mapp* 2020; Epub ahead of print. PMID: 32468614. Full Text

Touma R, Palla M, **Alam K**, Mastromatteo JF, and Abidov A. Giant Calcified Left Circumflex Coronary Artery Aneurysm with Complex Coronary-to–Left Ventricular Communication. *JACC: Case Reports* 2020; 2(11):1812-1817. PMID: Not assigned. Full Text

Tran G, **Khalil LS**, **Wrubel A**, **Klochko CL**, **Davis JJ**, and **Soliman SB**. Incidental findings detected on preoperative CT imaging obtained for robotic-assisted joint replacements: clinical importance and the effect on the scheduled arthroplasty. *Skeletal Radiol* 2020; Epub ahead of print. PMID: 33140168. Full Text

Tran G, Parrinello D, and **Dalal I**. Laparoscopic Port-Site Metastasis From Prostate Cancer on 18F-Fluciclovine PET/CT. *Clin Nucl Med* 2020; Epub ahead of print. PMID: 33208626. Full Text

Wallis J, Klein R, Bradshaw T, Catana C, Hatt M, Laforest R, Liu C, Mawlawi O, **McCall K**, Osborne D, Tang J, Wells RG, and Ghesani M. PIDSC Remote Viewing Guidelines Document. *J Nucl Med Technol* 2020; Epub ahead of print. PMID: 33380520. Request Article

Yaguchi G, **Tang HJ**, **Deebajah M**, **Keeley J**, **Pantelic M**, **Williamson S**, **Gupta N**, **Peabody JO**, **Menon M**, **Dabaja A**, and Alanee S. The effect of multiplicity of PI-RADS 3 lesions on cancer detection rate of confirmatory targeted biopsy in patients diagnosed with prostate cancer and managed with active surveillance. *Urol Oncol* 2020; 38(6):599. PMID: 32265090. Full Text

Yeni YN, **Oravec D**, **Drost J**, **Bevins N**, **Morrison C**, and **Flynn MJ**. Bone health assessment via digital wrist tomosynthesis in the mammography setting. *Bone* 2020; 144:115804. PMID: 33321264. Full Text

Zhang R, Tie X, **Qi Z**, **Bevins NB**, Zhang C, Griner D, **Song TK**, **Nadig JD**, Schiebler ML, Garrett JW, Li K, Reeder SB, and Chen GH. Diagnosis of COVID-19 Pneumonia Using Chest Radiography: Value of Artificial Intelligence. *Radiology* 2020; Epub ahead of print.:202944. PMID: 32969761. Full Text

Zong W, **Lee JK**, **Liu C**, **Carver EN**, **Feldman AM**, **Janic B**, **Elshaikh MA**, **Pantelic MV**, **Hearshen D**, **Chetty IJ**, **Movsas B**, and **Wen N**. A Deep Dive into Understanding Tumor Foci Classification using Multiparametric MRI Based on Convolutional Neural Network. *Med Phys*

2020; 47(9):4077-4086. PMID: 32449176. Full Text

Emergency Medicine

Abella BS, Berger WE, Blaiss MS, Stiell IG, Herres JP, Moellman JJ, Suner S, Kessler A, **Klausner HA**, Caterino JM, and Du J. Intravenous Cetirizine Versus Intravenous Diphenhydramine for the Treatment of Acute Urticaria: A Phase III Randomized Controlled Noninferiority Trial. *Ann Emerg Med* 2020; 76(4):489500. PMID: 32653333. Full Text

Berger DA, Chen NW, **Miller JB**, Welch RD, Reynolds JC, Pribble JM, and Swor DR. Substantial Variation Exists in Post-Cardiac Arrest Outcomes Across Michigan Hospitals. *Resuscitation* 2020; Epub ahead of print. PMID: 33221364. Full Text

Caldwell MT, Hambrick N, **Vallee P**, Thomas CSD, Sutton A, Daniels G, **Goyal N**, **Manteuffel J**, **Joseph CLM**, and Guetterman TC. "They're Doing Their Job": Women's Acceptance of Emergency Department Contraception Counseling. *Ann Emerg Med* 2020; 76(4):515-526. PMID: 31959536. Full Text

Cesaro R, and Hirshbein L. The ambivalent role of the institution in the history of child and adolescent psychiatry: a case study of the Hawthorn Centre in Michigan, USA. *Hist Psychiatry* 2020; 31(4):440-454. PMID: 32668976. Full Text

Clery MJ, Dworkis DA, Sonuyi T, **Khaldun JS**, and Abir M. Location of Violent Crime Relative to Trauma Resources in Detroit: Implications for Community Interventions. *West J Emerg Med* 2020; 21(2):291-294. PMID: 31999248. Full Text

Cook B, **McCord J**, **Hudson M**, **Al-Darzi W**, **Moyer M**, **Jacobsen G**, and **Nowak R**. Baseline high sensitivity cardiac troponin I level below limit of quantitation rules out acute myocardial infarction in the emergency department. *Crit Pathw Cardiol* 2020; Epub ahead of print. PMID: 32639243. Full Text

Dean DJ, **Sabagha N**, **Rose K**, **Weiss A**, France J, **Asmar T**, **Rammal JA**, **Beyer M**, **Bussa R**, **Ross J**, **Chaudhry K**, Smoot T, **Wilson K**, and **Miller J**. A Pilot Trial of Topical Capsaicin Cream for Treatment of Cannabinoid Hyperemesis Syndrome. *Acad Emerg Med* 2020; 27(11):1166-1172. PMID: 32569429. Full Text

Doyle MP, **McCarty JP**, and **Lazzara AA**. Case Study of Phrenic Nerve Paralysis: "I Can't Breathe!". *J Emerg Med* 2020; 58(6):e327-e241. PMID: 32354588. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Garmel GM, Pettis HM, Lane DR, Darvish A, Winters M, **Vallee P**, Mattu A, Haydel MJ, Cheaito MA, Bond MC, and Kazzi A. Clerkships in Emergency Medicine. *J Emerg Med* 2020; 58(4):e215-e222. PMID: 31911019. Full Text

Gibbs J, deFilippi C, Peacock F, Mahler S, **Nowak R**, Christenson R, Apple F, **Jacobsen G**, and **McCord J**. The utility of risk scores when evaluating for acute myocardial infarction using high-sensitivity cardiac troponin I. *Am Heart J* 2020; 227:1-8. PMID: 32634671. Full Text

Hamam MS, **Kunjummen E**, **Hussain MS**, Nasereldin M, **Bennett S**, and **Miller J**. Anxiety, Depression, and Pain: Considerations in the Treatment of Patients with Uncontrolled Hypertension. *Curr Hypertens Rep* 2020; 22(12):106. PMID: 33170388. Full Text

Holbrook MB, **Kaitis D**, **Van Laere L**, **Van Laere J**, and **Clark C**. Retinal detachment with subretinal and vitreous hemorrhages causing secondary angle closure glaucoma diagnosed with ultrasound. *Am J Emerg Med* 2020; 38(10):2245. PMID: 32563616. Full Text

Horiuchi Y, Wettersten N, Patel MP, Mueller C, Neath SX, Christenson RH, Morgenthaler NG, **McCord J**, **Nowak RM**, Vilke GM, Daniels LB, Hollander JE, Apple FS, Cannon CM, Nagurney JT, Schreiber D, deFilippi C, Hogan C, Diercks DB, Headden G, Limkakeng AT, Anand I, Wu AHB, Ebmeyer S, Jaffe AS, Peacock WF, and Maisel AS. Biomarkers Enhance Discrimination and Prognosis of Type 2 Myocardial Infarction. *Circulation* 2020; 142(16):1532-1544. PMID: 32820656. Full Text

Horiuchi YU, Wettersten N, Veldhuisen DJV, Mueller C, Filippatos G, **Nowak R**, Hogan C, Kontos MC, Cannon CM, MÜeller GA, Birkhahn R, Taub P, Vilke GM, Barnett O, Mc DK, Mahon N, NuÑez J, Briguori C, Passino C, Maisel A, and Murray PT. Potential Utility of Cardiorenal Biomarkers for Prediction and Prognostication of Worsening Renal Function in Acute Heart Failure. *J Card Fail* 2020; Epub ahead of print. PMID: 33296713. Full Text

Jayaprakash N, **Pflaum C**, **Gardner-Gray J**, **Hurst G**, **Coba V**, **Kinni H**, and **Deledda J**. Critical Care Delivery Solutions in the Emergency Department: Evolving Models in Caring for ICU Boarders. *Ann Emerg Med* 2020; 76(6):709-716. PMID: 32653331. Full Text

Kalayci A, Peacock WF, Nagurney JT, Hollander JE, Levy PD, Singer AJ, Shapiro NI, Cheng RK, Cannon CM, Blomkalns AL, Walters EL, Christenson RH, Chen-Tournoux A, **Nowak RM**, Lurie MD, Pang PS, Kastner P, Masson S, Gibson CM, Gaggin HK, and Januzzi JL, Jr. Echocardiographic assessment of insulin-like growth factor binding protein-7 and early identification of acute heart failure. *ESC Heart Fail* 2020; 7(4):1664-1675. PMID: 32406612. Full Text

Kocher KE, Arora R, Bassin BS, Benjamin LS, Bolton M, Dennis BJ, Ham JJ, **Krupp SS**, Levasseur KA, Macy ML, O'Neil BJ, Pribble JM, Sherwin RL, Sroufe NS, Uren BJ, and Nypaver MM. Baseline Performance of Real-World Clinical Practice Within a Statewide Emergency Medicine Quality Network: The Michigan Emergency Department Improvement Collaborative (MEDIC). *Ann Emerg Med* 2020; 75(2):192-205. PMID: 31256906. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

McCord J, **Hana A**, **Cook B**, **Hudson MP**, **Miller J**, Akoegbe G, Mueller C, **Moyer M**, Jacobsen G, and **Nowak R**. The Role of Cardiac Testing with the 0/1-Hour High-Sensitivity Cardiac Troponin Algorithm Evaluating for Acute Myocardial Infarction. *Am Heart J* 2020; Epub ahead of print. PMID: 33373603. Full Text

McLean SA, Ressler K, Koenen KC, Neylan T, Germine L, Jovanovic T, Clifford GD, Zeng D, An X, Linnstaedt S, Beaudoin F, House S, Bollen KA, Musey P, Hendry P, Jones CW, **Lewandowski C**, Swor R, Datner E, Mohiuddin K, Stevens JS, Storrow A, Kurz MC, McGrath ME, Fermann GJ, Hudak LA, Gentile N, Chang AM, Peak DA, Pascual JL, Seamon MJ, Sergot P, Peacock WF, Diercks D, Sanchez LD, Rathlev N, Domeier R, Haran JP, Pearson C, Murty VP, Insel TR, Dagum P, Onnela JP, Bruce SE, Gaynes BN, Joormann J, Miller MW, Pietrzak

RH, Buysse DJ, Pizzagalli DA, Rauch SL, Harte SE, Young LJ, Barch DM, Lebois LAM, van Rooij SJH, Luna B, Smoller JW, Dougherty RF, Pace TWW, Binder E, Sheridan JF, Elliott JM, Basu A, Fromer M, Parlikar T, Zaslavsky AM, and Kessler R. The AURORA Study: a longitudinal, multimodal library of brain biology and function after traumatic stress exposure. *Mol Psychiatry* 2020; 25(2):283-296. PMID: 31745239. Full Text

Miller J, Bruen C, Schnaus M, Zhang J, Ali S, Lind A, Stoecker Z, Stauderman K, and Hebbar S. Auxora versus standard of care for the treatment of severe or critical COVID-19 pneumonia: results from a randomized controlled trial. *Crit Care* 2020; 24(1):502. PMID: 32795330. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Miller J, House S, Lovato L, Meltzer A, Hahn B, Avarello J, Plasse T, Kalfus I, Fathi R, and Silverman R. Absence of QT prolongation after administration of a 24-mg bimodal-release ondansetron pill (RHB-102). *Am J Emerg Med* 2020; Epub ahead of print. PMID: 32139212. Full Text

Miller J, McNaughton C, **Joyce K**, **Binz S**, and Levy P. Hypertension Management in Emergency Departments. *Am J Hypertens* 2020; 33(10):927-934. PMID: 32307541. Full Text

Morris DC, **Jaehne AK**, **Chopp M**, **Zhang Z**, **Poisson L**, **Chen Y**, **Datta I**, and **Rivers EP**. Proteomic Profiles of Exosomes of Septic Patients Presenting to the Emergency Department Compared to Healthy Controls. *J Clin Med* 2020; 9(9). PMID: 32932765. Full Text

Nowak RM, Christenson RH, **Jacobsen G**, **McCord J**, Apple FS, Singer AJ, Limkakeng A, Jr., Peacock WF, and deFilippi CR. Performance of Novel High-Sensitivity Cardiac Troponin I Assays for 0/1-Hour and 0/2- to 3-Hour Evaluations for Acute Myocardial Infarction: Results From the HIGH-US Study. *Ann Emerg Med* 2020; 76(1):1-13. PMID: 32046869. Full Text

Nowak RM, DeMasi D, Murn A, and Neuenschwander J. Biotin Interference and Laboratory Testing: Possible Implications/Ramifications for Emergency Medicine. *Ann Emerg Med* 2020; 76(3):369-370. PMID: 32828334. Full Text

Nowak RM, Peacock WF, and deFilippi CR. In reply. *Ann Emerg Med* 2020; 76(5):692-693. PMID: 33097134. Full Text

Peacock WF, Christenson R, Diercks DB, Fromm C, Headden GF, Hogan CJ, Kulstad EB, LoVecchio F, **Nowak RM**, Schrock JW, Singer AJ, Storrow AB, Straseski J, Wu AHB, and Zelinski DP. Myocardial Infarction Can Be Safely Excluded by High-sensitivity Troponin I Testing 3 Hours After Emergency Department Presentation. *Acad Emerg Med* 2020; 27(8):671-680. PMID: 32220124. Full Text

Peacock WF, Rafique Z, Vishnevskiy K, Michelson E, Vishneva E, Zvereva T, Nahra R, Li D, and **Miller J**. Emergency Potassium Normalization Treatment Including Sodium Zirconium Cyclosilicate: A Phase II, Randomized, Double-blind, Placebo-controlled Study (ENERGIZE). *Acad Emerg Med* 2020; 27(6):475486. PMID: 32149451. Full Text

Russell A, **Rivers EP**, Giri PC, **Jaehne AK**, and Nguyen HB. A Physiologic Approach to Hemodynamic Monitoring and Optimizing Oxygen Delivery in Shock Resuscitation. *J Clin Med*

2020; 9(7). PMID: 32629778. Full Text

Sawaya RD, El Zahran T, Mrad S, Abdul Massih C, **Shaya S**, Makki M, Tamim H, and Majdalani M. Comparing febrile children presenting on and off antibiotics to the emergency department: a retrospective cohort study. *BMC Pediatr* 2020; 20(1):117. PMID: 32164611. Full Text

Strålin K, Rothman RE, Özenci V, Barkataki K, Brealey D, Dhiman N, Poling L, Kurz MC, Limaye AP, LoVecchio F, Lowery K, Miller LG, Moran GJ, Overcash JS, Parekh A, Peacock WF, **Rivers EP**, Sims M, Stubbs AM, Sundqvist M, Ullberg M, and Carroll KC. Performance of PCR/electrospray ionization-mass spectrometry on whole blood for detection of bloodstream microorganisms in patients with suspected sepsis. *J Clin Microbiol* 2020; 58(9). PMID: 32641399. Full Text

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated With Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6):e2012270. PMID: 32543702. Full Text

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Townsend SR, **Rivers EP**, and Duseja R. CMS Measure Stewards' Assessment of the Infectious Diseases Society of America's Position Paper on SEP-1. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32374387. Full Text

Venkatesulu BP, Thoguluva Chandrasekar V, Girdhar P, Pragathee V, Patel HK, and **Manteuffel J**. The mechanistic rationale of drugs, Primary endpoints, Geographical distribution of clinical trials against Severe acute respiratory syndrome-related coronavirus-2: A Systematic Review. *J Med Virol* 2020; 93(2):843-853. PMID: 32706390. Full Text

Viarasilpa T, **Panyavachiraporn N**, **Osman G**, **Kowalski RG**, **Miller J**, **Barkley GL**, and **Mayer SA**. Differentiation of psychogenic nonepileptic attacks from status epilepticus among patients intubated for convulsive activity. *Epilepsy Behav* 2020; 115:107679. PMID: 33360401. Full Text

Endocrinology and Metabolism

Agarwal S, Kanapka LG, Raymond JK, Walker A, Gerard-Gonzalez A, **Kruger D**, Redondo MJ, Rickels MR, Shah VN, Butler A, Gonzalez J, Verdejo AS, Gal RL, Willi S, and Long JA. Racial-Ethnic Inequity in Young Adults with Type 1 Diabetes. *J Clin Endocrinol Metab* 2020; 105(8). PMID: 32382736. Full Text

Arya AK, Kumari P, Bhadada SK, Agrawal K, Singh P, Mukherjee S, Sood A, and **Rao SD**. Progressive rise in the prevalence of asymptomatic primary hyperparathyroidism in India: Data from PHPT registry. *J Bone Miner Metab* 2020; Epub ahead of print. PMID: 32894354. Full Text

Arya AK, Singh P, Saikia UN, Sachdeva N, Dahiya D, Behera A, **Rao SD**, and Bhadada SK. Dysregulated mitogen-activated protein kinase pathway mediated cell cycle disruption in sporadic parathyroid tumors. *J Endocrinol Invest* 2020; 43(2):247-253.

PMID: 31535356. Request Article

Bhadada SK, and **Rao SD**. Role of Phosphate in Biomineralization. *Calcif Tissue Int* 2020; 108(1):32-40. PMID: 32712778. Full Text

D'Souza SC, and **Kruger DF**. Considerations for Insulin-Treated Type 2 Diabetes Patients During Hospitalization: A Narrative Review of What We Need to Know in the Age of Second-Generation Basal Insulin Analogs. *Diabetes Ther* 2020; 11(12):2775-2790. PMID: 33000382. Full Text

Dhaliwal R, Bhadada SK, and **Rao SD**. Letter to the Editor: "Our Response to COVID-19 as Endocrinologists and Diabetologists". *J Clin Endocrinol Metab* 2020; 105(7). PMID: 32382734. Full Text

Hilliard ME, Marrero DG, Minard CG, Cao VT, de Wit M, DuBose SN, Verdejo A, Jaser SS, **Kruger D**, Monzavi R, Shah VN, Paul Wadwa R, Weinstock RS, Thompson D, and Anderson BJ. Design and Psychometrics for New Measures of Health-Related Quality of Life in Adults with Type 1 Diabetes: Type 1 Diabetes and Life (T1DAL). *Diabetes Res Clin Pract* 2020; Epub ahead of print. PMID: 33189791. Full Text

Huq S, **Todkar S**, and **Lahiri SW**. Patient Perspectives On Obesity Management: Need For Greater Discussion Of BMI And Weight-Loss Options Beyond Diet And Exercise Especially In Patients With Diabetes. *Endocr Pract* 2020; 26(5):471-483. PMID: 31968196. Full Text

Kruger D, and Valentine V. Canagliflozin for the Treatment of Diabetic Kidney Disease and Implications for Clinical Practice: A Narrative Review. *Diabetes Ther* 2020; 11(6):1237-1250. PMID: 32405876. Full Text

Pratley RE, Kanapka LG, Rickels MR, Ahmann A, Aleppo G, Beck R, Bhargava A, Bode BW, Carlson A, Chaytor NS, Fox DS, Goland R, Hirsch IB, **Kruger D**, Kudva YC, Levy C, McGill JB, Peters A, Philipson L, Philis-Tsimikas A, Pop-Busui R, Shah VN, Thompson M, Vendrame F, Verdejo A, Weinstock RS, Young L, and Miller KM. Effect of Continuous Glucose Monitoring on Hypoglycemia in Older Adults With Type 1 Diabetes: A Randomized Clinical Trial. *Jama* 2020; 323(23):2397-2406. PMID: 32543682. Full Text

Qiu S, **Divine G**, **Warner E**, and **Rao SD**. Reference Intervals for Bone Histomorphometric Measurements Based on Data from Healthy Premenopausal Women. *Calcif Tissue Int* 2020; 107(6):543550. PMID: 32814991. Full Text

Rao SD, **Miragaya J**, **Parikh N**, **Honasoge M**, **Springer K**, **Van Harn M**, and **Divine GW**. Effect of vitamin D nutrition on disease indices in patients with primary hyperparathyroidism. *J Steroid Biochem Mol Biol* 2020; 201:105695. PMID: 32407867. Request Article

Roshandel D, Chen Z, Canty AJ, Bull SB, Natarajan R, Paterson AD, **Bhan A**, **Jones JK**, **Kruger D**, **Edwards PA**, **Remtema H**, **Angus E**, **Galprin A**, **McLellan M**, **Thomas A**, **Carey JD**, and **Whitehouse F**. DNA methylation age calculators reveal association with diabetic neuropathy in type 1 diabetes. *Clin Epigenetics* 2020; 12(1):52. PMID: 32248841. Full Text

Singh P, Bhadada SK, Dahiya D, Arya AK, Saikia UN, Sachdeva N, Kaur J, Brandi ML, and **Rao SD**. Reduced Calcium Sensing Receptor (CaSR) Expression Is Epigenetically Deregulated in Parathyroid Adenomas. *J Clin Endocrinol Metab* 2020; 105(9). PMID: 32609827. Full Text

Sultan R, **Levy S**, **Sulanc E**, **Honasoge M**, and **Rao SD**. Utility Of Afirma Gene Expression Classifier For Evaluation of Indeterminate Thyroid Nodules And Correlation With Ultrasound Risk Assessment: Single Institutional Experience. *Endocr Pract* 2020; 26(5):543-551. PMID: 31968199. Full Text

White RJ, Jerjes-Sanchez C, Bohns Meyer GM, Pulido T, Sepulveda P, Wang KY, Grunig E, Hiremath S, Yu Z, Gangcheng Z, Yip WLJ, Zhang S, Khan A, Deng CQ, Grover R, Tapson VF, **Awdish R**, and **Cajigas H**. Combination Therapy with Oral Treprostinil for Pulmonary Arterial Hypertension. A DoubleBlind Placebo-controlled Clinical Trial. *Am J Respir Crit Care Med* 2020; 201(6):707-717. PMID: 31765604. Full Text

Family Medicine

Casadei K, Kiel J, and Freidl M. Triceps Tendon Injuries. *Curr Sports Med Rep* 2020; 19(9):367-372. PMID: 32925376. Full Text

Coritsidis GN, **Yaphe S**, Rahkman I, Lubowski T, Munro C, Kuang Lee T, Stern A, and Bhat P. Outpatient Antibiotic Prescribing Patterns for Adult End-Stage Renal Disease Patients in New York State. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 33277995. Full Text

Mercuro NJ, Lodise TP, **Kenney RM**, **Rezik B**, **Vemulapalli RC**, **Costandi MJ**, and **Davis SL**. Impact of unit-specific metrics and prescribing tools on a family medicine ward. *Infect Control Hosp Epidemiol* 2020; 41(11):1272-1278. PMID: 32605686. Full Text

Park B, **Budzynska K**, **Almasri N**, **Islam S**, Alyas F, **Carolan RL**, **Abraham BE**, **Castro-Camero PA**, **Shreve ME**, **Rees DA**, and **Lamerato L**. Tight versus standard blood pressure control on the incidence of myocardial infarction and stroke: an observational retrospective cohort study in the general ambulatory setting. *BMC Fam Pract* 2020; 21(1):91. PMID: 32416722. Full Text

Park B, **Islam S**, **Vemulapalli RC**, and **Shreve ME**. Primary biliary cholangitis presenting as acute ischemic stroke: A rare association. *Clin Case Rep* 2020; 8(2):274-277. PMID: 32128172. Full Text

Gastroenterology

Agbim U, Sharma A, Maliakkal B, Karri S, Yazawa M, Goldkamp W, Podila PSB, Vanatta JM, **Gonzalez H**, Molnar MZ, Nair SP, Eason JD, and Satapathy SK. Outcomes of Liver Transplant Recipients With Acute-on-Chronic Liver Failure Based on EASL-CLIF Consortium Definition: A Single-center Study. *Transplant Direct* 2020; 6(4):e544. PMID: 32309630. Full Text

Ahsan BU, **Alhamar M**, **Hogan KM**, **Schultz D**, **Zuchelli T**, and **Zhang Z**. Endometrial clear cell carcinoma with metastasis to the common hepatic duct: A rare etiology of obstructive jaundice, diagnosed by biliary cytology brushing specimen. *Cytopathology* 2020; 31(3):240-242. PMID: 32049406. Full Text

Al-Darzi W, **Alalwan Y**, **Askar F**, **Sadiq O**, **Venkat D**, **Gonzalez H**, **Galusca D**, **Yoshida A**, and **Jafri SM**. Risk Factors and Outcomes of Intracardiac Thrombosis During Orthotopic Liver Transplantation. *Transplant Proc* 2020; Epub ahead of print. PMID: 33246584. Full Text

Ali B, Jiang Y, Agbim U, Kedia SK, Satapathy SK, Barnes M, Maliakkal B, Nair SP, Eason JD, and **Gonzalez HC**. Effect of opioid treatment on clinical outcomes among cirrhotic patients in

the United States. *Clin Transplant* 2020; 34(6):e13845. PMID: 32096883. Full Text

Alimirah M, **Sadiq O**, and **Gordon SC**. Novel Therapies in Hepatic Encephalopathy. *Clin Liver Dis* 2020; 24(2):303-315. PMID: 32245535. Full Text

Alimirah M, **Sadiq O**, and **Gordon SC**. Management of Direct-Acting Antiviral Failures. *Clin Liver Dis (Hoboken)* 2020; 16(1):25-28. PMID: 32714520. Full Text

Brown KA, and Collaborators PO. The case for simplifying and using absolute targets for viral hepatitis elimination goals. *J Viral Hepat* 2020; 28(1):12-19. PMID: 32979881. Full Text

Caines A, **Allo G**, and **Siddiqui Y**. Gastric varices from metastatic ovarian cancer with splenic involvement. *Practical Gastroenterology* 2020; 44(2):40-44. PMID: Not assigned. Request Article

Caines A, Selim R, and Salgia R. The Changing Global Epidemiology of Hepatocellular Carcinoma. *Clin Liver Dis* 2020; 24(4):535-547. PMID: 33012444. Full Text

Gonzalez H, Imam Z, Wong R, **Li J**, **Lu M**, **Trudeau S**, **Gordon S**, Imam M, and Gish R. Normal alkaline phosphatase levels are dependent on race/ethnicity: NationalGEP Health and Nutrition Examination Survey data. *BMJ Open Gastroenterol* 2020; 7(1). PMID: 33055108. Full Text

Gonzalez HC, and **Gordon SC**. Hepatitis C: Does Successful Treatment Alter the Natural History and Quality of Life? *Gastroenterol Clin North Am* 2020; 49(2):301-314. PMID: 32389364. Full Text

Gordon SC, Kachru N, Parker E, Korrer S, Ozbay AB, and Wong RJ. Health Care Use and Costs Among Patients With Nonalcoholic Steatohepatitis With Advanced Fibrosis Using the Fibrosis-4 Score. *Hepatol Commun* 2020; 4(7):998-1011. PMID: 32626832. Full Text

Gordon SC, **Wu KH**, Lindor K, Bowlus CL, Rodriguez CV, Anderson H, Boscarino JA, **Trudeau S**, **Rupp LB**, Haller IV, Romanelli RJ, VanWormer JJ, Schmidt MA, Daida YG, Sahota A, Vincent J, **Zhang T**, **Li J**, and **Lu M**. Ursodeoxycholic Acid Treatment Preferentially Improves Overall Survival Among African Americans With Primary Biliary Cholangitis. *Am J Gastroenterol* 2020; 115(2):262-270. PMID: 31985529. Full Text

Iqbal U, Siddique O, Khara HS, Khan MA, **Haq KF**, **Siddiqui MA**, Solanki S, Zuchelli TE, Shellenberger MJ, and Birk JW. Post-endoscopic retrograde cholangiopancreatography pancreatitis prevention using topical epinephrine: systematic review and meta-analysis. *Endosc Int Open* 2020; 8(8):E1061-e1067. PMID: 32743060. Full Text

Ivanics T, **Rizzari M**, **Moonka D**, **Al-Kurd A**, **Delvecchio K**, **Kitajima T**, **Elsabbagh A**, **Collins K**, **Yoshida A**, **Abouljoud M**, and **Nagai S**. Re-transplantation outcomes for hepatitis C in the United States before and after DAA-introduction. *Am J Transplant* 2020; Epub ahead of print. PMID: 32794649. Full Text

Kitajima T, Hibi T, **Moonka D**, Sapisochin G, **Abouljoud MS**, and **Nagai S**. Center Experience Affects Liver Transplant Outcomes in Patients with Hilar Cholangiocarcinoma. *Ann Surg Oncol* 2020; 27(13):5209-5221. PMID: 32495286. Full Text

Kitajima T, **Moonka D**, **Yeddula S**, **Rizzari M**, **Collins K**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. Liver transplant waitlist outcomes in alcoholic hepatitis compared with other liver

diseases: An analysis of UNOS registry. *Clin Transplant* 2020; 34(5):e13837. PMID: 32073688. Full Text

Kitajima T, **Nagai S**, **Moonka D**, **Segal A**, and **Abouljoud MS**. It Is Not All About Pretransplant Factors: Posttransplant Complications Alter the Risk of Alcohol Relapse. *Clin Liver Dis (Hoboken)* 2020; 15(6):239-242. PMID: 32617157. Full Text

Kitajima T, **Nagai S**, **Segal A**, **Magee M**, **Blackburn S**, **Ellithorpe D**, **Yeddula S**, **Qadeer Y**, **Yoshida A**, **Moonka D**, **Brown K**, and **Abouljoud MS**. Posttransplant Complications Predict Alcohol Relapse in Liver Transplant Recipients. *Liver Transpl* 2020; 26(3):379-389. PMID: 31872969. Full Text

Kitajima T, **Shamaa T**, Hibi T, **Moonka D**, Sapisochin G, **Abouljoud MS**, and **Nagai S**. Response to: "Surgical Volume Alone Does Not Determine Outcome Following Liver Transplant for Perihilar holangiocarcinoma". *Ann Surg Oncol* 2020; 27(Suppl 3):932-933. PMID: 33063257. Full Text

Kwong AJ, Devuni D, Wang C, Boike J, Jo J, VanWagner L, Serper M, Jones L, Sharma R, Verna EC, Shor J, German MN, Hristov A, Lee A, Spengler E, Koteish AA, Sehmbey G, Seetharam A, John N, Patel Y, Kappus MR, Couri T, Paul S, **Salgia RJ**, Nhu Q, Frenette CT, Lai JC, and Goel A. Outcomes of Liver
Transplantation Among Older Recipients With Nonalcoholic Steatohepatitis in a Large Multicenter US Cohort: the Re-Evaluating Age Limits in Transplantation Consortium. *Liver Transpl* 2020; 26(11):14921503. PMID: 33047893. Full Text

Lamerato L, Wittbrodt E, **Kaur M**, Datto C, and **Singla S**. Impact of opioid use on patients undergoing screening colonoscopy according to the quality of bowel preparation. *JGH Open* 2020; 4(3):490-496. PMID: 32514459. Full Text

Lawitz E, Landis CS, Flamm SL, Bonacini M, Ortiz-Lasanta G, Huang J, Zhang J, Kirby BJ, De-Oertel S, Hyland RH, Osinusi AO, Brainard DM, Robson R, Maliakkal BJ, **Gordon SC**, and Gane EJ. Sofosbuvir plus ribavirin and sofosbuvir plus ledipasvir in patients with genotype 1 or 3 hepatitis C virus and severe renal impairment: a multicentre, phase 2b, non-randomised, open-label study. *Lancet Gastroenterol Hepatol* 2020; 5(10):918-926. PMID: 32531259. Request Article

Loomba R, Wong R, Fraysse J, Shreay S, Li S, Harrison S, and **Gordon SC**. Nonalcoholic fatty liver disease progression rates to cirrhosis and progression of cirrhosis to decompensation and mortality: a real world analysis of Medicare data. *Aliment Pharmacol Ther* 2020; 51(11):1149-1159. PMID: 32372515. Full Text

Loomba R, Wong R, Fraysse J, Shreay S, Li S, Harrison S, and **Gordon SC**. Editorial: how widespread and serious is non-alcoholic fatty liver disease in the real world? Authors' reply. *Aliment Pharmacol Ther* 2020; 51(11):1200-1201. PMID: 32424927. Full Text

Lu M, Bowlus CL, Lindor K, Rodriguez-Watson CV, Romanelli RJ, Haller IV, Anderson H, VanWormer JJ, Boscarino JA, Schmidt MA, Daida YG, Sahota A, Vincent J, **Li J**, Trudeau S, **Rupp LB**, and **Gordon SC**. Validity of an Automated Algorithm to Identify Cirrhosis Using Electronic Health Records in Patients with Primary Biliary Cholangitis. *Clin Epidemiol* 2020; 12:1261-1267. PMID: 33204167. Full Text

Madill-Thomsen K, **Abouljoud M**, Bhatti C, Ciszek M, Durlik M, Feng S, Foroncewicz B, **Francis I**, Grat M, Jurczyk K, Klintmalm G, Krasnodebski M, McCaughan G, Miquel R,

Montano-Loza A, **Moonka D**, Mucha K, Myslak M, Paczek L, Perkowska-Ptasinska A, Piecha G, Reichman T, Sanchez-Fueyo A, Tronina O, Wawrzynowicz-Syczewska M, Wiecek A, Zieniewicz K, and Halloran PF. The molecular diagnosis of rejection in liver transplant biopsies: First results of the INTERLIVER study. *Am J Transplant* 2020; 20(8):2156-2172. PMID: 32090446. Full Text

Meighani A, **Alimirah M**, **Ramesh M**, and **Salgia R**. Fecal Microbiota Transplantation for Clostridioides Difficile Infection in Patients with Chronic Liver Disease. *Int J Hepatol* 2020; 2020:1874570. PMID: 32047670. Full Text

Mittal C, **Dang D**, Stoffel E, Menees S, Scott FI, Ahnen D, and Patel SG. Underutilization of Lynch Syndrome Screening at Two Large Veterans Affairs Medical Centers. *Dig Dis Sci* 2020; 65(11):3305-3315. PMID: 32500284. Full Text

Nagai S, **Chau LC**, **Kitajima T**, **Yeddula S**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Moonka D**. A Share 21 Model in Liver Transplantation: Impact on Waitlist Outcomes. *Am J Transplant* 2020; 20(8):2184-2197. PMID: 32155314. Full Text

Nagai S, **Kitajima T**, **Yeddula S**, **Salgia R**, Schilke R, **Abouljoud MS**, and **Moonka D**. Effect of mandatory 6-month waiting period on waitlist and transplant outcomes in patients with hepatocellular carcinoma. *Hepatology* 2020; Epub ahead of print. PMID: 32157711. Full Text

Noureddin N, Alkhouri N, **Brown KA**, and Noureddin M. Driving NASH forward using the FAST score but obey the traffic lights. *Hepatology* 2020; Epub ahead of print. PMID: 32757393. Full Text

Piraka C. Cool it now: a new addition for resecting 10- to 14-mm polyps. *Gastrointest Endosc* 2020; 92(6):1247-1249. PMID: 33236996. Full Text

Reddy CA, Tavakkoli A, Chen VL, Korsnes S, Bedi AO, Carrott PW, Chang AC, Lagisetty KH, Kwon RS, Elmunzer BJ, Orringer MB, **Piraka C**, Prabhu A, Reddy RM, Wamsteker E, and Rubenstein JH. LongTerm Quality of Life Following Endoscopic Therapy Compared to Esophagectomy for Neoplastic Barrett's Esophagus. *Dig Dis Sci* 2020; Epub ahead of print. PMID: 32519141. Full Text

Satapathy SK, **Gonzalez HC**, Vanatta J, Dyer A, Angel W, Nouer SS, Kocak M, Kedia SK, Jiang Y, Clark I, Yadak N, Nezakagtoo N, Helmick R, Horton P, Campos L, Agbim U, Maliakkal B, Maluf D, Nair S, Halford HH, and Eason JD. A pilot study of ex-vivo MRI-PDFF of donor livers for assessment of steatosis and predicting early graft dysfunction. *PLoS One* 2020; 15(5):e0232006. PMID: 32407331. Full Text

Solanki S, Chakinala RC, **Haq KF**, Singh J, Khan MA, Solanki D, Vyas MJ, Kichloo A, Mansuri U, Shah H, Patel A, Haq KS, Iqbal U, Nabors C, Khan HMA, and Aronow WS. Paralytic ileus in the United States: A cross-sectional study from the national inpatient sample. *SAGE Open Med* 2020; 8:2050312120962636. PMID: 33088567. Full Text

Spradling PR, Xing J, **Rupp LB**, Moorman AC, **Gordon SC**, **Lu M**, Teshale EH, Boscarino JA, Schmidt MA, Daida YG, and Holmberg SD. Low Uptake of Direct-acting Antiviral Therapy Among Hepatitis C Patients With Advanced Liver Disease and Access to Care, 2014-2017. *J Clin Gastroenterol* 2020; 55(1):77-83. PMID: 32250999. Full Text

Varma A, **Trudeau S**, **Zhou Y**, **Jafri SM**, **Krajenta R**, **Lamerato L**, **Brown K**, Luzzi V, **Lu M**,

and **Gordon SC**. African Americans Demonstrate Significantly Lower Serum Alanine Aminotransferase Compared to Non-African Americans. *J Racial Ethn Health Disparities* 2020; Epub ahead of print. PMID: 33230736. Request Article

Wong RJ, Kachru N, Martinez DJ, Moynihan M, Ozbay AB, and **Gordon SC**. Real-world Comorbidity Burden, Health Care Utilization, and Costs of Nonalcoholic Steatohepatitis Patients With Advanced Liver Diseases. *J Clin Gastroenterol* 2020; Epub ahead of print. PMID: 32815873. Full Text

Younossi ZM, Corey KE, Alkhouri N, Noureddin M, Jacobson I, Lam B, Clement S, Basu R, **Gordon S**, Ravendhra N, Puri P, Rinella M, Scudera P, Singal AK, and Henry L. Clinical assessment for high-risk patients with non-alcoholic fatty liver disease in primary care and diabetology practices. *Aliment Pharmacol Ther* 2020; 52(3):513-526. PMID: 32598051. Full Text

Global Health Initiative

Imran Khan M, Aijaz S, Syed FF, and **Kaljee L**. An optimal typhoid conjugate vaccine coverage complemented with WASH is imperative for the control of antimicrobial resistance in Pakistan. *Vaccine* 2020; 38(45):6969-6970. PMID: 33008669. Full Text

Lepard JR, Corley J, Sankey EW, **Prentiss T**, Rocque B, Park KB, **Rock J**, Hlaing K, and Myaing W. Training Neurosurgeons in Myanmar and Surrounding Countries: The Resident Perspective. *World Neurosurg* 2020; 139:75-82. PMID: 32251819. Full Text

Maki G, Smith I, Paulin S, **Kaljee L**, Kasambara W, Mlotha J, Chuki P, Rupali P, Singh DR, Bajracharya DC, Barrow L, Johnson E, **Prentiss T**, and **Zervos M**. Feasibility Study of the World Health Organization Health Care Facility-Based Antimicrobial Stewardship Toolkit for Low- and Middle-Income Countries. *Antibiotics (Basel)* 2020; 9(9). PMID: 32872440. Full Text

Nauriyal V, Rai SM, Joshi RD, Thapa BB, **Kaljee L**, **Prentiss T**, **Maki G**, Shrestha B, Bajracharya DC, Karki K, Joshi N, Acharya A, Banstola L, Poudel SR, Joshi A, Dahal A, Palikhe N, Khadka S, Giri P, Lamichhane A, and **Zervos M**. Evaluation of an Antimicrobial Stewardship Program for Wound and Burn Care in Three Hospitals in Nepal. *Antibiotics (Basel)* 2020; 9(12). PMID: 33339283. Full Text

Pieper B, Sobeck J, **Kaljee L**, and Templin TN. A Descriptive Study Using an Intercept Survey: Knowledge, Attitudes, Beliefs, and Behaviors About Systemic Antibiotic Use in Adults Who Reported a Wound Within the Previous Year. *J Wound Ostomy Continence Nurs* 2020; 47(1):20-25. PMID: 31929440. Full Text

Plum A, **Tanniru M**, and Khuntia J. An innovation platform for diffusing public health practices across a global network. *Health Policy and Technology* 2020; 9(2):225-234. PMID: Not assigned. Full Text

Rock JP, **Prentiss T**, Mo SM, Myat Hnin Aye NS, **Asmaro K**, Win AT, Phyu AM, Maung TM, Khaing EE, Naung Z, Park KB, Hlaing K, and Myaing W. Traumatic Brain Injury in Myanmar: Preliminary Results and Development of an Adjunct Electronic Medical Record. *World Neurosurg* 2020; 140:e260-e265. PMID: 32413564. Full Text

Selitsky L, **Markowitz N**, **Baxa DM**, **Kaljee L**, **Miree CA**, **Islam N**, **Burse C**, **Newaz R**, **Dankerlui D**, **Jacobsen G**, and **Joseph C**. Self-report of domestic violence and forced sex are related to sexual risk behaviors in a sample of juvenile detainees. *Health Justice* 2020; 8(1):15.

PMID: 32577955. Full Text

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**, **Nauriyal V**, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Wagner JL, Carreno JJ, **Kenney RM**, **Kilgore PE**, and **Davis SL**. Antimicrobial Stewardship Metrics that Matter. *Infectious Diseases in Clinical Practice* 2020; 28(2):89-93. PMID: Not assigned. Full Text

Graduate Medical Education

Harmes KM, Shih E, Plegue M, **Shultz C**, and Diez HL. Family physician perceptions of the role and value of the clinical pharmacist in the management of patients with type 2 diabetes. *JACCP Journal of the American College of Clinical Pharmacy* 2020; 3(1):15-20. PMID: Not assigned. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Hematology-Oncology

Apolo AB, Ellerton JA, Infante JR, Agrawal M, Gordon MS, Aljumaily R, Gourdin T, Dirix L, Lee KW, Taylor MH, Schöffski P, **Wang D**, Ravaud A, Manitz J, Pennock G, Ruisi M, Gulley JL, and Patel MR. Avelumab as second-line therapy for metastatic, platinum-treated urothelial carcinoma in the phase Ib JAVELIN Solid Tumor study: 2-year updated efficacy and safety analysis. *J Immunother Cancer* 2020; 8(2). PMID: 33037118. Full Text

Aw Yong KM, Ulintz PJ, Caceres S, Cheng X, Bao L, Wu Z, **Jiagge EM**, and Merajver SD. Heterogeneity at the invasion front of triple negative breast cancer cells. *Sci Rep* 2020; 10(1):5781. PMID: 32238832. Full Text

Balanchivadze N, and **Donthireddy V**. Hematology/Oncology Fellowship Emergency Restructuring in Response to the COVID-19 Pandemic-Henry Ford Hospital, Michigan. *JCO Oncol Pract* 2020; 16(9):e943-e947. PMID: 32407178. Request Article

Chun SG, Simone CB, 2nd, Amini A, **Chetty IJ**, Donington J, Edelman MJ, Higgins KA, Kestin LL, **Movsas B**, Rodrigues GB, Rosenzweig KE, Slotman BJ, **Rybkin, II**, Wolf A, and Chang JY. American Radium Society Appropriate Use Criteria: Radiation Therapy for Limited-Stage SCLC 2020. *J Thorac Oncol* 2020; 16(1):66-75. PMID: 33166720. Full Text

Dhanju S, Upadhyaya K, Rice CA, Pegan SD, **Media J**, **Valeriote FA**, and Crich D. Synthesis, Cytotoxicity, and Genotoxicity of 10-Aza-9-oxakalkitoxin, an N,N,O-Trisubstituted Hydroxylamine Analog, or Hydroxalog, of a Marine Natural Product. *J Am Chem Soc* 2020; 142(20):9147-9151. PMID: 32364709. Request Article

Domchek SM, Postel-Vinay S, Im SA, Park YH, Delord JP, Italiano A, Alexandre J, You B,

Bastian S, Krebs MG, **Wang D**, Waqar SN, Lanasa M, Rhee J, Gao H, Rocher-Ros V, Jones EV, Gulati S, CoenenStass A, Kozarewa I, Lai Z, Angell HK, Opincar L, Herbolsheimer P, and Kaufman B. Olaparib and durvalumab in patients with germline BRCA-mutated metastatic breast cancer (MEDIOLA): an open-label, multicentre, phase 1/2, basket study. *Lancet Oncol* 2020; 21(9):1155-1164. PMID: 32771088. Full Text

Du Z, Weinhold N, Song GC, Rand KA, Van Den Berg DJ, Hwang AE, Sheng X, Hom V, Ailawadhi S, Nooka AK, Singhal S, Pawlish K, Peters ES, Bock C, Mohrbacher A, Stram A, Berndt SI, Blot WJ, Casey G, Stevens VL, Kittles R, Goodman PJ, Diver WR, Hennis A, Nemesure B, Klein EA, **Rybicki BA**, Stanford JL, Witte JS, Signorello L, John EM, Bernstein L, Stroup AM, Stephens OW, Zangari M, Van Rhee F, Olshan A, Zheng W, Hu JJ, Ziegler R, Nyante SJ, Ingles SA, Press MF, Carpten JD, Chanock SJ, Mehta J, Colditz GA, Wolf J, Martin TG, Tomasson M, Fiala MA, Terebelo H, **Janakiraman N**, Kolonel L, Anderson KC, Le Marchand L, Auclair D, Chiu BC, Ziv E, Stram D, Vij R, Bernal-Mizrachi L, Morgan GJ, Zonder JA, Huff CA, Lonial S, Orlowski RZ, Conti DV, Haiman CA, and Cozen W. A metaanalysis of genome-wide association studies of multiple myeloma among men and women of African ancestry. *Blood Adv* 2020; 4(1):181-190. PMID: 31935283. Full Text

Duric N, Sak M, Fan S, Pfeiffer RM, Littrup PJ, Simon MS, Gorski DH, **Ali H**, Purrington KS, Brem RF, Sherman ME, and Gierach GL. Using Whole Breast Ultrasound Tomography to Improve Breast Cancer Risk Assessment: A Novel Risk Factor Based on the Quantitative Tissue Property of Sound Speed. *J Clin Med* 2020; 9(2). PMID: 32013177. Full Text

Fisher BJ, Pugh SL, Macdonald DR, Chakravatri A, Lesser GJ, Fox S, Rogers CL, Werner-Wasik M, **Doyle T**, Bahary JP, Fiveash JB, Bovi JA, Howard SP, Michael Yu HH, D'Souza D, Laack NN, Barani IJ, Kwok Y, Wahl DR, Strasser JF, Won M, and Mehta MP. Phase II Study of a Temozolomide-Based Chemo-radiotherapy Regimen for High Risk Low-Grade Gliomas: Long-term Results of Radiation Therapy Oncology Group (RTOG) 0424. *Int J Radiat Oncol Biol Phys* 2020; 107(4):720-725. PMID: 32251755. Full Text

Fradley MG, Welter-Frost A, Gliksman M, **Emole J**, Viganego F, Lee DH, Shah B, Chavez JC, PinillaIbarz J, and Schabath MB. Electrocardiographic Changes Associated With Ibrutinib Exposure. *Cancer Control* 2020; 27(1):1073274820931808. PMID: 32496158. Full Text

Jacobs SA, Lee JJ, George TJ, Wade JL, Stella PJ, **Wang D**, Sama A, Piette F, Pogue-Geile KL, Kim RS, Gavin PG, Lipchik C, Feng H, Wang Y, Finnigan M, Kiesel B, Beumer JH, Wolmark N, Lucas PC, Allegra CJ, and Srinivasan A. Neratinib plus Cetuximab in Quadruple WT (KRAS, NRAS, BRAF, PIK3CA) Metastatic Colorectal Cancer Resistant to Cetuximab or Panitumumab: NSABP FC-7, A Phase Ib Study. *Clin Cancer Res* 2020; Epub ahead of print. PMID: 33203645. Full Text

Johnson TA, Morris JD, Coppage DA, Cook CV, Persi LN, Ogarrio MA, Garcia TC, McIntosh NL, McCauley EP, **Media J**, **Maheshwari M**, **Valeriote FA**, Shaw J, and Crews P. Reinvestigation of Mycothiazole Reveals the Penta-2,4-dien-1-ol Residue Imparts Picomolar Potency and 8S Configuration. *ACS Med Chem Lett* 2020; 11(2):108-113. PMID: 32071675. Request Article

Kaplan MH, Contreras-Galindo R, **Jiagge E**, Merajver SD, Newman L, Bigman G, Dosik MH, Palapattu GS, Siddiqui J, Chinnaiyan AM, Adebamowo S, and Adebamowo C. Is the HERV-K HML-2 Xq21.33, an endogenous retrovirus mutated by gene conversion of chromosome X in a subset of African populations, associated with human breast cancer? *Infect Agent Cancer* 2020; 15:19. PMID: 32165916. Full Text

Kim MM, Parmar HA, Schipper M, Devasia T, Aryal MP, Kesari S, O'Day S, Morikawa A, Spratt DE, Junck L, Mammoser A, Hayman JA, Lawrence TS, Tsien CI, Aiken R, Goyal S, Abrouk N, **Trimble M**, Cao Y, and Lao CD. BRAINSTORM: A Multi-Institutional Phase I/II Study of RRx-001 in Combination with Whole Brain Radiation Therapy for Patients with Brain Metastases. *Int J Radiat Oncol Biol Phys* 2020; 107(3):478-486. PMID: 32169409. Full Text

Kumar R, Bhandari S, **Singh SRK**, Malapati S, and Cisak KI. Incidence and outcomes of heparin-induced thrombocytopenia in solid malignancy: an analysis of the National Inpatient Sample Database. *Br J Haematol* 2020; 189(3):543-550. PMID: 31990984. Full Text

Liaqat H, Ammad Ud Din M, and **Malik D**. Poroid Hidradenoma; a Benign Lesion Masking as Malignant Breast Tumor. *Qjm* 2020; 113(10):749-750. PMID: 32240315. Full Text

Maahs L, **Tang A**, **Saheli ZA**, Jacob B, Polasani R, and **Hwang C**. Real-world effectiveness of the pegfilgrastim on-body injector in preventing severe neutropenia. *J Oncol Pharm Pract* 2020; Epub ahead of print. PMID: 33323023. Full Text

Mazieres J, Rittmeyer A, **Gadgeel S**, Hida T, Gandara DR, Cortinovis DL, Barlesi F, Yu W, Matheny C, Ballinger M, and Park K. Atezolizumab vs Docetaxel in Pretreated Patients with Non-Small Cell Lung Cancer: Final Results From the Randomized Phase II POPLAR and Phase III OAK Clinical Trials. *J Thorac Oncol* 2020; 16(1):140-150. PMID: 33166718. Full Text

Mosalem O, **Abu Rous F**, Elshafie A, and Isaac D. Bilateral breast masses as a presentation for T-cell acute lymphoblastic leukaemia. *BMJ Case Rep* 2020; 13(8). PMID: 32847887. Full Text

Mosalem O, Hernandez Garcilazo N, Saleh Y, and **Abu Rous F**. Pulmonary embolism as the primary presentation of IgA vasculitis. *BMJ Case Rep* 2020; 13(8). PMID: 32859624. Full Text

Nagasaka M, Ge Y, Sukari A, **Kukreja G**, and Ou SI. A user's guide to lorlatinib. *Crit Rev Oncol Hematol* 2020; 151:102969. PMID: 32416346. Full Text

Onwubiko I, **Kasperek G**, **Laforest RA**, **Philip SG**, **Kuriakose P**, and **Otrock ZK**. Predictors of response and outcome of patients with acquired haemophilia A. *Haemophilia* 2020; 26(5):e244-e246. PMID: 32469118. Full Text

Patil NR, and **Khan GN**. Exceptional Response to A Single Cycle of Immunotherapy in a Lynch Syndrome Patient with Metastatic Pancreatic Adenocarcinoma. *Am J Case Rep* 2020; 21:e923803. PMID: 32658872. Request Article

Sankar K, **Gadgeel SM**, and Qin A. Molecular therapeutic targets in non-small cell lung cancer. *Expert Rev Anticancer Ther* 2020; 20(8):647-661. PMID: 32580596. Request Article

Schmidt JJ, **Khatri Y**, **Brody SI**, **Zhu C**, **Pietraszkiewicz H**, **Valeriote FA**, and **Sherman DH**. A Versatile Chemoenzymatic Synthesis for the Discovery of Potent Cryptophycin Analogs. *ACS Chem Biol* 2020; 15(2):524-532. PMID: 31961651. Request Article

Sha CM, Lehrer EJ, **Hwang C**, Trifiletti DM, Mackley HB, Drabick JJ, and Zaorsky NG. Toxicity in combination immune checkpoint inhibitor and radiation therapy: a systematic review and meta-analysis. *Radiother Oncol* 2020; 151(141-148). PMID: 32717359. Full Text

Shapiro AD, Ragni MV, Borhany M, Abajas YL, Tarantino MD, Holstein K, Croteau SE, Liesner

R, Tarango C, Carvalho M, McGuinn C, Funding E, Kempton CL, Bidlingmaier C, Cohen A, Oldenburg J, Kearney S, Knoll C, **Kuriakose P**, Acharya S, Reiss UM, Kulkarni R, Witkop M, Lethagen S, Donfield S, LeBeau P, Berntorp E, and Astermark J. Natural history study of factor IX deficiency with focus on treatment and complications (B-Natural). *Haemophilia* 2020; Epub ahead of print. PMID: 33278853. Full Text

Singh SRK, **Thanikachalam K**, and **Donthireddy V**. Desperate times, desperate measures: successful use of chemotherapy in treatment of haemophagocytic lymphohistiocytosis (HLH) due to disseminated histoplasmosis. *BMJ Case Rep* 2020; 13(9). PMID: 32878853. Full Text

Solomon SR, Martin AS, Zhang MJ, Ballen K, Bashey A, Battiwalla M, Baxter-Lowe LA, Brunstein C, Chhabra S, **Perez MAD**, Fuchs EJ, Ganguly S, Hardy N, Hematti P, McGuirk J, **Peres E**, Ringden O, Rizzieri D, Romee R, Solh M, Szwajcer D, van der Poel M, Waller E, William BM, and Eapen M. Optimal donor for African Americans with hematologic malignancy: HLA-haploidentical relative or umbilical cord blood transplant. *Biol Blood Marrow Transplant* 2020; 26(10):1930-1936. PMID: 32649981. Full Text

Spigel D, Jotte R, Nemunaitis J, Shum M, Schneider J, Goldschmidt J, Eisenstein J, Berz D, Seneviratne , Socoteanu M, Bhanderi V, Konduri K, Xia M, Wang H, Hozak RR, Gueorguieva I, Ferry D, Gandhi L, Chao BH, and **Rybkin I**. Brief Report: Randomized Phase 2 Studies of Checkpoint Inhibitors Alone or in Combination with Pegilodecakin in Patients with Metastatic Non-Small-Cell Lung Cancer (CYPRESS-1 and CYPRESS-2). *J Thorac Oncol* 2020; Epub ahead of print. PMID: 33166722. Request Article

Sukari A, **Kukreja G**, Nagasaka M, Shukairy MK, Yoo G, Lin HS, Hotaling J, and Kim H. The role of immune checkpoint inhibitors in anaplastic thyroid cancer (Case Series). *Oral Oncol* 2020; 109:104744. PMID: 32402656. Full Text

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**. Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Thanikachalam K, **Damarla V**, **Seixas T**, **Dobrosotskaya I**, **Wollner I**, **Kwon D**, **Winters K**, **Raoufi M**, **Li J**, **Siddiqui F**, and **Khan G**. Neoadjuvant Phase II Trial of Chemoradiotherapy in Patients With esectable and Borderline Resectable Pancreatic Cancer. *Am J Clin Oncol* 2020; 43(6):435-441. PMID: 32251119. Full Text

Verschraegen CF, Jerusalem G, McClay EF, Iannotti N, Redfern CH, Bennouna J, Chen FL, Kelly K, ehnert J, Morris JC, Taylor M, Spigel D, **Wang D**, Grote HJ, Zhou D, Munshi N, Bajars M, and Gulley JL. Efficacy and safety of first-line avelumab in patients with advanced non-small cell lung cancer: results from a phase Ib cohort of the JAVELIN Solid Tumor study. *J Immunother Cancer* 2020; 8(2). PMID: 32907924. Full Text

Voss MH, Gordon MS, Mita M, Rini B, Makker V, Macarulla T, Smith DC, Cervantes A, Puzanov I, Pili R, **Wang D**, Jalal S, Pant S, Patel MR, Neuwirth RL, Enke A, Shou Y, Sedarati F, Faller DV, and Burris HA, 3rd. Phase 1 study of mTORC1/2 inhibitor sapanisertib (TAK-228) in advanced solid tumours, with an expansion phase in renal, endometrial or bladder cancer. *Br J Cancer* 2020; 123(11):1590-1598. PMID: 32913286. Full Text

Yu Y, Brown Wade N, Hwang AE, Nooka AK, Fiala MA, Mohrbacher A, Peters ES, Pawlish K, Bock C, Van Den Berg DJ, Rand KA, Stram D, Conti DV, Auclair D, Colditz GA, Mehta J,

Haiman CA, Terebelo H, **Janakiraman N**, Singhal S, Chiu B, Vij R, Bernal-Mizrachi L, Zonder JA, Huff CA, Lonial S, Orlowski RZ, Cozen W, and Ailawadhi S. Variability in Cytogenetic Testing for Multiple Myeloma: A Comprehensive Analysis From Across the United States. *JCO Oncol Pract* 2020; 16(10):e1169-e1180. PMID: 32469686. Request Article

Hospital Medicine

Barnes GD, Burnett A, Allen A, Blumenstein M, Clark NP, Cuker A, Dager WE, Deitelzweig SB, **Ellsworth S**, Garcia D, **Kaatz S**, and Minichiello T. Thromboembolism and anticoagulant therapy during the COVID19 pandemic: interim clinical guidance from the anticoagulation forum. *J Thromb Thrombolysis* 2020; 50(1):72-81. PMID: 32440883. Full Text

Barnes GD, Li Y, Gu X, Haymart B, Kline-Rogers E, Ali MA, Kozlowski J, **Krol G**, Froehlich JB, and **Kaatz S**. Periprocedural Bridging Anticoagulation in Patients with Venous Thromboembolism: A Registry-based Cohort Study. *J Thromb Haemost* 2020; 18(8):2025-2030. PMID: 32428998. Full Text

Dawson T, DeCamillo D, Kong X, Shensky B, **Kaatz S**, **Krol GD**, Ali M, Haymart B, Froehlich JB, and Barnes GD. Correcting Inappropriate Prescribing of Direct Oral Anticoagulants: A Population Health Approach. *J Am Heart Assoc* 2020; 9(22):e016949. PMID: 33150804. Full Text

Gunasekaran K, Ahmad M, Rehman S, **Thilagar B**, Gopalratnam K, Ramalingam S, Paramasivam V, Arora A, and Chandran A. Impact of a Positive Viral Polymerase Chain Reaction on Outcomes of Chronic Obstructive Pulmonary Disease (COPD) Exacerbations. *Int J Environ Res Public Health* 2020; 17(21). PMID: 33147795. Full Text

Gunasekaran K, Rajasurya V, Devasahayam J, Singh Rahi M, Chandran A, Elango K, and **Talari G**. A Review of the Incidence Diagnosis and Treatment of Spontaneous Hemorrhage in Patients Treated with Direct Oral Anticoagulants. *J Clin Med* 2020; 9(9). PMID: 32942757. Full Text

Nair S, **Garza N**, **George M**, and **Kaatz S**. Treatment of Acute Venous Thromboembolism. *Med Clin North Am* 2020; 104(4):631-646. PMID: 32505257. Full Text

Segon YS, **Summey RD**, Slawski B, and **Kaatz S**. Surgical Venous Thromboembolism Prophylaxis: Clinical Practice Update. *Hosp Pract (1995)* 2020; 48(5):248-257. PMID: 32589468. Request Article

Talari G, **Demertzis ZD**, **Summey RD**, **Gill B**, and **Kaatz S**. Perioperative management of anticoagulation. *Hosp Pract (1995)* 2020; 48(5):231-240. PMID: 32627607. Request Article

Warkentin TE, and **Kaatz S**. COVID-19 versus HIT hypercoagulability. *Thromb Res* 2020; 196:38-51. PMID: 32841919. Full Text

Hypertension and Vascular Research

Bryson TD, **Pandrangi TS**, **Khan SZ**, **Xu J**, **Pavlov TS**, **Ortiz PA**, **Peterson E**, and **Harding P**. The deleterious role of the prostaglandin E2 EP3 receptor in angiotensin II hypertension. *Am J Physiol Heart Circ Physiol* 2020; 318(4):H867-h882. PMID: 32142358. Full Text

Dalmasso C, Chade AR, **Mendez M**, Giani JF, Bix GJ, Chen KC, and Loria AS. Intrarenal Renin Angiotensin System Imbalance During Postnatal Life Is Associated with Increased

Microvascular Density in the Mature Kidney. *Front Physiol* 2020; 11:1046. PMID: 32982785. Full Text

Dham D, **Roy B**, **Gowda A**, **Pan G**, Sridhar A, Zeng X, Thandavarayan RA, and **Selvaraj Palaniyandi S**. 4-hydroxy-2-nonenal, a lipid peroxidation product, as a biomarker in diabetes and its complications: challenges and opportunities. *Free Radic Res* 2020; Epub ahead of print. PMID: 33336611. Request Article

Hamid S, **Rhaleb IA**, Kassem KM, and **Rhaleb NE**. Role of Kinins in Hypertension and Heart Failure. *Pharmaceuticals (Basel)* 2020; 13(11). PMID: 33126450. Full Text

Kruger D, and Valentine V. Canagliflozin for the Treatment of Diabetic Kidney Disease and Implications for Clinical Practice: A Narrative Review. *Diabetes Ther* 2020; 11(6):1237-1250. PMID: 32405876. Full Text

Manis AD, Palygin O, Isaeva E, Levchenko V, LaViolette PS, **Pavlov TS**, Hodges MR, and Staruschenko A. Kcnj16 knockout produces audiogenic seizures in the Dahl salt-sensitive rat. *JCI Insight* 2020; Epub ahead of print. PMID: 33232300. Full Text

Mottillo EP, and Steinberg GR. Current and emerging roles of adipose tissue in health and disease. *Biochem J* 2020; 477(19):3645-3647. PMID: 33017469. Full Text

Pan G, **Deshpande M**, **Pang H**, Stemmer PM, Carruthers NJ, Shearn CT, Backos DS, and **Palaniyandi SS**. 4-Hydroxy-2-nonenal attenuates 8-oxoguanine DNA glycosylase 1 activity. *J Cell Biochem* 2020; Epub ahead of print. PMID: 32628320. Full Text

Pavlov TS, Palygin O, Isaeva E, Levchenko V, Khedr S, Blass G, Ilatovskaya DV, Cowley AW, Jr., and Staruschenko A. NOX4-dependent regulation of ENaC in hypertension and diabetic kidney disease. *Faseb j* 2020; 34(10):13396-13408. PMID: 32799394. Full Text

Roy B, and **Palaniyandi SS**. Aldehyde dehydrogenase 2 inhibition potentiates 4-hydroxy-2-nonenal induced decrease in angiogenesis of coronary endothelial cells. *Cell Biochem Funct* 2020; 38(3):290-299. PMID: 31943249. Full Text

Roy B, **Sundar K**, and **Palaniyandi SS**. 4-hydroxy-2-nonenal decreases coronary endothelial cell migration: Potentiation by aldehyde dehydrogenase 2 inhibition. *Vascul Pharmacol* 2020; 131:106762. PMID: 32585188. Full Text

Venkat P, **Cui C**, **Chen Z**, **Chopp M**, **Zacharek A**, **Landschoot-Ward J**, **Culmone L**, **Yang XP**, **Xu J**, and **Chen J**. CD133+Exosome Treatment Improves Cardiac Function after Stroke in Type 2 Diabetic Mice. *Transl Stroke Res* 2020; Epub ahead of print. PMID: 32198711. Request Article

Yang A, and **Mottillo EP**. Adipocyte lipolysis: from molecular mechanisms of regulation to disease and therapeutics. *Biochem J* 2020; 477(5):985-1008. PMID: 32168372. Full Text

Infectious Diseases

Alangaden G, and **Ramesh MS**. Reply to Fernandez Cruz. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32589700. Full Text

Alangaden GJ, and **Mayur RS**. Response to "Is the outcome of SARS-CoV-2 infection in solid organ transplant recipients really similar to that of the general population?". *Am J Transplant*

2020; Epub ahead of print. PMID: 33249750. Full Text

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Bakthavatchalam YD, Shankar A, Muniyasamy R, Peter JV, **Marcus Z**, Triplicane Dwarakanathan H, Gunasekaran K, Iyadurai R, and Veeraraghavan B. Levonadifloxacin, a recently approved benzoquinolizine fluoroquinolone, exhibits potent in vitro activity against contemporary Staphylococcus aureus isolates and Bengal Bay clone isolates collected from a large Indian tertiary care hospital. *J Antimicrob Chemother* 2020; 75(8):2156-2159. PMID: 32361727. Full Text

Bergin SP, Coles A, Calvert SB, Farley J, Powers JH, **Zervos MJ**, Sims M, Kollef MH, Durkin MJ, Kabchi BA, Donnelly HK, **Bardossy AC**, Greenshields C, Rubin D, Sun JL, Chiswell K, Santiago J, Gu P, Tenaerts P, Fowler VG, Jr., and Holland TL. PROPHETIC: Prospective Identification of Pneumonia in Hospitalized Patients in the Intensive Care Unit. *Chest* 2020; 158(6):2370-2380. PMID: 32615191. Full Text

Bhagwat SS, Hariharan P, Joshi PR, Palwe SR, Shrivastava R, Patel MV, Devanga Ragupathi NK, Bakthavatchalam YD, **Ramesh MS**, Soman R, and Veeraraghavan B. Activity of cefepime/zidebactam against MDR Escherichia coli isolates harbouring a novel mechanism of resistance based on four-aminoacid inserts in PBP3. *J Antimicrob Chemother* 2020; 75(12):3563-3567. PMID: 32772098. Full Text

Cassone M, Zhu Z, Mantey J, Gibson KE, **Perri MB**, **Zervos MJ**, Snitkin ES, Foxman B, and Mody L. Interplay Between Patient Colonization and Environmental Contamination With Vancomycin-Resistant Enterococci and Their Association With Patient Health Outcomes in Postacute Care. *Open Forum Infect Dis* 2020; 7(1) ofz519. PMID: 31988973. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Dabbagh MF, **Aurora L**, **D'Souza P**, **Weinmann AJ**, **Bhargava P**, and **Basir MB**. Cardiac Tamponade Secondary to COVID-19. *JACC Case Rep* 2020; 2(9):1326-1330. PMID: 32328588. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Fowler VG, Jr., Das AF, Lipka-Diamond J, Schuch R, Pomerantz R, Jauregui-Peredo L, Bressler A, Evans DC, Moran GJ, Rupp ME, Wise RA, Corey GR, **Zervos M**, Douglas PS, and Cassino C. Exebacase for Staphylococcus aureus bloodstream infection and endocarditis. *J Clin Invest* 2020; 130(7):3750-3760. PMID: 32271718. Full Text

Fram G, **Wang DD**, **Malette K**, **Villablanca P**, **Kang G**, **So K**, **Basir MB**, **Khan A**, **McKinnon JE**, **Zervos M**, and **O'Neill WW**. Cardiac Complications Attributed to Hydroxychloroquine: A

systematic review of the Literature Pre-COVID-19. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID: 33059567. Request Article

Gudipati S, **Brar I**, **Murray S**, **McKinnon JE**, **Yared N**, and **Markowitz N**. Descriptive Analysis of Patients Living with HIV Affected By COVID-19. *J Acquir Immune Defic Syndr* 2020; 85(2):123-126. PMID: 32675771. Full Text

Gudipati S, **Zervos M**, and **Herc E**. Can the One Health Approach Save Us from the Emergence and Reemergence of Infectious Pathogens in the Era of Climate Change: Implications for Antimicrobial Resistance? *Antibiotics (Basel)* 2020; 9(9). PMID: 32937739. Full Text

Heldman MR, Kates OS, Haydel BM, Florman SS, Rana MM, **Chaudhry ZS**, **Ramesh MS**, Safa K, Kotton CN, Blumberg EA, Besharatian BD, Tanna SD, Ison MG, Malinis M, Azar MM, Rakita RM, Morillas JA, Majeed A, Sait AS, Spaggiari M, Hemmige V, Mehta SA, Neumann H, Badami A, Jeng A, Goldman JD, Lala A, Hemmersbach-Miller M, McCort ME, Bajrovic V, Ortiz-Bautista C, Friedman-Moraco R, Sehgal S, Lease ED, Limaye AP, and Fisher CE. Healthcare resource use among solid organ transplant recipients hospitalized with COVID-19. *Clin Transplant* 2020; Epub ahead of print. PMID: 33349940. Full Text

Hutton MA, Sundaram A, **Perri MB**, **Zervos MJ**, and **Herc ES**. Assessment of invitrosynergy of daptomycin or vancomycin plus ceftaroline for daptomycin non-susceptible Staphylococcus aureus. *Diagn Microbiol Infect Dis* 2020; 98(3):115126. PMID: 32861155. Full Text

Kates OS, Haydel BM, Florman SS, Rana MM, **Chaudhry ZS**, **Ramesh MS**, Safa K, Kotton CN, Blumberg EA, Besharatian BD, Tanna SD, Ison MG, Malinis M, Azar MM, Rakita RM, Morillas JA, Majeed A, Sait AS, Spaggiari M, Hemmige V, Mehta SA, Neumann H, Badami A, Goldman JD, Lala A, Hemmersbach-Miller M, McCort ME, Bajrovic V, Ortiz-Bautista C, Friedman-Moraco R, Sehgal S, Lease ED, Fisher CE, and Limaye AP. COVID-19 in solid organ transplant: A multi-center cohort study. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32766815. Full Text

Lundgren JD, Grund B, Barkauskas CE, Holland TL, Gottlieb RL, Sandkovsky U, Brown SM, Knowlton KU, Self WH, Files DC, Jain MK, Benfield T, Bowdish ME, Leshnower BG, Baker JV, Jensen JU, Gardner EM, Ginde AA, Harris ES, Johansen IS, **Markowitz N**, Matthay MA, Østergaard L, Chang CC, Davey VJ, Goodman A, Higgs ES, Murray DD, Murray TA, Paredes R, Parmar MKB, Phillips AN, Reilly C, Sharma S, Dewar RL, Teitelbaum M, Wentworth D, Cao H, Klekotka P, Babiker AG, Gelijns AC, Kan VL, Polizzotto MN, Thompson BT, Lane HC, and Neaton JD. A Neutralizing Monoclonal Antibody for Hospitalized Patients with Covid-19. *N Engl J Med* 2020; Epub ahead of print. PMID: 33356051. Full Text

Maki G, Smith I, Paulin S, **Kaljee L**, Kasambara W, Mlotha J, Chuki P, Rupali P, Singh DR, Bajracharya DC, Barrow L, Johnson E, **Prentiss T**, and **Zervos M**. Feasibility Study of the World Health Organization Health Care Facility-Based Antimicrobial Stewardship Toolkit for Low- and Middle-Income Countries. *Antibiotics (Basel)* 2020; 9(9). PMID: 32872440. Full Text

McCreary EK, Kullar R, Geriak M, Zasowski EJ, Rizvi K, Schulz LT, Ouellette K, Vasina L, Haddad F, Rybak MJ, **Zervos MJ**, Sakoulas G, and Rose WE. Multicenter Cohort of Patients with MethicillinResistant Staphylococcus aureus Bacteremia Receiving Daptomycin Plus Ceftaroline Compared with Other MRSA Treatments. *Open Forum Infect Dis* 2020; 7(1): ofz538. PMID: 31938716. Full Text

McCullough PA, Alexander PE, Armstrong R, Arvinte C, Bain AF, Bartlett RP, Berkowitz RL,

Berry AC, Borody TJ, Brewer JH, Brufsky AM, Clarke T, Derwand R, Eck A, Eck J, Eisner RA, Fareed GC, Farella A, Fonseca SNS, Geyer CE, Jr., Gonnering RS, Graves KE, Gross KBV, Hazan S, Held KS, Hight HT, Immanuel S, Jacobs MM, Ladapo JA, Lee LH, Littell J, Lozano I, Mangat HS, Marble B, **McKinnon JE**, Merritt LD, Orient JM, Oskoui R, Pompan DC, Procter BC, Prodromos C, Rajter JC, Rajter JJ, Ram CVS, Rios SS, Risch HA, Robb MJA, Rutherford M, Scholz M, Singleton MM, Tumlin JA, Tyson BM, Urso RG, Victory K, Vliet EL, Wax CM, Wolkoff AG, Wooll V, and Zelenko V. Multifaceted highly targeted sequential multidrug treatment of early ambulatory high-risk SARS-CoV-2 infection (COVID-19). *Rev Cardiovasc Med* 2020; 21(4):517-530. PMID: 33387997. Full Text

McCullough PA, Kelly RJ, Ruocco G, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, Carter H, Singh B, McCullough SP, Bhambi BK, Palazzuoli A, De Ferrari GM, Milligan G, Safder T, Tecson KM, **Wang DD**, **McKinnon JE**, **O'Neill WW**, **Zervos M**, and Risch HA. Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection. *Am J Med* 2020; 134(1):16-22. PMID: 32771461. Full Text

Meighani A, **Alimirah M**, **Ramesh M**, and **Salgia R**. Fecal Microbiota Transplantation for Clostridioides Difficile Infection in Patients with Chronic Liver Disease. *Int J Hepatol* 2020; 2020:1874570. PMID: Full Text

Melia MT, Paez A, Reid G, Chirch LM, Luther VP, Blackburn BG, Perez F, Abdoler E, Kaul DR, Rehm S, Harik N, Barsoumian A, Person AK, Yun H, Beckham JD, Boruchoff S, Cariello PF, Cutrell JB, Graber CJ, Lee DH, Maziarz E, Paras ML, Razonable RR, Ressner R, **Chen A**, Chow B, Escota G, **Herc E**, Johnson A, Maves RC, Nnedu O, Clauss H, Kulkarni P, Pottinger PS, Serpa JA, Bhowmick T, Bittner M, Wooten D, Casanas B, Shnekendorf R, and Blumberg EA. The Struggling Infectious Diseases Fellow: Remediation Challenges and Opportunities. *Open Forum Infect Dis* 2020; 7(3): ofaa058. PMID: 32166097. Full Text

Mercuro NJ, **Gill CM**, **Kenney RM**, **Alangaden GJ**, and **Davis SL**. Treatment and outcomes of
Enterococcus faecium bloodstream infections in solid organ transplant recipients. *Transpl Infect Dis* 2020; 22(2): e13251. PMID: 31997476. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Morrison A, **Brar I**, **Willens D**, and **Thomas E**. Collaboration Improves PrEP Care for Providers and Patients. *Am J Med* 2020; 133(5): e212. PMID: 32450956. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol* 2020; 92(10):1791-1792. PMID: 32314799. Full Text

Nauriyal V, Rai SM, Joshi RD, Thapa BB, **Kaljee L**, **Prentiss T**, **Maki G**, Shrestha B, Bajracharya DC, Karki K, Joshi N, Acharya A, Banstola L, Poudel SR, Joshi A, Dahal A, Palikhe N, Khadka S, Giri P, Lamichhane A, and **Zervos M**. Evaluation of an Antimicrobial

Stewardship Program for Wound and Burn Care in Three Hospitals in Nepal. *Antibiotics (Basel)* 2020; 9(12). PMID: 33339283. Full Text

Patil NR, **Herc ES**, and **Girgis M**. Cold agglutinin disease and autoimmune hemolytic anemia with pulmonary embolism as a presentation of COVID-19 infection. *Hematol Oncol Stem Cell Ther* 2020; Epub ahead of print. PMID: 32645300. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**, **Spizarny D**, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Ramireddy S, **Gudipati S**, and **Zervos M**. Expect the Unexpected: A Rare Case of Pseudomonas aerguinosa Endocarditis. *IDCases* 2020; 21:e00787. PMID: 32399394. Full Text

Selitsky L, **Markowitz N**, **Baxa DM**, **Kaljee L**, **Miree CA**, **Islam N**, **Burse C**, **Newaz R**, **Dankerlui D**, **Jacobsen G**, and **Joseph C**. Self-report of domestic violence and forced sex are related to sexual risk behaviors in a sample of juvenile detainees. *Health Justice* 2020; 8(1):15. PMID: 32577955. Full Text

Shallal A, **Kenney R**, and **Weinmann A**. Missed Vaccine Opportunities to S. pneumoniae and Influenza in Patients Admitted During the COVID-19 Pandemic. *Infect Control Hosp Epidemiol* 2020; Epub ahead of print. PMID: 33100230. Full Text

Shallal A, **Markowitz N**, and **Tibbetts R**. The Brief Case: Cough in an Immunocompromised Patient. *J Clin Microbiol* 2020; 58(11). PMID: 33087542. Full Text

Shallal A, **Markowitz N**, and **Tibbetts R**. Closing the Brief Case: Cough in an Immunocompromised Patient. *J Clin Microbiol* 2020; 58(11). PMID: 33087543. Full Text

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated With Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6): e2012270. PMID: 32543702. Full Text

Swegal W, **Deeb R**, Greene J, **Peterson E**, **Perri MB**, **Bardossy AC**, **Zervos M**, and **Jones LR**. Changes in Nasal Staphylococcus Colonization and Infection Rates After Nasal Surgery. *Facial Plast Surg Aesthet Med* 2020; Epub ahead of print. PMID: 32392437. Full Text

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**, **Nauriyal V**, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Vaughn VM, O'Malley M, Flanders SA, Gandhi TN, Petty LA, Malani AN, **Weinmann A**, Horowitz JK, and Chopra V. Association of Infectious Disease Physician Approval of

Peripherally Inserted Central Catheter With Appropriateness and Complications. *JAMA Netw Open* 2020; 3(10): e2017659. PMID: 33084898. Full Text

Weber DJ, Talbot TR, **Weinmann A**, Mathew T, Heil E, Stenehjem E, Duncan R, Gross A, Stinchfield P, Baliga C, Wagner J, Schaffner W, Echevarria K, and Drees M. Policy statement from the Society for Healthcare Epidemiology of America (SHEA): Only medical contraindications should be accepted as a reason for not receiving all routine immunizations as recommended by the Centers for Disease Control and Prevention. *Infect Control Hosp Epidemiol* 2020; 42(1):1-5. PMID: 32938509. Full Text

Yassin-Kassab A, **Bhargava P**, **Tibbetts RJ**, **Griggs ZH**, **Peterson EI**, and **Craig JR**. Comparison of bacterial maxillary sinus cultures between odontogenic sinusitis and chronic rhinosinusitis. *Int Forum Allergy Rhinol* 2020; Epub ahead of print. PMID: 32656998. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Internal Medicine

Al-Abcha A, Saleh Y, Mujer M, Boumegouas M, Herzallah K, Charles L, **Elkhatib L**, Abdelkarim O, Kehdi M, and Abela GS. Meta-analysis Examining the Usefulness of Angiotensin Receptor blockers for the
Prevention of Aortic Root Dilation in Patients With the Marfan Syndrome. *Am J Cardiol* 2020; 128:101106. PMID: 32650901. Full Text

Al-Darzi W, **Alalwan Y**, **Askar F**, **Sadiq O**, **Venkat D**, **Gonzalez H**, **Galusca D**, **Yoshida A**, and **Jafri SM**. Risk Factors and Outcomes of Intracardiac Thrombosis During Orthotopic Liver Transplantation. *Transplant Proc* 2020; Epub ahead of print. PMID: 33246584. Full Text

Al-Darzi WK, **Hana A**, **Lahiri MK**, **Dagher C**, **Greenberg JC**, **Alaswad K**, **Rabbani BT**, **McCord JK**, and **Reddy M**. Diffuse B Cell Lymphoma Leading to Complete Heart Block: Is This Transient or Permanent? *Am J Case Rep* 2020; 21: e925760. PMID: 33093439. Request Article

Ali O, Shenoy M, Alani A, **Alani M**, and Williams K. Are SPECT MPI measures of dyssynchrony dyssynchronous? *J Nucl Cardiol* 2020; Epub ahead of print. PMID: 31933153. Full Text

Alimirah M, **Sadiq O**, and **Gordon SC**. Novel Therapies in Hepatic Encephalopathy. *Clin Liver Dis* 2020; 24(2):303-315. PMID: 32245535. Full Text

Alimirah M, **Sadiq O**, and **Gordon SC**. Management of Direct-Acting Antiviral Failures. *Clin Liver Dis (Hoboken)* 2020; 16(1):25-28. PMID: 32714520. Full Text

Altibi AM, Prousi G, Agarwal M, Shah M, Tripathi B, Ram P, and Patel B. Readmission-free period and in-hospital mortality at the time of first readmission in acute heart failure patients-NRD-based analysis of 40,000 heart failure readmissions. *Heart Fail Rev* 2020; 26(1):57-64. PMID: 31897907. Full Text

Balanchivadze N, **Kudirka AA**, **Askar S**, **Almadhoun K**, **Kuriakose P**, **Fadel R**, and **Dabak V**. Impact of COVID-19 Infection on 24 Patients with Sickle Cell Disease. One Center Urban

Experience, Detroit, MI, USA. *Hemoglobin* 2020; 44(4):284-289. PMID: 32722950. Full Text

Barkoudah E, Piazza G, Hecht TEH, Grant P, Deitelzweig S, Fang MC, Fanikos J, Kao CK, Barnes GD, Chen T, Ramishvili T, Schnipper JL, Goldstein JN, Ruff CT, **Kaatz S**, Schwartz A, Connors JM, and Goldhaber SZ. Extended Venous Thromboembolism Prophylaxis in Medically Ill Patients: An NATF Anticoagulation Action Initiative. *Am J Med* 2020; 133 Suppl 1:1-27. PMID: 32362349. Full Text

Barnes GD, Burnett A, Allen A, Blumenstein M, Clark NP, Cuker A, Dager WE, Deitelzweig SB, **Ellsworth S**, Garcia D, **Kaatz S**, and Minichiello T. Thromboembolism and anticoagulant therapy during the COVID19 pandemic: interim clinical guidance from the anticoagulation forum. *J Thromb Thrombolysis* 2020; 50(1):72-81. PMID: 32440883. Full Text

Barnes GD, Li Y, Gu X, Haymart B, Kline-Rogers E, Ali MA, Kozlowski J, **Krol G**, Froehlich JB, and **Kaatz S**. Periprocedural Bridging Anticoagulation in Patients with Venous Thromboembolism: A Registry-based Cohort Study. *J Thromb Haemost* 2020; 18(8):2025-2030. PMID: 32428998. Full Text

Barssoum K, **Altibi AM**, Rai D, Kharsa A, Kumar A, Chowdhury M, Elkaryoni A, Abuzaid AS, Baibhav B, Parikh V, Masri A, Amsallem M, and Nanda NC. Assessment of right ventricular function following left ventricular assist device (LVAD) implantation-The role of speckle-tracking echocardiography: A metaanalysis. *Echocardiography* 2020; 37(12):2048-2060. PMID: 33084128. Full Text

Barssoum K, **Altibi AM**, Rai D, Kumar A, Kharsa A, Chowdhury M, Thakkar S, Shahid S, Abdelazeem M, Abuzaid AS, Baibhav B, Parikh V, Feitell SC, Balmer-Swain M, Rao M, Amsallem M, and Nanda NC. Speckle tracking echocardiography can predict subclinical myocardial involvement in patients with sarcoidosis: A meta-analysis. *Echocardiography* 2020; 37(12):2061-2070. PMID: 33058271. Full Text

Battisha A, **Altibi AM**, Madoukh B, Sheikh O, Sawalha K, Shaikh S, and Al-Sadawi M. Spontaneous Biliary Pericardial Tamponade: A Case Report and Literature Review. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID: 32525780. Request Article
Battisha A, Sawalha K, **Altibi AM**, Madoukh B, Al-Akchar M, and Patel B. Cardiogenic shock in autoimmune rheumatologic diseases: an insight on etiologies, management, and treatment outcomes. *Heart Fail Rev* 2020; Epub ahead of print. PMID: 32562022. Full Text

Caines A, Selim R, and Salgia R. The Changing Global Epidemiology of Hepatocellular Carcinoma. *Clin Liver Dis* 2020; 24(4):535-547. PMID: 33012444. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Dawson T, DeCamillo D, Kong X, Shensky B, **Kaatz S**, **Krol GD**, Ali M, Haymart B, Froehlich JB, and Barnes GD. Correcting Inappropriate Prescribing of Direct Oral Anticoagulants: A Population Health Approach. *J Am Heart Assoc* 2020; 9(22):e016949. PMID: 33150804. Full Text

DeCamillo D, **Ellsworth S**, **Kaatz S**, and Barnes GD. Use of apixaban and rivaroxaban in young adults with acute venous thromboembolism: a multi-center retrospective case series. *J*

Thromb Thrombolysis 2020; 50(4):844-848. PMID: 32219722. Full Text

El-Khatib L, **Alrayes H**, **Sallam O**, and **Elbanna A**. Quinidine hypersensitivity: a side effect of a forgotten antiarrhythmic. *BMJ Case Rep* 2020; 13(8). PMID: 32843415. Full Text

El-Khatib LA, De Feijter-Rupp H, Janoudi A, Fry L, Kehdi M, and Abela GS. Cholesterol induced heart valve inflammation and injury: efficacy of cholesterol lowering treatment. *Open Heart* 2020; 7(2). PMID: 32747455. Full Text

Elghazawy H, Bakkach J, Zaghloul MS, Abusanad A, Hussein MM, Alorabi M, Eldin NB, Helal T, Zaghloul TM, **Venkatesulu BP**, Elghazaly H, and Al-Sukhun S. Implementation of breast cancer continuum of care in low- and middle-income countries during the COVID-19 pandemic. *Future Oncol* 2020; 16(31):25512567. PMID: 32715776. Full Text

Elghazawy H, **Venkatesulu BP**, Verma V, Pushparaji B, Monlezun DJ, Marmagkiolis K, and Iliescu CA. The role of cardio-protective agents in cardio-preservation in breast cancer patients receiving Anthracyclines ± Trastuzumab: a Meta-analysis of clinical studies. *Crit Rev Oncol Hematol* 2020; 153:103006. PMID: 32777728. Full Text

Elkaryoni A, **Altibi AM**, Khan MS, Okasha O, Ellakany K, Hassan A, Singh A, Qarajeh R, Mehta S, and Nanda NC. Global longitudinal strain assessment of the left ventricle by speckle tracking
echocardiography detects acute cellular rejection in orthotopic heart transplant recipients: A systematic review and meta-analysis. *Echocardiography* 2020; 37(2):302-309. PMID: 31967669. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Gorgis S, **Dabbagh MF**, **Mishra K**, **Ahluwalia G**, **Hana A**, **Fram G**, **Dhillon D**, **Lemor A**, **Khan A**, **Miller D**, **Kaatz S**, **O'Neill WW**, and **Wang DD**. Unprotected discharge: absence of stroke prevention strategies in patients with atrial fibrillation admitted for bleeding. *J Interv Card Electrophysiol* 2020; Epub ahead of print. PMID: 33119818. Full Text

Gui H, **Levin AM**, Hu D, Sleiman P, **Xiao S**, Mak AC, **Yang M**, Barczak AJ, Huntsman S, Eng C, **Hochstadt S**, **Zhang E**, **Whitehouse K**, **Simons S**, **Cabral W**, **Takriti S**, Abecasis G, Blackwell TW, Kang HM, Nickerson DA, Germer S, **Lanfear DE**, Gilliland F, Gauderman WJ, Kumar R, Erle DJ, Martinez FD, Hakonarson H, Burchard EG, and **Williams LK**. Mapping the 17q12-21.1 Locus for Variants Associated with Early-onset Asthma in African Americans. *Am J Respir Crit Care Med* 2020; Epub ahead of print. PMID: 32966749. Full Text

Gupta A, **Fouad L**, **Basir M**, **Neupane S**, **Zaidan M**, **Koenig G**, **Alqarqaz M**, **Villablanca PA**, **O'Neill WW**, and **Alaswad K**. Safety and effectiveness of MANTA vascular closure device after large-bore mechanical circulatory support: Real-world experience. *Cardiovasc Revasc Med* 2020; 21(7):875-878. PMID: 32327356. Full Text

Gupta K, Ramakrishnan S, Zachariah G, Rao JS, Mohanan PP, Venugopal K, Sateesh S, Sethi R, Jain D, Bardolei N, Mani K, Kakar TS, Jain V, Gupta P, Gupta R, Bansal S, Nath RK, Tyagi S, Wander GS, Gupta S, Mandal S, Senguttuvan NB, Subramanyam G, Roy D, Datta S, Ganguly K, Routray SN, Mishra SS, Singh BP, Bharti BB, Das MK, Deb PK, Deedwania P, Seth A, Shivkumar Rao J, Sinha AK, Bhushan S, Verma SK, Bhargava B, Roy A, Sood S, Isser HS, Pandit N, Trehan V, Gupta MD, Girish MP, Ahuja R,

Manchanda SC, Mohanty A, Jain P, Shrivastava S, Kalra IPS, Sarang BS, Ratti HS, Sahib GB, Gupta R, Amit SKA, Goswami KC, Bahl VK, Chopra HK, Koshy G, Nair T, Shyam N, Roby A, George R, Kumar S, Kader A, Abraham M, Viswanathan S, Jabir A, Menon J, Unni G, Mathew C, Jayagopal PB, Sajeev, Ashokan PK, Asharaf, Pancholia AK, Gupta AK, Das R, Aggarwal D, Malviya A, Ali SM, Barward P, Singh N, Tomar YS, Chaddha D, Dani S, Vyas C, Bhatt K, Doshi S, Meena CB, Subramanyam, Muruganandam AM, Narain V, Saran RK, Jain P, Kumar S, Goel PK, Das MK, Kumar S, Chandra S, Banerjee A, and Guha S. Impact of the 2017 ACC/AHA guidelines on the prevalence of hypertension among Indian adults: Results from a cross-sectional survey. *International Journal of Cardiology: Hypertension* 2020; 7. PMID: Not assigned. Full Text

Harnish P, Nesheiwat Z, **Mahmood S**, Soni R, and Eltahawy E. Echocardiography in Detecting Mechanical Complications in Acute Coronary Syndrome. *CASE (Phila)* 2020; 4(5):393-398. PMID: 33117936. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Horiuchi Y, Wettersten N, Patel MP, Mueller C, Neath SX, Christenson RH, Morgenthaler NG, **McCord J**, **Nowak RM**, Vilke GM, Daniels LB, Hollander JE, Apple FS, Cannon CM, Nagurney JT, Schreiber D, deFilippi C, Hogan C, Diercks DB, Headden G, Limkakeng AT, Anand I, Wu AHB, Ebmeyer S, Jaffe AS, Peacock WF, and Maisel AS. Biomarkers Enhance Discrimination and Prognosis of Type 2 Myocardial Infarction. *Circulation* 2020; 142(16):1532-1544. PMID: 32820656. Full Text

Huang L, **Li GH**, **Yu Q**, **Xu Y**, **Cvetkovski S**, **Wang X**, **Parajuli N**, **Udo-Inyang I**, Kaplan D, **Zhou L**, Yao Z, and **Mi QS**. Smad2/4 Signaling Pathway Is Critical for Epidermal Langerhans Cell Repopulation Under Inflammatory Condition but Not Required for Their Homeostasis at Steady State. *Front Immunol* 2020; 11:912. PMID: 32457763. Full Text

Jain V, **Gupta K**, Bhatia K, Bansal A, Arora S, **Khandelwal AK**, Rosenberg JR, Levisay JP, Tommaso CL, Ricciardi MJ, and Qamar A. Management of STEMI during the COVID-19 pandemic: Lessons learned in 2020 to prepare for 2021. *Trends Cardiovasc Med* 2020; Epub ahead of print. PMID: 33338636. Full Text

Kerndt CC, Balinski AM, and **Papukhyan HV**. Giant Pericardial Lipoma Inducing Cardiac Tamponade and New Onset Atrial Flutter. *Case Rep Cardiol* 2020; 2020:6937126. PMID: 32190390. Full Text

Korpole PR, Al-Bacha S, and **Hamadeh S**. A Case for Biopsy: Injectable Naltrexone-Induced Acute Eosinophilic Pneumonia. *Cureus* 2020; 12(9):e10221. PMID: 32913694. Full Text

Lanfear DE, **Luzum JA**, **She R**, **Gui H**, Donahue MP, O'Connor CM, Adams KF, Sanders-van Wijk S, **Zeld N**, Maeder MT, **Sabbah HN**, Kraus WE, Brunner-La Rocca HP, **Li J**, and **Williams LK**. Polygenic Score for Beta-Blocker Survival Benefit in European Ancestry Patients with Reduced Ejection Fraction Heart Failure. *Circ Heart Fail* 2020; 13(12):e007012. PMID: 33012170. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

Liaqat H, Ammad Ud Din M, and **Malik D**. Poroid Hidradenoma; a Benign Lesion Masking as Malignant Breast Tumor. *Qjm* 2020; 113(10):749-750. PMID: 32240315. Full Text

Liaqat H, **Shirvanian N**, Ammad Ud Din M, and **Amin A**. Cocaine-related vasculitis. *Clinical Case Reports* 2020; 8(12):3640-3641. PMID: 33364016. Full Text

Lin JC, **Kavousi Y**, **Sullivan B**, and **Stevens C**. Analysis of Outpatient Telemedicine Reimbursement in an Integrated Healthcare System. *Ann Vasc Surg* 2020; 65:100-106. PMID: 31678131. Full Text

Lyons AB, **Kohli I**, Nahhas AF, **Braunberger TL**, **Mohammad TF**, Nicholson CL, Nartker NT, **Modi K**, Matsui MS, **Lim HW**, and **Hamzavi IH**. Trichloroacetic acid model to accurately capture the efficacy of treatments for postinflammatory hyperpigmentation. *Arch Dermatol Res* 2020; 312(10):725-730. PMID: 32253506. Full Text

Maahs L, **Tang A**, **Saheli ZA**, Jacob B, Polasani R, and **Hwang C**. Real-world effectiveness of the pegfilgrastim on-body injector in preventing severe neutropenia. *J Oncol Pharm Pract* 2020; Epub ahead of print. PMID: 33323023. Full Text

Mahajan M, **Venkatesulu BP**, **Sallam O**, **Taneja K**, **Scott M**, and **Brar I**. Unmasking lymphoma immune reconstitution inflammatory syndrome in a patient with pyrexia of unknown origin: a case report. *J Egypt Natl Canc Inst* 2020; 32(1):8. PMID: 32372315. Full Text

McCord J, **Hana A**, **Cook B**, **Hudson MP**, **Miller J**, Akoegbe G, Mueller C, **Moyer M**, Jacobsen G, and **Nowak R**. The Role of Cardiac Testing with the 0/1-Hour High-Sensitivity Cardiac Troponin Algorithm Evaluating for Acute Myocardial Infarction. *Am Heart J* 2020; Epub ahead of print. PMID: 33373603. Full Text

Meighani A, **Alimirah M**, **Ramesh M**, and **Salgia R**. Fecal Microbiota Transplantation for Clostridioides Difficile Infection in Patients with Chronic Liver Disease. *Int J Hepatol* 2020; 2020:1874570. PMID: 32047670. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Morrison A, **Brar I**, **Willens D**, and **Thomas E**. Collaboration Improves PrEP Care for Providers and Patients. *Am J Med* 2020; 133(5):e212. PMID: 32450956. Full Text

Nair S, **Garza N**, **George M**, and **Kaatz S**. Treatment of Acute Venous Thromboembolism. *Med Clin North Am* 2020; 104(4):631-646. PMID: 32505257. Full Text

Patel S, **Jamoor K**, **Khan A**, and **Maskoun W**. Late onset complete heart block after transcatheter aortic valve replacement treated with permanent his-bundle pacing. *Pacing Clin Electrophysiol* 2020; Epub ahead of print. PMID: 32940376. Full Text

Piscoya A, **Ng-Sueng LF**, Parra Del Riego A, Cerna-Viacava R, Pasupuleti V, Roman YM, Thota P, White CM, and Hernandez AV. Efficacy and harms of remdesivir for the treatment of COVID-19: A systematic review and meta-analysis. *PLoS One* 2020; 15(12):e0243705. PMID:

33301514. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Ramireddy S, **Gudipati S**, and **Zervos M**. Expect the Unexpected: A Rare Case of Pseudomonas aerguinosa Endocarditis. *IDCases* 2020; 21:e00787. PMID: 32399394. Full Text

Refaai MA, **Shah V**, and Fernando R. Performance of the microINR Point-of-Care System: A Multicenter Clinical Trial. *Thromb Haemost* 2020; 120(4):687-691. PMID: 32299116. Full Text

Slota AA, Malik D, and Hall D. Pseudo-Thrombocytosis Caused by Extreme Microcytosis in a Patient with Alpha Thalassemia Trait. *Indian J Hematol Blood Transfus* 2020; 36(4):779-780. PMID: 33100731. Full Text

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated With Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6):e2012270. PMID: 32543702. Full Text

Talari G, **Demertzis ZD**, **Summey RD**, **Gill B**, and **Kaatz S**. Perioperative management of anticoagulation. *Hosp Pract (1995)* 2020; 48(5):231-240. PMID: 32627607. Request Article

Tawfik GM, Giang HTN, Ghozy S, **Altibi AM**, Kandil H, Le HH, Eid PS, Radwan I, Makram OM, Hien TTT, Sherif M, Hossain AS, Thang TLL, Puljak L, Salem H, Numair T, Moji K, and Huy NT. Protocol registration issues of systematic review and meta-analysis studies: a survey of global researchers. *BMC Med Res Methodol* 2020; 20(1):213. PMID: 32842968. Full Text

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Venkatesulu BP, Giridhar P, Malouf TD, Trifletti DM, and Krishnan S. A systematic review of the role of carbon ion radiation therapy in recurrent rectal cancer. *Acta Oncol* 2020; 59(10):1218-1223. PMID: 32476538. Request Article

Venkatesulu BP, Thoguluva Chandrasekar V, Girdhar P, Pragathee V, Patel HK, and **Manteuffel J**. The mechanistic rationale of drugs, Primary endpoints, Geographical distribution of clinical trials against Severe acute respiratory syndrome-related coronavirus-2: A Systematic Review. *J Med Virol* 2020; 93(2):843-853. PMID: 32706390. Full Text

Wang L, Pezeshkian K, Rayamajhi S, Herzallah K, Al-Abcha A, Olomu A, Kelly-Blake K, **Yu E**, and Wang DH. Relationship between blood pressure and kidney diseases in large randomized controlled trials: secondary analyses using SPRINT and ACCORD-BP trials. *J Hum Hypertens* 2020; Epub ahead of print. PMID: 33093616. Request Article

Yao Y, **Liu Q**, **Adrianto I**, **Wu X**, **Glassbrook J**, **Khalasawi N**, **Yin C**, **Yi Q**, Dong Z, Geissmann F, **Zhou L**, and **Mi QS**. Histone deacetylase 3 controls lung alveolar macrophage development

and homeostasis. *Nat Commun* 2020; 11(1):3822. PMID: 32732898. Full Text

Nephrology

Agrawal V, Plantinga L, Abdel-Kader K, Pivert K, Provenzano A, **Soman S**, Choi MJ, and Jaar BG. Burnout and Emotional Well-Being among Nephrology Fellows-a National Online Survey. *J Am Soc Nephrol* 2020; 31(4):675-685. PMID: 32123052. Full Text

Ananthasubramaniam K, and **Karthikeyan V**. Lurking in the shadows: Asymptomatic bilateral lung involvement with novel corona virus 2019 identified on myocardial perfusion SPECT CT: Implications for interpreting physicians. *J Nucl Cardiol* 2020; 27(4):1387-1390. PMID: 32529532. Full Text

Andrews AM, Zhang N, Smith AH, Loughery C, Resnicow K, Chapman R, Jenkins Riley H, Stav S, and **Yee J**. A Clustered Randomized Trial Informing Patients on Dialysis About Their Ability to Donate Organs and Tissues. *Prog Transplant* 2020; 30(3):220-227. PMID: 32567518. Full Text

Bixby AL, Shaikh SA, Naik AS, Cotiguala L, McMurry K, **Samaniego-Picota MD**, Marshall VD, and Park JM. Safety and Efficacy of Direct-acting Oral Anticoagulants Versus Warfarin in Kidney Transplant Recipients: A Retrospective Single Center Cohort Study. *Transpl Int* 2020; 33(7):740-751. PMID: 32107804. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Cotiguala L, Masood A, Park JM, **Samaniego-Picota MD**, Kaul DR, and Naik AS. Increasing Net Immunosuppression after BK Polyoma Virus Infection. *Transpl Infect Dis* 2020; Epub ahead of print. PMID: 32959930. Full Text

Davenport MS, Perazella MA, **Yee J**, Dillman JR, Fine D, McDonald RJ, Rodby RA, Wang CL, and Weinreb JC. Use of Intravenous Iodinated Contrast Media in Patients with Kidney Disease: Consensus Statements from the American College of Radiology and the National Kidney Foundation. *Radiology* 2020; 294(3):660-668. PMID: 31961246. Full Text

A, Dwyer JP, Horwitz E, Lash J, Lenoir K, McWilliams A, Oparil S, Rahbari-Oskoui F, Rahman M, Parkulo MA, Pemu P, Raj DS, Rocco M, **Soman S**, Thomas G, Tuot DS, Whelton PK, and Pajewski NM. Concordance Between Blood Pressure in the Systolic Blood Pressure Intervention Trial and in Routine Clinical Practice. *JAMA Intern Med* 2020; 180(12):1655-1663. PMID: 33044494. Full Text

McCullough PA, Eidt J, Rangaswami J, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, **Soman S**, Singh B, McCullough SP, McCullough HB, Palazzuoli A, Ruocco GM, and Ronco C. Urgent need for individual mobile phone and institutional reporting of at home, hospitalized, and intensive care unit cases of SARS-CoV-2 (COVID-19) infection. *Rev Cardiovasc Med* 2020; 21(1):1-7. PMID: 32259899. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in

Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Naik AS, Le D, Aqeel J, Wang SQ, Chowdhury M, Walters LM, Cibrik DM, **Samaniego M**, and Wiggins RC. Podocyte stress and detachment measured in urine are related to mean arterial pressure in healthy humans. *Kidney Int* 2020; 98(3):699-707. PMID: 32739208. Full Text

Nonahal K. Message from the Chair. *J Ren Nutr* 2020; 30(1):88. PMID: 31882126. Full Text

Palsson R, Colona MR, Hoenig MP, Lundquist AL, **Novak JE**, Perazella MA, and Waikar SS. Assessment of Interobserver Reliability of Nephrologist Examination of Urine Sediment. *JAMA Netw Open* 2020; 3(8)e2013959. PMID: 32821922. Full Text

Sharma Y, Nasr SH, Larsen CP, **Kemper A**, **Ormsby AH**, and **Williamson SR**. COVID-19-Associated Collapsing Focal Segmental Glomerulosclerosis: A Report of 2 Cases. *Kidney Med* 2020; 2(4):493-497. PMID: 32775990. Full Text

Shrivastava P, **Prashar R**, **Khoury N**, **Patel A**, **Yeddula S**, **Kitajima T**, **Nagai S**, and **Samaniego M**. Acute Kidney Injury in a Predominantly African American Cohort of Kidney Transplant Recipients With COVID-19 Infection. *Transplantation* 2020; 105(1):201-205. PMID: 33093403. Full Text

Singh N, Tandukar S, Zibari G, Naseer MS, Amiri HS, and **Samaniego M**. Successful Simultaneous Pancreas and Kidney Transplant in a Patient Post-COVID-19 Infection. *Kidney Int* 2020; 98(6):16151616. PMID: 32946881. Full Text

Weinreb JC, Rodby RA, **Yee J**, Wang CL, Fine D, McDonald RJ, Perazella MA, Dillman JR, and Davenport MS. Use of Intravenous Gadolinium-based Contrast Media in Patients with Kidney Disease: Consensus Statements from the American College of Radiology and the National Kidney Foundation. *Radiology* 2020; 298(1):28-35. PMID: 33170103. Full Text

Wheeler DC, Stefansson BV, Batiushin M, Bilchenko O, Cherney DZI, Chertow GM, Douthat W, Dwyer JP, Escudero E, Pecoits-Filho R, Furuland H, Górriz JL, Greene T, Haller H, Hou FF, Kang SW, Isidto R, Khullar D, Mark PB, McMurray JJV, Kashihara N, Nowicki M, Persson F, Correa-Rotter R, Rossing P, Toto RD, **Umanath K**, Van Bui P, Wittmann I, Lindberg M, Sjöström CD, Langkilde AM, and Heerspink HJL. The dapagliflozin and prevention of adverse outcomes in chronic kidney disease (DAPA-CKD) trial: baseline characteristics. *Nephrol Dial Transplant* 2020; 35(10):1700-1711. PMID: 32862232. Full Text

Affan M, Mahajan A, Rehman T, Kananeh M, **Schultz L**, and **Cerghet M**. The effect of race on clinical presentation and outcomes in neurosarcoidosis. *J Neurol Sci* 2020; 417:117073. PMID: 32771711. Full Text

Aldrich EF, Higashida R, Hmissi A, Le EJ, Macdonald RL, Marr A, **Mayer SA**, Roux S, and Bruder N. Thick and diffuse cisternal clot independently predicts vasospasm-related morbidity and poor outcome after aneurysmal subarachnoid hemorrhage. *J Neurosurg* 2020; Epub ahead of print.:1-9. PMID: 32442971. Full Text

Neurology

Ali A. Delay in OnabotulinumtoxinA Treatment During the COVID-19 Pandemic-Perspectives from a Virus Hotspot. *Headache* 2020; 60(6):1183-1186. PMID: 32359098. Full Text

Aloizou AM, Siokas V, Mentis AFA, Dastamani M, Sokratous M, Xiromerisiou G, **Mitsias PD**,

Hadjigeorgiou GM, and Dardiotis E. Advancements in the Treatment of Cerebrovascular Complications of Cancer. *Current Treatment Options in Neurology* 2020; 22(6). PMID: Not assigned. Full Text

Anand SK, **Macki M**, Culver LG, **Wasade VS**, Hendren S, and **Schwalb JM**. Patient navigation in epilepsy care. *Epilepsy Behav* 2020; 113:107530. PMID: 33232897. Full Text

Bansal P, **Fory EK**, **Malik S**, and **Memon AB**. Clinical Course of a Patient with Radiographically Described Acute Necrotizing Encephalopathy (ANE). *Radiology* 2020; 297(2):E278-E280. PMID: 32787703. Full Text

Barohn RJ, Gajewski B, Pasnoor M, Brown A, Herbelin LL, Kimminau KS, Mudaranthakam DP, Jawdat O, Dimachkie MM, Iyadurai S, Stino A, Kissel J, Pascuzzi R, Brannagan T, Wicklund M, Ahmed A, Walk D, Smith G, Quan D, Heitzman D, Tobon A, Ladha S, Wolfe G, Pulley M, Hayat G, Li Y, Thaisetthawatkul P, Lewis R, Biliciler S, Sharma K, Salajegheh K, Trivedi J, Mallonee W, Burns T, Jacoby M, Bril V, Vu T, Ramchandren S, Bazant M, Austin S, Karam C, Hussain Y, Kutz C, Twydell P, Scelsa S, Kushlaf H, Wymer J, Hehir M, Kolb N, Ralph J, Barboi A, Verma N, Ahmed M, **Memon A**, Saperstein D, Lou JS, Swenson A, and Cash T. Patient Assisted Intervention for Neuropathy: Comparison of Treatment in Real Life Situations (PAIN-CONTRoLS): Bayesian Adaptive Comparative Effectiveness Randomized Trial. *JAMA Neurol* 2020; Epub ahead of print. PMID: 32809014. Full Text

Bergman D, **Modh A**, **Schultz L**, **Snyder J**, **Mikkelsen T**, **Shah M**, Ryu S, **Siddiqui MS**, and **Walbert T**. Randomized prospective trial of fractionated stereotactic radiosurgery with chemotherapy versus chemotherapy alone for bevacizumab-resistant high-grade glioma. *J Neurooncol* 2020; 148(2):353-361. PMID: 32444980. Full Text

Bowyer SM, Pang EW, Huang M, Papanicolaou AC, and Lee RR. Presurgical Functional Mapping with Magnetoencephalography. *Neuroimaging Clin N Am* 2020; 30(2):159-174. PMID: 32336404. Full Text

Bowyer SM, **Zillgitt A**, Greenwald M, and Lajiness-O'Neill R. Language Mapping With Magnetoencephalography: An Update on the Current State of Clinical Research and Practice With Considerations for Clinical Practice Guidelines. *J Clin Neurophysiol* 2020; 37(6):554-563. PMID: 33165228. Full Text

Carlson AP, Hanggi D, Wong GK, Etminan N, **Mayer SA**, Aldrich F, Diringer MN, Schmutzhard E, Faleck HJ, Ng D, Saville BR, Bleck T, Grubb R, Jr., Miller M, Suarez JI, Proskin HM, and Macdonald RL. Single-Dose Intraventricular Nimodipine Microparticles Versus Oral Nimodipine for Aneurysmal Subarachnoid Hemorrhage. *Stroke* 2020; 51(4):1142-1149. PMID: 32138631. Full Text

Carneiro T, Dashkoff J, Leung LY, Nobleza COS, Marulanda-Londono E, Hathidara M, Koch S, Sur N, Boske A, Voetsch B, **Aboul Nour H**, **Miller DJ**, Daneshmand A, Shulman J, Curiale G, Greer DM, Romero JR, Anand P, and Cervantes-Arslanian AM. Intravenous tPA for Acute Ischemic Stroke in Patients with COVID-19. *J Stroke Cerebrovasc Dis* 2020; 29(11):105201. PMID: 33066885. Full Text

Chaudhry F, **Bulka H**, **Rathnam AS**, Said OM, Lin J, **Lorigan H**, Bernitsas E, Rube J, Korzeniewski SJ, **Memon AB**, Levy PD, **Schultz L**, Javed A, Lisak R, and **Cerghet M**. COVID-19 in multiple sclerosis patients and risk factors for severe infection. *J Neurol Sci* 2020; 418:117147. PMID: 32980780. Full Text

Chesnut R, Aguilera S, Buki A, Bulger E, Citerio G, Cooper DJ, Arrastia RD, Diringer M, Figaji A, Gao G, Geocadin R, Ghajar J, Harris O, Hoffer A, Hutchinson P, Joseph M, Kitagawa R, Manley G, **Mayer S**, Menon DK, Meyfroidt G, Michael DB, Oddo M, Okonkwo D, Patel M, Robertson C, Rosenfeld JV, Rubiano AM, Sahuquillo J, Servadei F, Shutter L, Stein D, Stocchetti N, Taccone FS, Timmons S, Tsai E, Ullman JS, Vespa P, Videtta W, Wright DW, Zammit C, and Hawryluk GWJ. A management algorithm for adult patients with both brain oxygen and intracranial pressure monitoring: the Seattle International Severe Traumatic Brain Injury Consensus Conference (SIBICC). *Intensive Care Med* 2020; 46(5):919929. PMID: 31965267. Full Text

Cissé FA, **Osman GM**, Legros B, Depondt C, Hirsch LJ, Struck AF, and Gaspard N. Validation of an algorithm of time-dependent electro-clinical risk stratification for electrographic seizures (TERSE) in critically ill patients. *Clin Neurophysiol* 2020; 131(8):1956-1961. PMID: 32622337. Full Text

Consortium ITP-CAoWG, and **Mikkelsen T**. Pan-cancer analysis of whole genomes. *Nature* 2020; 578(7793):82-93. PMID: 32025007. Full Text

Dakay K, Kaur G, Gulko E, Santarelli J, Bowers C, **Mayer SA**, Gandhi CD, and Al-Mufti F. Reversible cerebral vasoconstriction syndrome and dissection in the setting of COVID-19 infection. *J Stroke Cerebrovasc Dis* 2020; 29(9):105011. PMID: 32807426. Full Text

Delly F, Syed MJ, Lisak RP, and Zutshi D. Myasthenic crisis in COVID-19. *J Neurol Sci* 2020; 414:116888. PMID: 32413767. Full Text

Dharaiya D, and **Memon AB**. Palatal myoclonus secondary to neurosarcoidosis. *Clin Case Rep* 2020; 8(3):587-588. PMID: 32185071. Full Text

Dickey AS, **Mitsias PD**, Olango WM, Agan MC, Roche WP, Thomas JR, Rodrigues GM, Frankel MR, Ratcliff JJ, Nogueira RG, Haussen DC, and Karakis I. The Prognostic Value of Quantitative EEG in Patients Undergoing Mechanical Thrombectomy for Acute Ischemic Stroke. *J Clin Neurophysiol* 2020; Epub ahead of print. PMID: 32804879. Full Text

Fan B, **Pan W**, **Wang X**, **Wei M**, **He A**, **Zhao A**, **Chopp M**, **Zhang ZG**, and **Liu XS**. Long non-coding RNA mediates stroke-induced neurogenesis. *Stem Cells* 2020; 38(8):973-985. PMID: 32346940. Full Text

Farbman ES, Waters CH, **LeWitt PA**, Rudzińska M, Klingler M, Lee A, Qian J, Oh C, and Hauser RA. A 12-month, dose-level blinded safety and efficacy study of levodopa inhalation powder (CVT-301, Inbrija) in patients with Parkinson's disease. *Parkinsonism Relat Disord* 2020; 81:144-150. PMID: 33130477. Full Text

Francis R, Singh PK, Singh S, **Giri S**, and Kumar A. Glycolytic inhibitor 2-deoxyglucose suppresses inflammatory response in innate immune cells and experimental staphylococcal endophthalmitis. *Exp Eye Res* 2020; 197:108079. PMID: 32454039. Request Article

Francoeur CL, Lee J, Dangayach N, Gidwani U, and **Mayer SA**. Non-invasive cerebral perfusion monitoring in cardiac arrest patients: a prospective cohort study. *Clin Neurol Neurosurg* 2020; 196:105970. PMID: 32505869. Full Text

Frisoli TM, **So CY**, **Guruswamy JG**, **Chebl AB**, **Lee JC**, and **Eng MH**. Vacuuming in Crowded Dangerous Spaces: Aspiration of Large Ascending Aortic Thrombus. *JACC: Case Reports* 2020; 2(12):1979-1983. PMID: Not assigned. Full Text

Gan X, **Chopp M**, **Xin H**, **Wang F**, **Golembieski W**, **Lu M**, He L, and **Liu Z**. Targeted tPA overexpression in denervated spinal motor neurons promotes stroke recovery in mice. *J Cereb Blood Flow Metab* 2020; 41(1):92-104. PMID: 31987011. Full Text

Gilbert MR, Yuan Y, Wu J, Mendoza T, Vera E, Omuro A, Lieberman F, Robins HI, Gerstner ER, Wu J, Wen PY, **Mikkelsen T**, Aldape K, and Armstrong TS. A Phase II Study of Dose-Dense Temozolomide and Lapatinib for Recurrent Low-Grade and Anaplastic Supratentorial, Infratentorial, and Spinal Cord Ependymoma. *Neuro Oncol* 2020; Epub ahead of print. PMID: 33085768. Full Text

Gorgis S, **Dabbagh MF**, **Mishra K**, **Ahluwalia G**, **Hana A**, **Fram G**, **Dhillon D**, **Lemor A**, **Khan A**, **Miller D**, **Kaatz S**, **O'Neill WW**, and **Wang DD**. Unprotected discharge: absence of stroke prevention strategies in patients with atrial fibrillation admitted for bleeding. *J Interv Card Electrophysiol* 2020; Epub ahead of print. PMID: 33119818. Full Text

Grover KM, and **Sripathi N**. Myasthenia Gravis and Pregnancy. *Muscle Nerve* 2020; 62(6):664-672. PMID: 32929722. Full Text

Haider SA, **Asmaro K**, **Kalkanis SN**, **Lee IY**, **Bazydlo M**, **Nerenz DR**, Salloum RG, **Snyder J**, and **Walbert T**. The Economic Impact of Glioma Survivorship: the cost of care from a patient perspective. *Neurology* 2020; 95(11):e1575-e1581. PMID: 32646959. Full Text

Hamalainen M, Huang M, and **Bowyer SM**. Magnetoencephalography Signal Processing, Forward Modeling, Magnetoencephalography Inverse Source Imaging, and Coherence Analysis. *Neuroimaging Clin N Am* 2020; 30(2):125-143. PMID: 32336402. Full Text

Hogan J, Sun H, **Nour HA**, Jing J, Tabaeizadeh M, Shoukat M, Javed F, Kassa S, Edhi MM, Bordbar E, Gallagher J, Junior VM, Ghanta M, Shao YP, Akeju O, Cole AJ, Rosenthal ES, Zafar S, and Westover MB. Burst Suppression: Causes and Effects on Mortality in Critical Illness. *Neurocrit Care* 2020; 33(2):565-574. PMID: 32096120. Full Text

Ioannidis SG, and **Mitsias PD**. Patent Foramen Ovale in Cryptogenic Ischemic Stroke: Direct Cause, Risk Factor, or Incidental Finding? *Front Neurol* 2020; 11:567. PMID: 32670184. Full Text

Ironside N, Chen CJ, Mutasa S, Sim JL, Ding D, Marfatiah S, Roh D, Mukherjee S, Johnston KC, Southerland AM, **Mayer SA**, Lignelli A, and Connolly ES. Fully Automated Segmentation Algorithm for Perihematomal Edema Volumetry After Spontaneous Intracerebral Hemorrhage. *Stroke* 2020; 51(3):815823. PMID: 32078476. Full Text

Jamali-Dinan SS, **Soltanian-Zadeh H**, **Bowyer SM**, Almohri H, Dehghani H, Elisevich K, and NazemZadeh MR. A Combination of Particle Swarm Optimization and Minkowski Weighted K-Means Clustering: Application in Lateralization of Temporal Lobe Epilepsy. *Brain Topogr* 2020; 33(4):519-532. PMID: 32347472. Full Text

Kananeh MF, **Brady PD**, **Mehta CB**, **Louchart LP**, **Rehman MF**, **Schultz LR**, Lewis A, and Varelas PN. Factors that affect consent rate for organ donation after brain death: A 12-year registry. *J Neurol Sci* 2020; 416:117036. PMID: 32693247. Full Text

Kaur J, **Davoodi-Bojd E**, **Fahmy LM**, **Zhang L**, **Ding G**, Hu J, **Zhang Z**, **Chopp M**, and **Jiang Q**. Magnetic Resonance Imaging and Modeling of the Glymphatic System. *Diagnostics (Basel)*

2020; 10(6). PMID: 32471025. Full Text

Larivière S, Rodríguez-Cruces R, Royer J, Caligiuri ME, Gambardella A, Concha L, Keller SS, Cendes F, Yasuda C, Bonilha L, Gleichgerrcht E, Focke NK, Domin M, von Podewills F, Langner S, Rummel C, Wiest R, Martin P, Kotikalapudi R, O'Brien TJ, Sinclair B, Vivash L, Desmond PM, Alhusaini S, Doherty CP, Cavalleri GL, Delanty N, Kälviäinen R, Jackson GD, Kowalczyk M, Mascalchi M, Semmelroch M, Thomas RH, **Soltanian-Zadeh H**, **Davoodi-Bojd E**, Zhang J, Lenge M, Guerrini R, Bartolini E, Hamandi K, Foley S, Weber B, Depondt C, Absil J, Carr SJA, Abela E, Richardson MP, Devinsky O, Severino M, Striano P, Tortora D, Hatton SN, Vos SB, Duncan JS, Whelan CD, Thompson PM, Sisodiya SM, Bernasconi A, Labate A, McDonald CR, Bernasconi N, and Bernhardt BC. Network-based atrophy modeling in the common epilepsies: A worldwide ENIGMA study. *Sci Adv* 2020; 6(47). PMID: 33208365. Full Text

A, **Davoodi-Bojd E**, Fahmy L, **Li L**, Nejad-Davarani SP, **Chopp M**, **Jiang Q**, and **Cerghet M**. Impairments of white matter tracts and connectivity alterations in five cognitive networks of patients with multiple sclerosis. *Clin Neurol Neurosurg* 2020; 201:106424. PMID: 33348120. Full Text

LeWitt PA. Dopamine Metabolite Biomarkers and Testing for Disease Modification in Parkinson Disease. *JAMA Neurol* 2020; 77(8):1038-1039. PMID: 32597929. Full Text

LeWitt PA, Kymes S, and Hauser RA. Parkinson Disease and Orthostatic Hypotension in the Elderly: Recognition and Management of Risk Factors for Falls. *Aging Dis* 2020; 11(3):679-691. PMID: 32489712. Full Text

Li L, **Chopp M**, **Ding G**, **Davoodi-Bojd E**, **Zhang L**, **Li Q**, **Zhang Y**, **Xiong Y**, and **Jiang Q**. MRI Detection of Impairment of Glymphatic Function in Rat after Mild Traumatic Brain Injury. *Brain Res* 2020; 1747:147062. PMID: 32818526. Full Text

Li L, **Li R**, **Zacharek A**, **Wang F**, **Landschoot-Ward J**, **Chopp M**, **Chen J**, and **Cui X**. ABCA1/ApoE/HDL Signaling Pathway Facilitates Myelination and Oligodendrogenesis after Stroke. *Int J Mol Sci* 2020; 21(12). PMID: 32575457. Full Text

Li R, Yuan Q, Su Y, **Chopp M**, Yan T, and **Chen J**. Immune response mediates the cardiac damage after subarachnoid hemorrhage. *Exp Neurol* 2020; 323:113093. PMID: 31676318. Full Text

Li W, **Chopp M**, **Zacharek A**, Yang W, **Chen Z**, **Landschoot-Ward J**, **Venkat P**, and **Chen J**. SUMO1 Deficiency Exacerbates Neurological and Cardiac Dysfunction after Intracerebral Hemorrhage in Aged Mice. *Transl Stroke Res* 2020; Epub ahead of print. PMID: 32761461. Request Article

Li W, Li L, **Li W**, **Chopp M**, **Venkat P**, **Zacharek A**, **Chen Z**, **Landschoot-Ward J**, and **Chen J**. Spleen associated immune-response mediates brain-heart interaction after intracerebral hemorrhage. *Exp Neurol* 2020; 327:113209. PMID: 31987832. Full Text

Lima M, Siokas V, Aloizou AM, Liampas I, Mentis AA, Tsouris Z, Papadimitriou A, **Mitsias PD**, Tsatsakis A, Bogdanos DP, Baloyannis SJ, and Dardiotis E. Unraveling the Possible Routes of SARS-COV-2 Invasion into the Central Nervous System. *Curr Treat Options Neurol* 2020; 22(11):37. PMID: 32994698. Full Text

Liu X, **Fan B**, **Chopp M**, and **Zhang Z**. Epigenetic Mechanisms Underlying Adult Post Stroke Neurogenesis. *Int J Mol Sci* 2020; 21(17). PMID: 32867041. Full Text

LoCastro E, Paudyal R, Mazaheri Y, Hatzoglou V, Oh JH, Lu Y, Konar AS, Vom Eigen K, Ho A, **Ewing JR**, Lee N, Deasy JO, and Shukla-Dave A. Computational Modeling of Interstitial Fluid Pressure and Velocity in Head and Neck Cancer Based on Dynamic Contrast-Enhanced Magnetic Resonance Imaging: Feasibility Analysis. *Tomography* 2020; 6(2):129-138. PMID: 32548289. Full Text

Mac Grory B, Nackenoff A, Poli S, Spitzer MS, Nedelmann M, Guillon B, Preterre C, Chen CS, Lee AW, Yaghi S, Stretz C, Azher I, Paddock J, Bakaeva T, Greer DM, Shulman JG, **Kowalski RG**, Lavin P, Mistry E, Espaillat K, Furie K, Kirshner H, and Schrag M. Intravenous Fibrinolysis for Central Retinal Artery Occlusion: A Cohort Study and Updated Patient-Level Meta-Analysis. *Stroke* 2020; 51(7):2018-2025. PMID: 32568646. Full Text

Macki M, Mahajan A, Shatz R, **Air EL**, **Novikova M**, Fakih M, Elmenini J, **Kaur M**, **Bouchard KR**, **Funk BA**, and **Schwalb JM**. Prevalence of Alternative Diagnoses and Implications for Management in Idiopathic Normal Pressure Hydrocephalus Patients. *Neurosurgery* 2020; 87(5):999-1007. PMID: 32472677. Full Text

Maideniuc C, and **Memon AB**. Acute necrotizing myelitis and acute motor axonal neuropathy in a COVID19 patient. *J Neurol* 2020; Epub ahead of print. PMID: 32772172. Full Text

Manara A, **Varelas P**, and Smith M. Neurological determination of death in isolated brainstem lesions: A case report to highlight the issues involved. *J Intensive Care Soc* 2020; 21(3):269-273. PMID: 32782467. Full Text

Mastorodemos VC, Ioannidis SG, Papadaki EZ, and **Mitsias PD**. Posterior Reversible Encephalopathy Syndrome, Multiple Sclerosis and interferon therapy: Association, co-incidence or convoluted interplay? *Mult Scler Relat Disord* 2020; 45:102356. PMID: 32659736. Full Text

Mayer SA, and Viarasilpa T. Response by Mayer and Viarasilpa to Letter Regarding Article, "CTA-for-All: Impact of Emergency Computed Tomographic Angiography for All Patients With Stroke Presenting Within 24 Hours of Onset". *Stroke* 2020; 51(2):e43. PMID: 31914886. Full Text

Medalla M, Chang W, Calderazzo SM, Go V, Tsolias A, Goodliffe JW, Pathak D, De Alba D, Pessina M, Rosene DL, **Buller B**, and Moore TL. Treatment with Mesenchymal-Derived Extracellular Vesicles Reduces Injury-Related Pathology in Pyramidal Neurons of Monkey Perilesional Ventral Premotor Cortex. *J Neurosci* 2020; 40(17):3385-3407. PMID: 32241837. Full Text

Michaelidou K, Tsiverdis I, Erimaki S, Papadimitriou D, Amoiridis G, Papadimitriou A, **Mitsias P**, and Zaganas I. Whole exome sequencing establishes diagnosis of Charcot-Marie-Tooth 4J, 1C, and X1 subtypes. *Mol Genet Genomic Med* 2020; 8(4):e1141. PMID: 32022442. Full Text

Mistry EA, Dakay K, Petersen NH, Jayaraman M, McTaggart R, Furie K, Mistry A, Mehta T, Arora N, De Los Rios La Rosa F, Starosciak AK, Siegler JE, Barnhill N, Patel K, **Assad S**, **Tarboosh A**, Cruz AS, Wagner J, Fortuny E, Bennett A, James RF, Jagadeesan BD, Streib C, Kasner S, Weber S, Chitale RV, Volpi J, **Mayer SA**, Khatri P, and Yaghi S. Pre-endovascular therapy change in blood pressure is associated with outcomes in patients with stroke. *J Neurol Neurosurg Psychiatry* 2020; 91(4):438-439. PMID: 32029540. Full Text

Mitsias PD. Early Neurological Deterioration After Intravenous Thrombolysis: Still No End in Sight in the Quest for Understanding END. *Stroke* 2020; 51(9):2615-2617. PMID: 32811379. Full Text

Moffet EW, Subramaniam T, Hirsch LJ, Gilmore EJ, Lee JW, Rodriguez-Ruiz AA, Haider HA, Dhakar MB, Jadeja N, **Osman G**, Gaspard N, and Struck AF. Validation of the 2HELPS2B Seizure Risk Score in Acute Brain Injury Patients. *Neurocrit Care* 2020; 33(3):701-707. PMID: 32107733. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Morris DC, **Jaehne AK**, **Chopp M**, **Zhang Z**, **Poisson L**, **Chen Y**, **Datta I**, and **Rivers EP**. Proteomic Profiles of Exosomes of Septic Patients Presenting to the Emergency Department Compared to Healthy Controls. *J Clin Med* 2020; 9(9). PMID: 32932765. Full Text

Nair DR, Laxer KD, Weber PB, Murro AM, Park YD, **Barkley GL**, Smith BJ, Gwinn RP, Doherty MJ, Noe KH, Zimmerman RS, Bergey GK, Anderson WS, Heck C, Liu CY, Lee RW, Sadler T, Duckrow RB, Hirsch LJ, Wharen RE, Jr., Tatum W, Srinivasan S, McKhann GM, Agostini MA, Alexopoulos AV, Jobst BC, Roberts DW, Salanova V, Witt TC, Cash SS, Cole AJ, Worrell GA, Lundstrom BN, Edwards JC, Halford JJ, Spencer DC, Ernst L, Skidmore CT, Sperling MR, Miller I, Geller EB, Berg MJ, Fessler AJ, Rutecki P, Goldman AM, Mizrahi EM, Gross RE, Shields DC, Schwartz TH, Labar DR, Fountain NB, Elias WJ, Olejniczak PW, Villemarette-Pittman NR, Eisenschenk S, Roper SN, Boggs JG, Courtney TA, Sun FT, Seale CG, Miller KL, Skarpaas TL, and Morrell MJ. Nine-year prospective efficacy and safety of brainresponsive neurostimulation for focal epilepsy. *Neurology* 2020; 95(9):e1233-e1256. PMID: 32690786. Full Text

Nejad-Davarani SP, **Zakariaei N**, Chen Y, Haacke EM, **Hurst NJ**, **Siddiqui MS**, **Schultz LR**, **Snyder JM**, **Walbert T**, and **Glide-Hurst C**. Rapid Multi-contrast Brain Imaging on a 0.35T MR-linac. *Med Phys* 2020; 47(9):4064-4076. PMID: 32434276. Full Text

Noh T, **Osman G**, **Chedid M**, and **Hefzy H**. Nitrous oxide-induced demyelination: Clinical presentation, diagnosis and treatment recommendations. *J Neurol Sci* 2020; 414:116817. PMID: 32302804. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3):E397-E399. PMID: 32496518. Full Text

Parikh NS, Kamel H, Navi BB, Iadecola C, Merkler AE, Jesudian A, Dawson J, Falcone GJ, Sheth KN, Roh DJ, Elkind MSV, Hanley DF, Ziai WC, Murthy SB, and **Mayer SA**. Liver Fibrosis Indices and Outcomes After Primary Intracerebral Hemorrhage. *Stroke* 2020; 51(3):830-837. PMID: 31906832. Full Text

Popugaev KA, Bakharev SA, Kiselev KV, Samoylov AS, Kruglykov NM, Abudeev SA, Zhuravel

SV, Shabanov AK, Mueller T, **Mayer SA**, and Petrikov SS. Clinical and pathophysiologic aspects of ECMOassociated hemorrhagic complications. *PLoS One* 2020; 15(10):e0240117. PMID: 33048966. Full Text

Qian Y, **Chopp M**, and **Chen J**. Emerging role of microRNAs in ischemic stroke with comorbidities. *Exp Neurol* 2020; 331:113382. PMID: 32561412. Full Text

Ramadan AR, **Alsrouji OK**, **Cerghet M**, **Chopp M**, **Danoun O**, **Grover KM**, **Ismail M**, **Katramados AM**, **Mohamed GA**, **Mehta CB**, **Newman DS**, **Osman G**, **Reuther J**, **Sallowm Y**, **Zaman IF**, and **Barkley GL**. Tales of a department: How the COVID-19 pandemic transformed Detroit's Henry Ford Hospital, Department of Neurology - Part I: The surge. *BMJ Neurology Open* 2020; 2(1). PMID: Not assigned. Full Text

Rodgers SA, **Suneja A**, **Yoshida A**, **Abouljoud MS**, and **Otrock ZK**. Paradoxical embolic strokes in a liver transplant recipient with atrial septal defect undergoing therapeutic plasma exchange. *J Clin Apher* 2020; Epub ahead of print. PMID: 33058311. Full Text

Schefold JC, Backlund M, Ala-Kokko T, Zuercher P, Mukherjee R, Mistry S, **Mayer SA**, Dziewas R, Bakker J, and Jakob SM. The PhINEST study - Pharyngeal ICU Novel Electrical Stimulation Therapy: Study protocol of a prospective, multi-site, randomized, sham-controlled, single-blind (outcome assessorblinded) study. *Medicine (Baltimore)* 2020; 99(11):e19503. PMID: 32176093. Full Text

Shaikh AG, Beylergil SB, Scorr L, Kilic-Berkmen G, Freeman A, Klein C, Junker J, Loens S, Brüggemann N, Münchau A, Bäumer T, Vidailhet M, Roze E, Bonnet C, Jankovic J, Jimenez-Shahed J, **Patel N**, Marsh L, Comella C, Barbano RL, Berman BD, Malaty I, Shukla AW, Reich SG, Ledoux MS, Berardelli A, Ferrazzano G, Stover N, Ondo W, Richardson SP, Saunders-Pullman R, Mari Z, Agarwal P, Adler C, Chouinard S, Fox SH, Brashear A, Truong D, Suchowersky O, Frank S, Factor S, Perlmutter J, and Jinnah HA. Dystonia & tremor: A cross-sectional study of the dystonia coalition cohort. *Neurology* 2020; Epub ahead of print. PMID: 33046615. Full Text

Shen Y, Hu J, Eteer K, Chen Y, Buch S, Alhourani H, Shah K, **Jiang Q**, Ge Y, and Haacke EM. Detecting sub-voxel microvasculature with USPIO-enhanced susceptibility-weighted MRI at 7 T. *Magn Reson Imaging* 2020; 67:90-100. PMID: 31911199. Full Text

Sico JJ, Sarwal A, Benish SM, Busis NA, Cohen BH, Das RR, Finsilver S, **Halperin JJ**, Kelly AG, Meunier L, Phipps MS, Thirumala PD, Villanueva R, von Gaudecker J, Bennett A, and Shenoy AM. Quality improvement in neurology: Neurology Outcomes Quality Measurement Set. *Neurology* 2020; 94(22):982-990. PMID: 32398356. Full Text

Siegler JE, Messe SR, Sucharew H, Kasner SE, Mehta T, Arora N, Starosciak AK, De Los Rios La Rosa F, Barnhill NR, Mistry AM, Patel K, Assad S, Tarboosh A, Dakay K, Wagner J, Bennett A, Jagadeesan B, Streib C, Weber SA, Chitale R, Volpi JJ, **Mayer SA**, Yaghi S, Jayaraman MV, Khatri P, and Mistry EA. Noncontrast CT versus Perfusion-Based Core Estimation in Large Vessel Occlusion: The Blood Pressure after Endovascular Stroke Therapy Study. *J Neuroimaging* 2020; 30(2):219-226. PMID: 31762108. Full Text

Singh J, and **Ali A**. Headache as the Presenting Symptom in 2 Patients with COVID-19 and a History of Migraine: 2 Case Reports. *Headache* 2020; 60(8):1773-1776. PMID: 32521062. Full Text

Singh S, Singh PK, **Suhail H**, Arumugaswami V, Pellett PE, **Giri S**, and Kumar A. AMP-

Activated Protein Kinase Restricts Zika Virus Replication in Endothelial Cells by Potentiating Innate Antiviral Responses and Inhibiting Glycolysis. *J Immunol* 2020; 204(7):1810-1824. PMID: 32086387. Full Text

Skiba V, **Novikova M**, **Suneja A**, **McLellan B**, and **Schultz L**. Use of Positive Airway Pressure in Mild Cognitive Impairment to Delay Progression to Dementia. *J Clin Sleep Med* 2020; 16(6):863-870. PMID: 32039755. Full Text

Suri R, and **Ali A**. Coining the Pablo Picasso Syndrome. *Headache* 2020; 60(3):626-629. PMID: 31957015. Full Text

Syed MJ, Lisak RP, **Delly F**, and Zutshi D. Reply from the authors: Myasthenic crises in COVID-19. *J Neurol Sci* 2020; 417:117061. PMID: 32741591. Full Text

Tsivgoulis G, Goyal N, Katsanos AH, Malhotra K, Ishfaq MF, Pandhi A, Frohler MT, Spiotta AM, Anadani M, Psychogios M, Maus V, Siddiqui A, Waqas M, Schellinger PD, Groen M, Krogias C, Richter D, Saqqur M, Garcia-Bermejo P, Mokin M, Leker R, Cohen JE, Magoufis G, Psychogios K, Lioutas VA, Van Nostrand M, Sharma VK, Paciaroni M, Rentzos A, Shoirah H, Mocco J, Nickele C, **Mitsias PD**, Inoa V, Hoit D, Elijovich L, Arthur AS, and Alexandrov AV. Intravenous thrombolysis for large vessel or distal occlusions presenting with mild stroke severity. *Eur J Neurol* 2020; 27(6):1039-1047. PMID: 32149450. Full Text

Venkat P, **Cui C**, **Chen Z**, **Chopp M**, **Zacharek A**, **Landschoot-Ward J**, **Culmone L**, **Yang XP**, **Xu J**, and **Chen J**. CD133+Exosome Treatment Improves Cardiac Function after Stroke in Type 2 Diabetic Mice. *Transl Stroke Res* 2020; Epub ahead of print. PMID: 32198711. Request Article

Venkat P, **Ning R**, **Zacharek A**, **Culmone L**, **Liang L**, **Landschoot-Ward J**, and **Chopp M**. Treatment with an Angiopoietin-1 mimetic peptide promotes neurological recovery after stroke in diabetic rats. *CNS Neurosci Ther* 2020; Epub ahead of print. PMID: 33346402. Full Text

Venkat P, **Zacharek A**, **Landschoot-Ward J**, **Wang F**, **Culmone L**, **Chen Z**, **Chopp M**, and **Chen J**. Exosomes derived from bone marrow mesenchymal stem cells harvested from type two diabetes rats promotes neurorestorative effects after stroke in type two diabetes rats. *Exp Neurol* 2020; 334:113456. PMID: 32889008. Full Text

Viarasilpa T, Ghosh P, Gidwani S, Lantigua H, De Marchis GM, Panyavachiraporn N, Schmidt JM, Lee K, Badjatia N, Agarwal S, Claassen J, and **Mayer SA**. Prognostic Significance of Sentinel Headache Preceding Aneurysmal Subarachnoid Hemorrhage. *World Neurosurg* 2020; 139:e672-e676. PMID: 32339738. Full Text

Viarasilpa T, **Panyavachiraporn N**, **Marashi SM**, **Van Harn M**, **Kowalski RG**, and **Mayer SA**. Prediction of Symptomatic Venous Thromboembolism in Critically Ill Patients: The ICU-Venous Thromboembolism Score. *Crit Care Med* 2020; 48(6):e470-e479. PMID: 32187076. Full Text

Viarasilpa T, **Panyavachiraporn N**, **Osman G**, **Kowalski RG**, **Miller J**, **Barkley GL**, and **Mayer SA**. Differentiation of psychogenic nonepileptic attacks from status epilepticus among patients intubated for convulsive activity. *Epilepsy Behav* 2020; 115:107679. PMID: 33360401. Full Text

Wagley N, Lajiness-O'Neill R, Hay JSF, **Bowyer SM**, Ugolini M, Kovelman I, and Brennan JR. Predictive processing during a naturalistic statistical learning task in ASD. *eNeuro* 2020; 7(6). PMID: 33199412. Full Text

Wang C, **Chopp M**, **Huang R**, **Li C**, **Zhang Y**, **Golembieski W**, **Lu M**, Hazan Z, **Zhang ZG**, and **Zhang L**. Delayed (21 Days) Post Stroke Treatment With RPh201, a Botany-Derived Compound, Improves Neurological Functional Recovery in a Rat Model of Embolic Stroke. *Front Neurosci* 2020; 14:813. PMID: 32848574. Full Text

Wang H, **Jiang Q**, Shen Y, **Zhang L**, Haacke EM, Ge Y, Qi S, and Hu J. The capability of detecting small vessels beyond the conventional MRI sensitivity using iron-based contrast agent enhanced susceptibility weighted imaging. *NMR Biomed* 2020; 33(5):e4256. PMID: 32045957. Full Text

Wang L, **Chopp M**, **Szalad A**, **Lu X**, **Zhang Y**, **Wang X**, **Cepparulo P**, **Lu M**, **Li C**, and **Zhang ZG**. Exosomes Derived From Schwann Cells Ameliorate Peripheral Neuropathy in Type II Diabetic Mice. *Diabetes* 2020; 69(4):749-759. PMID: 31915154. Full Text

Wasade VS, and **Schultz L**. Reply to: Effect of seizure timing on long-term survival in brain tumor patients. *Epilepsy Behav* 2020; Epub ahead of print. PMID: 33239218. Full Text

Wasade VS, Viarasilpa T, Balki I, **Osman G**, **Gaddam A**, Dharaiya D, **Pellumbi N**, **Snyder J**, **Walbert T**, Spanaki M, and **Schultz L**. Effect of seizure timing on long-term survival in patients with brain tumor. *Epilepsy Behav* 2020; 111:107307. PMID: 32693378. Full Text

Williams AM, Higgins GA, Bhatti UF, Biesterveld BE, Dekker SE, Kathawate RG, Tian Y, Wu Z, Kemp MT, Wakam GK, Liu B, Li Y, **Buller B**, and Alam HB. Early Treatment with Exosomes following Traumatic Brain Injury and Hemorrhagic Shock in a Swine Model Promotes Transcriptional Changes associated with Neuroprotection. *J Trauma Acute Care Surg* 2020; 89(3):536-543. PMID: 32658440. Full Text

Williams AM, Wu Z, Bhatti UF, Biesterveld BE, Kemp MT, Wakam GK, Vercruysse CA, Chtraklin K, Siddiqui AZ, Pickell Z, Dekker SE, Tian Y, Liu B, Li Y, **Buller B**, and Alam HB. Early Single-Dose Exosome Treatment Improves Neurologic Outcomes in a 7-Day Swine Model of Traumatic Brain Injury and Hemorrhagic Shock. *J Trauma Acute Care Surg* 2020; 89(2):388-396. PMID: 32218019. Full Text

Xin H, **Liu Z**, **Buller B**, **Li Y**, **Golembieski W**, **Gan X**, **Wang F**, **Lu M**, **Ali MM**, **Zhang ZG**, and **Chopp M**. MiR-17-92 enriched exosomes derived from multipotent mesenchymal stromal cells enhance axon-myelin remodeling and motor electrophysiological recovery after stroke. *J Cereb Blood Flow Metab* 2020; Epub ahead of print. PMID: 32811262. Full Text

Ye LF, Reznik E, Korn JM, Lin F, Yang G, Malesky K, Gao H, Loo A, Pagliarini R, **Mikkelsen T**, Lo DC, **deCarvalho AC**, and Stockwell BR. Patient-derived glioblastoma cultures as a tool for small-molecule drug discovery. *Oncotarget* 2020; 11(4):443-451. PMID: 32064048. Full Text

Yu X, Jiaerken Y, Wang S, Hong H, Jackson A, Yuan L, Lou M, **Jiang Q**, Zhang M, and Huang P. Changes in the Corticospinal Tract Beyond the Ischemic Lesion Following Acute Hemispheric Stroke: A Diffusion Kurtosis Imaging Study. *J Magn Reson Imaging* 2020; 52(2):512-519. PMID: 31981400. Full Text

Zafar SF, Subramaniam T, **Osman G**, Herlopian A, and Struck AF. Electrographic seizures and ictalinterictal continuum (IIC) patterns in critically ill patients. *Epilepsy Behav* 2020; 106:107037. PMID: 32222672. Full Text

Zaganas I, Mastorodemos V, Spilioti M, Mathioudakis L, Latsoudis H, Michaelidou K, Kotzamani D, Notas K, Dimitrakopoulos K, Skoula I, Ioannidis S, Klothaki E, Erimaki S, Stavropoulos G, Vassilikos V, Amoiridis G, Efthimiadis G, Evangeliou A, and **Mitsias P**. Genetic cause of heterogeneous inherited myopathies in a cohort of Greek patients. *Mol Genet Metab Rep* 2020; 25:100682. PMID: 33304817. Full Text

Zahoor I, and **Giri S**. Specialized Pro-Resolving Lipid Mediators: Emerging Therapeutic Candidates for Multiple Sclerosis. *Clin Rev Allergy Immunol* 2020; Epub ahead of print. PMID: 32495237. Full Text

Zhang Y, **Qin Y**, **Chopp M**, **Li C**, **Kemper A**, **Liu X**, **Wang X**, **Zhang L**, and **Zhang ZG**. Ischemic Cerebral Endothelial Cell-Derived Exosomes Promote Axonal Growth. *Stroke* 2020; 51(12):3701-3712. PMID: 33138691. Full Text

Zhang Y, **Zhang Y**, **Chopp M**, **Zhang ZG**, **Mahmood A**, and **Xiong Y**. Mesenchymal Stem Cell-Derived Exosomes Improve Functional Recovery in Rats After Traumatic Brain Injury: A Dose-Response and Therapeutic Window Study. *Neurorehabil Neural Repair* 2020; 34(7):616-626. PMID: 32462980. Full Text

Zhao Q, Yan T, **Chopp M**, **Venkat P**, and **Chen J**. Brain-kidney interaction: Renal dysfunction following ischemic stroke. *J Cereb Blood Flow Metab* 2020; 40(2):246-262. PMID: 31766979. Full Text

Zheng Z, **Chopp M**, and **Chen J**. Multifaceted roles of pericytes in central nervous system homeostasis and disease. *J Cereb Blood Flow Metab* 2020; 40(7):1381-1401. PMID: 32208803. Full Text

Zhou Y, Cai J, Zhang W, Gong X, Yan S, Zhang K, Luo Z, Sun J, **Jiang Q**, and Lou M. Impairment of the Glymphatic Pathway and Putative Meningeal Lymphatic Vessels in the Aging Human. *Ann Neurol* 2020; 87(3):357-369. PMID: 31916277. Full Text

Zillgitt A, **Barkley GL**, and **Bowyer SM**. Visual Mapping With Magnetoencephalography: An Update on the Current State of Clinical Research and Practice With Considerations for Clinical Practice Guidelines. *J Clin Neurophysiol* 2020; 37(6):585-591. PMID: 33165231. Full Text

Neurosurgery

Afzal M, Alam F, **Malik KM, and Malik GM.** Clinical Context-Aware Biomedical Text Summarization Using Deep Neural Network: Model Development and Validation. *J Med Internet Res* 2020; 22(10):e19810. PMID: 33095174. Full Text

Alexander C, Caras A, Miller WK, **Tahir R**, **Mansour TR**, Medhkour A, and **Marin H**. M2 segment thrombectomy is not associated with increased complication risk compared to M1 segment: A metaanalysis of recent literature. *J Stroke Cerebrovasc Dis* 2020; 29(9):105018. PMID: 32807433. Full Text

Anand SK, and **Macki M**. What have we learned from C5 palsy - A short communication. *J Clin Neurosci* 2020; 81:111-112. PMID: 33222897. Full Text

Anand SK, **Macki M**, Culver LG, **Wasade VS**, Hendren S, and **Schwalb JM**. Patient navigation in epilepsy care. *Epilepsy Behav* 2020; 113:107530. PMID: 33232897. Full Text

Ashraf O, Arzumanov G, Luther E, McMahon JT, Malcolm JG, Mansour S, **Lee IY**, Willie JT, Komotar RJ, and Danish SF. Magnetic resonance-guided laser interstitial thermal therapy for posterior fossa neoplasms. *J Neurooncol* 2020; 149(3):533-542. PMID: 33057919. Full Text

Asmaro K, **Rock J**, and **Craig J**. Expanded Endonasal Approach for Resection of Extradural Infratemporal Fossa Trigeminal Schwannoma: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown)* 2020; 19(4):E396-E397. PMID: 32348506. Full Text

Azad S, **Oravec D**, **Baumer T**, **Schildcrout A**, **White P**, **Basheer A**, **Bey MJ**, **Bartol SW**, **Chang V**, and **Yeni YN**. Dynamic foraminal dimensions during neck motion 6.5 years after fusion and artificial disc replacement. *PLoS One* 2020; 15(8):e0237350. PMID: 32780779. Full Text

Barzilai O, **Robin AM**, O'Toole JE, and Laufer I. Minimally Invasive Surgery Strategies: Changing the Treatment of Spine Tumors. *Neurosurg Clin N Am* 2020; 31(2):201-209. PMID: 32147011. Full Text

Benzil DL, Muraszko KM, Soni P, **Air EL**, Orrico KO, and Rutka JT. Toward an understanding of sexual harassment in neurosurgery. *J Neurosurg* 2020; Epub ahead of print. PMID: 33171438. Full Text

Bergman D, **Modh A**, **Schultz L**, **Snyder J**, **Mikkelsen T**, **Shah M**, Ryu S, **Siddiqui MS**, and **Walbert T**. Randomized prospective trial of fractionated stereotactic radiosurgery with chemotherapy versus chemotherapy alone for bevacizumab-resistant high-grade glioma. *J Neurooncol* 2020; 148(2):353-361. PMID: 32444980. Full Text

Bier A, **Hong X**, **Cazacu S**, Goldstein H, Rand D, **Xiang C**, **Jiang W**, Ben-Asher HW, **Attia M**, Brodie A, **She R**, **Poisson LM**, and Brodie C. miR-504 modulates the stemness and mesenchymal transition of glioma stem cells and their interaction with microglia via delivery by extracellular vesicles. *Cell Death Dis* 2020; 11(10):899. PMID: 33093452. Full Text

Caras A, Mugge L, Miller WK, **Mansour TR**, Schroeder J, and Medhkour A. Usefulness and Impact of Intraoperative Imaging for Glioma Resection on Patient Outcome and Extent of Resection: A Systematic Review and Meta-Analysis. *World Neurosurg* 2020; 134:98-110. PMID: 31639502. Full Text

Chaudhry F, **Hunt RJ**, Hariharan P, Anand SK, Sanjay S, Kjoller EE, Bartlett CM, Johnson KW, Levy PD, **Noushmehr H**, and **Lee IY**. Machine Learning Applications in the Neuro ICU: A Solution to Big Data Mayhem? *Front Neurol* 2020; 11:554633. PMID: 33162926. Full Text

Chen J, Mitra A, Li S, Song S, Nguyen BN, Chen JS, Shin JH, Gough NR, Lin P, Obias V, He AR, Yao Z, **Malta TM**, **Noushmehr H**, Latham PS, Su X, Rashid A, Mishra B, Wu RC, and Mishra L. Targeting the E3 Ubiquitin Ligase PJA1 Enhances Tumor-Suppressing TGFβ Signaling. *Cancer Res* 2020; 80(9):18191832. PMID: 32127355. Full Text

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12): e0291. PMID: 33251520. Full Text

Cloughesy TF, Petrecca K, **Walbert T**, Butowski N, Salacz M, Perry J, Damek D, Bota D, Bettegowda C, Zhu JJ, Iwamoto F, Placantonakis D, Kim L, Elder B, Kaptain G, Cachia D, Moshel Y, Brem S, Piccioni D, Landolfi J, Chen CC, Gruber H, Rao A, Hogan D, Accomando

W, Ostertag D, Montellano TT, Kheoh T, Kabbinavar F, and Vogelbaum MA. Effect of Vocimagene Amiretrorepvec in Combination With Flucytosine vs Standard of Care on Survival Following Tumor Resection in Patients With Recurrent HighGrade Glioma: A Randomized Clinical Trial. *JAMA Oncol* 2020; 6(12):1939-1946. PMID: 33119048. Full Text

Colaprico A, Olsen C, Bailey MH, Odom GJ, Terkelsen T, Silva TC, Olsen AV, Cantini L, Zinovyev A, Barillot E, **Noushmehr H**, Bertoli G, Castiglioni I, Cava C, Bontempi G, Chen XS, and Papaleo E. Interpreting pathways to discover cancer driver genes with Moonlight. *Nat Commun* 2020; 11(1):69. PMID: 31900418. Full Text

De Bonis P, Musio A, Mongardi L, Lofrese G, **La Marca F**, Visani J, Cavallo MA, and Scerrati A.
Transpars approach for L5-S1 foraminal and extra-foraminal lumbar disc herniations: technical note. *J Neurosurg Sci* 2020; Epub ahead of print. PMID: 33297610. Request Article

Golebiewska A, Hau AC, Oudin A, Stieber D, Yabo YA, Baus V, Barthelemy V, Klein E, Bougnaud S, Keunen O, Wantz M, Michelucci A, Neirinckx V, Muller A, Kaoma T, Nazarov PV, Azuaje F, De Falco A, Flies B, Richart L, Poovathingal S, Arns T, Grzyb K, Mock A, Herold-Mende C, Steino A, Brown D, May P, Miletic H, **Malta TM**, **Noushmehr H**, Kwon YJ, Jahn W, Klink B, Tanner G, Stead LF, Mittelbronn M, Skupin A, Hertel F, Bjerkvig R, and Niclou SP. Patient-derived organoids and orthotopic xenografts of primary and recurrent gliomas represent relevant patient avatars for precision oncology. *Acta Neuropathol* 2020; 140(6):919-949. PMID: 33009951. Full Text

Haider SA, **Asmaro K**, **Kalkanis SN**, **Lee IY**, **Bazydlo M**, **Nerenz DR**, Salloum RG, **Snyder J**, and **Walbert T**. The Economic Impact of Glioma Survivorship: the cost of care from a patient perspective. *Neurology* 2020; 95(11): e1575-e1581. PMID: 32646959. Full Text

Haider SA, Shank CD, and **Walters BC**. Commentary: The Role of Stereotactic Radiosurgery in the Management of Brain Metastases From a Health-Economic Perspective: A Systematic Review. *Neurosurgery* 2020; 87(3):E277-E278. PMID: 32320033. Full Text

Hatcher SE, and **Air EL**. Catastrophic failure of spinal cord stimulator paddle electrodes in the cervical spine. *Clin Neurol Neurosurg* 2020; 196:106010. PMID: 32563977. Full Text

Hocker S, Shah S, Vespa P, Provencio JJ, Calvillo E, Olson DM, Venkatasubba Rao CP, Hemphill JC, 3rd, Helbok R, Human T, Kamel H, Madden LK, Nyquist P, Bentho O, O'Phelan K, Lewin JJ, 3rd, Alexander S, Ziai W, Chou SH, Rincon F, McNett M, Ko N, Zink B, Rhoney D, Diringer MN, Stevens R, Robertson CS, Sampaio G, Shutter LA, Ling G, **Rehman M**, Mahmoud SH, Yeager S, Livesay S, and Suarez JI. The Future of Neurocritical Care Research: Proceedings and Recommendations from the Fifth Neurocritical Care Research Network Conference. *Neurocrit Care* 2020; 32(1):311-316. PMID: 31264070. Full Text

Lee EQ, Weller M, Sul J, Bagley SJ, Sahebjam S, van den Bent M, Ahluwalia M, Campian JL, Galanis E, Gilbert MR, Holdhoff M, Lesser GJ, Lieberman FS, Mehta MP, Penas-Prado M, Schreck KC, Strowd RE, Vogelbaum MA, **Walbert T**, Chang SM, Nabors LB, Grossman S, Reardon DA, and Wen PY. Optimizing eligibility criteria and clinical trial conduct to enhance clinical trial participation for primary brain tumor patients. *Neuro Oncol* 2020; 22(5):601-612. PMID: 31974566. Full Text

Lepard JR, Corley J, Sankey EW, **Prentiss T**, Rocque B, Park KB, **Rock J**, Hlaing K, and Myaing W. Training Neurosurgeons in Myanmar and Surrounding Countries: The Resident

Perspective. *World Neurosurg* 2020; 139:75-82. PMID: 32251819. Full Text

Li L, **Chopp M**, **Ding G**, **Davoodi-Bojd E**, **Zhang L**, **Li Q**, **Zhang Y**, **Xiong Y**, and **Jiang Q**. MRI Detection of Impairment of Glymphatic Function in Rat after Mild Traumatic Brain Injury. *Brain Res* 2020; 1747:147062. PMID: 32818526. Full Text

Li S, Han C, **Asmaro K**, Quan S, Li M, Ren C, Zhang J, Zhao W, Xu J, Liu Z, Zhang P, Zhu L, Ding Y, Wang K, Ji X, and Duan L. Remote Ischemic Conditioning Improves Attention Network Function and Blood Oxygen Levels in Unacclimatized Adults Exposed to High Altitude. *Aging Dis* 2020; 11(4):820-827. PMID: 32765948. Full Text

Macki M, Mahajan A, Shatz R, **Air EL**, **Novikova M**, Fakih M, Elmenini J, **Kaur M**, **Bouchard KR**, **Funk BA**, and **Schwalb JM**. Prevalence of Alternative Diagnoses and Implications for Management in Idiopathic Normal Pressure Hydrocephalus Patients. *Neurosurgery* 2020; 87(5):999-1007. PMID: 32472677. Full Text

Malik KM, Krishnamurthy M, Alam F, **Zakaria H**, and **Malik G**. Introducing the Rupture Criticality Index to Compare Risk Factor Combinations Associated with Aneurysmal Rupture. *World Neurosurg* 2020; Epub ahead of print. PMID: 33045451. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Muralidharan K, Yekula A, Small JL, Rosh ZS, Kang KM, Wang L, Lau S, Zheng H, Lee H, Bettegowda C, Chicoine MR, **Kalkanis S**, Shankar GM, Nahed BV, Curry WT, Jones PS, Cahill DP, Balaj L, and Carter BS. TERT promoter mutation analysis for blood-based diagnosis and monitoring of gliomas. *Clin Cancer Res* 2020; 27(1):169-178. PMID: 33051308. Full Text

Nejad-Davarani SP, **Zakariaei N**, Chen Y, Haacke EM, **Hurst NJ**, **Siddiqui MS**, **Schultz LR**, **Snyder JM**, **Walbert T**, and **Glide-Hurst C**. Rapid Multi-contrast Brain Imaging on a 0.35T MR-linac. *Med Phys* 2020; 47(9):4064-4076. PMID: 32434276. Full Text

Noh T, **Osman G**, **Chedid M**, and **Hefzy H**. Nitrous oxide-induced demyelination: Clinical presentation, diagnosis and treatment recommendations. *J Neurol Sci* 2020; 414:116817. PMID: 32302804. Full Text

Noll KR, **Walbert T**, and Wefel JS. Impaired neurocognitive function in glioma patients: from pathophysiology to novel intervention strategies. *Curr Opin Neurol* 2020; 33(6):716-722. PMID: 33009006. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3):E397-E399. PMID: 32496518. Full Text

Park P, **Chang V**, Yeh HH, **Schwalb JM**, **Nerenz DR**, **Schultz LR**, **Abdulhak MM**, Easton R, PerezCruet M, Kashlan ON, Oppenlander ME, Szerlip NJ, Swong KN, and Aleem IS. Impact of Michigan's new opioid prescribing laws on spine surgery patients: analysis of the Michigan

Spine Surgery Improvement Collaborative. *J Neurosurg Spine* 2020; Epub ahead of print. PMID: 33307531. Full Text

Peereboom DM, Ye X, **Mikkelsen T**, Lesser GJ, Lieberman FS, Robins HI, Ahluwalia MS, Sloan AE, and Grossman SA. A Phase II and Pharmacodynamic Trial of RO4929097 for Patients with Recurrent/Progressive Glioblastoma. *Neurosurgery* 2020; Epub ahead of print. PMID: 33027815. Full Text

Puduvalli VK, Wu J, Yuan Y, Armstrong TS, Vera E, Wu J, Xu J, Giglio P, Colman H, **Walbert T**, Raizer J, Groves MD, Tran D, Iwamoto F, Avgeropoulos N, Paleologos N, Fink K, Peereboom D, Chamberlain M, Merrell R, Penas Prado M, Yung WKA, and Gilbert MR. A Bayesian Adaptive Randomized Phase II
Multicenter Trial of Bevacizumab with or without Vorinostat in Adults with Recurrent Glioblastoma. *Neuro Oncol* 2020; 22(10):1505-1515. PMID: 32166308. Full Text

Raslan AM, Ben-Haim S, Falowski SM, Machado AG, Miller J, Pilitsis JG, Rosenberg WS, Rosenow JM, Sweet J, Viswanathan A, Winfree CJ, and **Schwalb JM**. Congress of Neurological Surgeons Systematic Review and Evidence-Based Guideline on Neuroablative Procedures for Patients with Cancer Pain. *Neurosurgery* 2020; Epub ahead of print. PMID: 33355345. Full Text

Redjal N, Nahed BV, Dietrich J, **Kalkanis SN**, and Olson JJ. Congress of neurological surgeon systematic review and evidence-based guidelines update on the role of chemotherapeutic management and antiangiogenic treatment of newly diagnosed glioblastoma in adults. *J Neurooncol* 2020; 150(2):165213. PMID: 33215343. Full Text

Rock JP, **Prentiss T**, Mo SM, Myat Hnin Aye NS, **Asmaro K**, Win AT, Phyu AM, Maung TM, Khaing EE, Naung Z, Park KB, Hlaing K, and Myaing W. Traumatic Brain Injury in Myanmar: Preliminary Results and Development of an Adjunct Electronic Medical Record. *World Neurosurg* 2020; 140: e260-e265. PMID: 32413564. Full Text

Saadmim F, Forhad T, Sikder A, Ghann W, **M MA**, Sitther V, Ahammad AJS, Subhan MA, and Uddin J. Enhancing the Performance of Dye Sensitized Solar Cells Using Silver Nanoparticles Modified Photoanode. *Molecules* 2020; 25(17). PMID: 32899213. Full Text

Schafer E, **Bazydlo M**, **Schultz L**, Park P, **Chang V**, Easton RW, **Schwalb J**, Khalil J, Perez-Cruet M, **Abdulhak M**, and Aleem I. Rates and Risk Factors Associated with 90-day Readmission Following Cervical Spine Fusion Surgery: Analysis of the Michigan Spine Surgery Improvement Collaborative (MSSIC) Registry. *Spine J* 2020; 20(5):708-716. PMID: 31958576. Full Text

Schwalb JM. Commentary: Percutaneous Trigeminal Stimulation for Intractable Facial Pain: A Case Series. *Neurosurgery* 2020; 87(3): E305. PMID: 32348492. Full Text

Schwalb JM. Commentary: Impact of Spinal Cord Stimulation on Opioid Dose Reduction: A Nationwide Analysis. *Neurosurgery* 2020; 88(1):E41. PMID: 32888297. Full Text

Snyder JM, **Pawloski JA**, and **Poisson LM**. Developing Real-world Evidence-Ready Datasets: Time for Clinician Engagement. *Curr Oncol Rep* 2020; 22(5):45. PMID: 32297007. Full Text

Wang MC, Boop FA, Kondziolka D, Resnick DK, **Kalkanis SN**, Koehnen E, Selden NR, Heilman CB, Valadka AB, Cockroft KM, Wilson JA, Ellenbogen RG, Asher AL, Byrne RW,

Camarata PJ, Huang J, Knightly JJ, Levy EI, Lonser RR, Connolly ES, Meyer FB, and Liau LM. Continuous improvement in patient safety and quality in neurological surgery: the American Board of Neurological Surgery in the past, present, and future. *J Neurosurg* 2020; Epub ahead of print. PMID: 33065539. Full Text

Wasade VS, Viarasilpa T, Balki I, **Osman G**, **Gaddam A**, Dharaiya D, **Pellumbi N**, **Snyder J**, **Walbert T**, Spanaki M, and **Schultz L**. Effect of seizure timing on long-term survival in patients with brain tumor. *Epilepsy Behav* 2020; 111:107307. PMID: 32693378. Full Text

Ye LF, Reznik E, Korn JM, Lin F, Yang G, Malesky K, Gao H, Loo A, Pagliarini R, **Mikkelsen T**, Lo DC, **deCarvalho AC**, and Stockwell BR. Patient-derived glioblastoma cultures as a tool for small-molecule drug discovery. *Oncotarget* 2020; 11(4):443-451. PMID: 32064048. Full Text

Yee TJ, Fearer KJ, Oppenlander ME, Kashlan ON, Szerlip N, Buckingham MJ, Swong K, **Chang V**, **Schwalb JM**, and Park P. Correlation Between the Oswestry Disability Index and the North American Spine Surgery Patient Satisfaction Index. *World Neurosurg* 2020; 139:e724-e729. PMID: 32344134. Full Text

Zakaria HM, **Wilkinson BM**, Pennington Z, Saadeh YS, Lau D, **Chandra A**, Ahmed AK, **Macki M**, **Anand SK**, **Abouelleil MA**, Fateh JA, Rick JW, Morshed RA, Deng H, Chen KY, **Robin A**, **Lee IY**, **Kalkanis S**, Chou D, Park P, Sciubba DM, and **Chang V**. Sarcopenia as a Prognostic Factor for 90-Day and Overall Mortality in Patients Undergoing Spine Surgery for Metastatic Tumors: A Multicenter Retrospective Cohort Study. *Neurosurgery* 2020; 87(5):1025-1036. PMID: 32592483. Full Text

Zervos TM, **Bazydlo M**, **Tundo K**, **Macki M**, and **Rock J**. Risk Factors Associated With Symptomatic Deep Vein Thrombosis Following Elective Spine Surgery: A Case Control Study. *World Neurosurg* 2020; 144e460-e465. PMID: 32889183. Full Text

Zervos TM, Mg TM, **Zakaria H**, **Hlaing K**, Aung TH, Myaing W, and **Rock J**. Surgical Treatment of Intracranial Anterior Ethmoidal Aneurysm: Case Report, Literature Review, and Surgical Video. *World Neurosurg* 2019; 136:1-5. PMID: 31901499. Full Text

Zervos TM, **Scarpace L**, **Robin AM**, **Schwalb JM**, and **Air EL**. Adapting to Space Limitations During Prone Real-Time Magnetic Resonance Imaging-Guided Stereotaxic Laser Ablation: Technical Pearls. *Oper Neurosurg (Hagerstown)* 2020; 18(4):398-402. PMID: 31245819. Full Text

Zhang Y, **Zhang Y**, **Chopp M**, **Zhang ZG**, **Mahmood A**, and **Xiong Y**. Mesenchymal Stem Cell-Derived Exosomes Improve Functional Recovery in Rats After Traumatic Brain Injury: A Dose-Response and Therapeutic Window Study. *Neurorehabil Neural Repair* 2020; 34(7):616-626. PMID: 32462980. Full Text

Nursing

Doe S, **Petersen S**, **Buekers T**, and **Swain M**. Does a Multidisciplinary Approach to Invasive Breast Cancer Care Improve Time to Treatment and Patient Compliance? *J Natl Med Assoc* 2020; 112(3):268274. PMID: 32291070. Request Article

Kitajima T, **Nagai S**, **Segal A**, **Magee M**, **Blackburn S**, **Ellithorpe D**, **Yeddula S**, **Qadeer Y**, **Yoshida A**, **Moonka D**, **Brown K**, and **Abouljoud MS**. Posttransplant Complications Predict Alcohol Relapse in Liver Transplant Recipients. *Liver Transpl* 2020; 26(3):379-389. PMID:

31872969. Full Text

McCord J, **Hana A**, **Cook B**, **Hudson MP**, **Miller J**, Akoegbe G, Mueller C, **Moyer M**, Jacobsen G, and **Nowak R**. The Role of Cardiac Testing with the 0/1-Hour High-Sensitivity Cardiac Troponin Algorithm Evaluating for Acute Myocardial Infarction. *Am Heart J* 2020; Epub ahead of print. PMID: 33373603. Full Text

Nemeh H, **Coba V**, Chulkov M, **Gupta A**, **Yeldo N**, **Chamogeorgakis T**, **Tanaka D**, **Allenspach L**, **Simanovski J**, and Shanti C. Lung Transplantation for the Treatment of Vaping Induced, Irreversible, End Stage Lung Injury. *Ann Thorac Surg* 2020; Epub ahead of print. PMID: 33130115. Full Text

Roshandel D, Chen Z, Canty AJ, Bull SB, Natarajan R, Paterson AD, **Bhan A**, **Jones JK**, **Kruger D**, **Edwards PA**, **Remtema H**, **Angus E**, **Galprin A**, **McLellan M**, **Thomas A**, **Carey JD**, and **Whitehouse F**. DNA methylation age calculators reveal association with diabetic neuropathy in type 1 diabetes. *Clin Epigenetics* 2020; 12(1):52. PMID: 32248841. Full Text

Simanovski J, and Ralph J. Readmissions After Lung Transplantation. *Prog Transplant* 2020; 30(4):365367. PMID: 32912114. Full Text

Surabenjawong U, Phrampus PE, Lutz J, Farkas D, **Gopalakrishna A**, Monsomboon A, Limsuwat C, and O'Donnell JM. Comparison of Innovative Peer-to-Peer Education and Standard Instruction on Airway Management Skill Training. *Clinical Simulation in Nursing* 2020; 47:16-24. PMID: Not assigned. Full Text

VanBlarcom AG, **Wojack CA**, and Casida J. Cardiac Tamponade Following the Removal of Epicardial Pacing Wires: Critical Care APRN Toolkit. *AACN Adv Crit Care* 2020; 31(4):410-415. PMID: 33313709. Request Article

White RJ, Jerjes-Sanchez C, Bohns Meyer GM, Pulido T, Sepulveda P, Wang KY, Grunig E, Hiremath S, Yu Z, Gangcheng Z, Yip WLJ, Zhang S, Khan A, Deng CQ, Grover R, Tapson VF, **Awdish R**, and **Cajigas H**. Combination Therapy with Oral Treprostinil for Pulmonary Arterial Hypertension. A DoubleBlind Placebo-controlled Clinical Trial. *Am J Respir Crit Care Med* 2020; 201(6):707-717. PMID: 31765604. Full Text

Obstetrics, Gynecology, and Women's Health Services

Briskin R, and **Atiemo H**. Case - Unique complication of continent catheterizable stoma after bariatric surgery. *Can Urol Assoc J* 2020; Epub ahead of print. PMID: 33382367. Full Text

Doe S, **Petersen S**, **Buekers T**, and **Swain M**. Does a Multidisciplinary Approach to Invasive Breast Cancer Care Improve Time to Treatment and Patient Compliance? *J Natl Med Assoc* 2020; 112(3):268-274. PMID: 32291070. Request Article

Doe S, **Petersen S**, and **Swain M**. Utilization of genetic testing in breast cancer treatment after implementation of comprehensive multi-disciplinary care. *Breast J* 2020; 26(5):911-916. PMID: 31916345.
Full Text

Hong L, **Smith N**, **Keerthy M**, **Lee-Griffith M**, **Garcia R**, **Shaman M**, and **Goyert G**. Severe COVID-19 infection in pregnancy requiring intubation without preterm delivery: A case report. *Case Rep Womens Health* 2020; 27:e00217. PMID: 32382516. Full Text

Kalmbach DA, **Cheng P**, O'Brien LM, Swanson LM, **Sangha R**, Sen S, Guille C, **Cuamatzi-Castelan A**, Henry AL, **Roth T**, and **Drake CL**. A randomized controlled trial of digital cognitive behavioral therapy for insomnia in pregnant women. *Sleep Med* 2020; 72:82-92. PMID: 32559716. Full Text

Saad F, **Ayyash M**, Ayyash M, Elhage N, Ali I, Makki M, Hamade H, and Blackwood RA. Assessing Knowledge, Physician Interactions and Patient-Reported Barriers to Colorectal Cancer Screening Among Arab Americans in Dearborn, Michigan. *J Community Health* 2020; 45(5):900-909. PMID: 32189212. Full Text

Saeed H, **Hong L**, **Smith N**, and **Shaman M**. Ovarian torsion in utero diagnosed at 37 weeks of pregnancy: A case report. *Case Rep Womens Health* 2020; 27:e00232. PMID: 32577405. Full Text

Singh PK, Singh S, Wright RE, 3rd, **Rattan R**, and Kumar A. Aging, But Not Sex and Genetic Diversity, Impacts the Pathobiology of Bacterial Endophthalmitis. *Invest Ophthalmol Vis Sci* 2020; 61(14):5. PMID: 33263715. Full Text

Tsafrir Z, **Janosek-Albright K**, **Aoun J**, **Diaz-Insua M**, **Abd-El-Barr AE**, **Schiff L**, **Talukdar S**, **Menon M**, **Munkarah A**, **Theoharis E**, and **Eisenstein D**. The impact of a wireless audio system on communication in robotic-assisted laparoscopic surgery: A prospective controlled trial. *PLoS One* 2020; 15(1):e0220214. PMID: 31923185. Full Text

Vadlamudi G, **Hong L**, and **Keerthy M**. Evans Syndrome Associated with Pregnancy and COVID-19 Infection. *Case Rep Obstet Gynecol* 2020; 2020:8862545. PMID: 32850163. Full Text

Wang A, Zawadzki N, Hedlin H, LeBlanc E, **Budrys N**, Van Horn L, Gass M, Westphal L, and Stefanick ML. Reproductive history and osteoarthritis in the Women's Health Initiative. *Scand J Rheumatol* 2020; 50(1):58-67. PMID: 32757806. Request Article

Xia H, Li S, Li X, Wang W, Bian Y, Wei S, Grove S, Wang W, Vatan L, Liu JR, McLean K, **Rattan R**, **Munkarah AR**, Guan JL, Kryczek I, and Zou W. Autophagic adaptation to oxidative stress alters peritoneal residential macrophage survival and ovarian cancer metastasis. *JCI Insight* 2020; 5(18). PMID: 32780724. Full Text

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh M**. Increased risk of recurrence in early-stage endometrial carcinoma after delays in adjuvant radiation treatment. *Int J Gynecol Cancer* 2020; 31(1):73-77. PMID: 33087415. Full Text

Ophthalmology and Eye Care Services

Bansal P, **Fory EK**, **Malik S**, and **Memon AB**. Clinical Course of a Patient with Radiographically Described Acute Necrotizing Encephalopathy (ANE). *Radiology* 2020; 297(2):E278-E280. PMID: 32787703. Full Text

Barbosa J, Malbin B, **Le K**, and Lin X. Quantifying Areas of Vascular Leakage in Sickle Cell Retinopathy Using Standard and Widefield Fluorescein Angiography. *Ophthalmic Surg Lasers Imaging Retina* 2020; 51(3):153-158. PMID: 32211905. Request Article

Barbosa J, Syeda S, Rodriguez-Torres Y, **Le K**, and Lin X. Quantifying vitreous inflammation in

uveitis: an optical coherence tomography prospective study. *Can J Ophthalmol* 2020; 55(5):352-358. PMID: 32439194. Full Text

Bernard A, Weiss S, Stein JD, Ulin SS, D'Souza C, Salgat A, Panzer K, **Riddering A**, **Edwards P**, Meade M, McKee MM, and Ehrlich JR. Assessing the impact of COVID-19 on persons with disabilities: evelopment of a novel survey. *Int J Public Health* 2020; 65(6):755-757. PMID: 32705300. Full Text

Brill DA, Lin X, Garcia AL, **Hou AC**, and **Le KH**. Case of torpedo maculopathy with two distinct zones of the retinal pigment epithelium. *Retin Cases Brief Rep* 2020; Epub ahead of print. PMID: 32039943. Full Text

Hamad AE, Moinuddin O, Blair MP, Schechet SA, Shapiro MJ, Quiram PA, Mammo DA, Berrocal AM, Prakhunhungsit S, Cernichiaro-Espinosa LA, Mukai S, Yonekawa Y, Ung C, Holz ER, Harper CA, 3rd, Young RC, Besirli CG, Nagiel A, Lee TC, Gupta MP, Walsh MK, Khawly JA, Campbell JP, Kychenthal A, Nudleman ED, Robinson JE, Hartnett ME, Calvo CM, and Chang EY. Late-Onset Retinal Findings and Complications in Untreated Retinopathy of Prematurity. *Ophthalmol Retina* 2020; 4(6):602-612. PMID: 32059986. Full Text

Hamid MS, **Steen DW**, **Ormsby AH**, Lin X, and **Le KH**. Inflamed nonlimbal scleral dermoid masquerading as nodular scleritis. *J aapos* 2020; 24(5):319-321. PMID: 32931936. Full Text

Holbrook MB, **Kaitis D**, **Van Laere L**, **Van Laere J**, and **Clark C**. Retinal detachment with subretinal and vitreous hemorrhages causing secondary angle closure glaucoma diagnosed with ultrasound. *Am J Emerg Med* 2020; 38(10):2245. PMID: 32563616. Full Text

Hosseinzadeh Z, Hauser S, Singh Y, Pelzl L, Schuster S, Sharma Y, Höflinger P, Zacharopoulou N, Stournaras C, **Rathbun DL**, Zrenner E, Schöls L, and Lang F. Decreased Na(+)/K(+) ATPase Expression and Depolarized Cell Membrane in Neurons Differentiated from Chorea-Acanthocytosis Patients. *Sci Rep* 2020; 10(1):8391. PMID: 32439941. Full Text

Rathbun DL, Shivdasani MN, Guo T, Fried S, Lovell NH, and **Hessburg P**. The eye and the chip 2019Conference Report. *J Neural Eng* 2020; 17(1):010401. PMID: 31965978. Full Text

Roshandel D, Chen Z, Canty AJ, Bull SB, Natarajan R, Paterson AD, **Bhan A**, **Jones JK**, **Kruger D**, **Edwards PA**, **Remtema H**, **Angus E**, **Galprin A**, **McLellan M**, **Thomas A**, **Carey JD**, and **Whitehouse F**. DNA methylation age calculators reveal association with diabetic neuropathy in type 1 diabetes. *Clin Epigenetics* 2020; 12(1):52. PMID: 32248841. Full Text

Salman M, Andrews C, Heister M, **Darnley-Fisch D**, and Newman-Casey PA. Psychosocial Predictors of Glaucoma Medication Adherence among the Support, Educate, Empower (SEE) Personalized Glaucoma Coaching Pilot Study Participants. *Am J Ophthalmol* 2020; 216. PMID: 32087145. Full Text

Sekhar S, Ramesh P, Bassetto G, Zrenner E, Macke JH, and **Rathbun DL**. Characterizing Retinal Ganglion Cell Responses to Electrical Stimulation Using Generalized Linear Models. *Front Neurosci* 2020; 14:378. PMID: 32477044. Full Text

White RJ, Jerjes-Sanchez C, Bohns Meyer GM, Pulido T, Sepulveda P, Wang KY, Grunig E, Hiremath S, Yu Z, Gangcheng Z, Yip WLJ, Zhang S, Khan A, Deng CQ, Grover R, Tapson VF, **Awdish R**, and **Cajigas H**. Combination Therapy with Oral Treprostinil for Pulmonary Arterial

Hypertension. A DoubleBlind Placebo-controlled Clinical Trial. *Am J Respir Crit Care Med* 2020; 201(6):707-717. PMID: 31765604. Full Text

Zhang F. Special communication for deaf patients during topical anesthesia cataract surgery. *Am J Ophthalmol Case Rep* 2020; 20:100940. PMID: 33083633. Full Text

Orthopaedics/Bone and Joint Center

Ali SA, Gandhi R, Potla P, Keshavarzi S, Espin-Garcia O, Shestopaloff K, Pastrello C, Bethune-Waddell wD, Lively S, Perruccio AV, Rampersaud YR, Veillette C, Rockel JS, Jurisica I, Appleton T, and Kapoor M. Sequencing identifies a distinct signature of circulating microRNAs in early radiographic knee osteoarthritis. *Osteoarthritis Cartilage* 2020; 28(11):1471-1481. PMID: 32738291. Full Text

Andrews E, **Lezotte J**, and **Ackerman AM**. Lingual compression for acute macroglossia in a COVID-19 positive patient. *BMJ Case Rep* 2020; 13(7). PMID: 32675133. Full Text

Armstrong AD, Agel J, Beal MD, Bednar MS, Caird MS, Carpenter JE, **Guthrie ST**, Juliano P, Karam M, LaPorte D, Marsh JL, Patt JC, Peabody TD, Wu K, Martin DF, Harrast JJ, and Van Heest AE. Use of the Behavior Assessment Tool in 18 Pilot Residency Programs. *JB JS Open Access* 2020; 5(4). PMID: 33244509. Full Text

Azad S, **Oravec D**, **Baumer T**, **Schildcrout A**, **White P**, **Basheer A**, **Bey MJ**, **Bartol SW**, **Chang V**, and **Yeni YN**. Dynamic foraminal dimensions during neck motion 6.5 years after fusion and artificial disc replacement. *PLoS One* 2020; 15(8):e0237350. PMID: 32780779. Full Text

Bell KL, Detweiler M, Yayac M, Penna S, and Chen AF. Preoperative Opioid Use Increases the Cost of Care in Total Joint Arthroplasty. *J Am Acad Orthop Surg* 2020; Epub ahead of print. PMID: 32925386. Full Text

Bernstein DN, **Franovic S**, **Smith DG**, **Hessburg L**, **Yedulla N**, **Moutzouros V**, and **Makhni EC**. Pediatric PROMIS Computer Adaptive Tests Are Highly Correlated With Adult PROMIS Computer Adaptive Tests in Pediatric Sports Medicine Patients. *Am J Sports Med* 2020; 48(14):3620-3625. PMID: 33175563. Full Text

Bober K, **Kadado A**, **Charters M**, **Ayoola A**, and **North T**. Pain Control After Total Hip Arthroplasty: A Randomized Controlled Trial Determining Efficacy of Fascia Iliaca Compartment Blocks in the Immediate Postoperative Period. *J Arthroplasty* 2020; 35(65):S241-S245. PMID: 32222267. Full Text

Cunningham AK, **Rourke MM**, **Moeller JL**, and **Nayak M**. HPV Immunization in High School StudentAthletes Receiving Preparticipation Physical Evaluations at Mass Event Versus Other Venues. *Sports Health* 2020; 13(1):91-94. PMID: 32662740. Full Text

Day CS. CORR Insights(R): Operative Treatment Is Not Associated With More Relief of Depression Symptoms Than Nonoperative Treatment in Patients with Common Hand Illness. *Clin Orthop Relat Res* 2020; 478(6):1330-1332. PMID: 32271172. Full Text

Fidai MS, Okoroha KR, **Meldau J**, **Meta F**, **Lizzio VA**, **Borowsky P**, Redler LH, **Moutzouros V**, and **Makhni EC**. Fatigue Increases Dynamic Knee Valgus in Youth Athletes: Results From a Field-Based Drop-Jump Test. *Arthroscopy* 2020; 36(1):214-222.e212. PMID: 31864579. Full Text

Fitzgerald J. Applications of CRISPR for musculoskeletal research. *Bone Joint Res* 2020; 9(7):351-359. PMID: 32676188. Full Text

Forsythe B, Lavoie-Gagne O, Patel BH, Lu Y, Ritz E, Chahla J, **Okoroha KR**, Allen AA, and Nwachukwu BU. Efficacy of Arthroscopic Surgery in the Management of Adhesive Capsulitis: A Systematic Review and Network Meta-analysis of Randomized Controlled Trials. *Arthroscopy* 2020; Epub ahead of print. PMID: 33221429. Full Text

Franovic S, **Kuhlmann N**, **Schlosser C**, **Pietroski A**, **Buchta AG**, and **Muh SJ**. Role of preoperative PROMIS scores in predicting postoperative outcomes and likelihood of achieving MCID following reverse shoulder arthroplasty. *Seminars in Arthroplasty* 2020; 30(2):154-161. PMID: Not assigned. Full Text

Franovic S, **Taylor K**, **Kuhlmann N**, **Aboona F**, **Schlosser C**, and **Muh SJ**. PROMIS CAT forms demonstrate responsiveness in patients following reverse shoulder arthroplasty across numerous health domains: Responsiveness of PROMIS after RSA. *Seminars in Arthroplasty* 2020; 30(1):28-34. PMID: Not assigned. Full Text

Frisch NB, Courtney PM, **Darrith B**, Copeland LA, and Gerlinger TL. Veterans Undergoing Total Hip and Knee Arthroplasty: 30-day Outcomes as Compared to the General Population. *J Am Acad Orthop Surg* 2020; 28(22):923-929. PMID: 32004175. Full Text

Gardinier JD, **Daly-Seiler CS**, and **Zhang C**. Osteocytes' expression of the PTH/PTHrP receptor has differing effects on endocortical and periosteal bone formation during adenine-induced CKD. *Bone* 2020; 133:115186. PMID: 31987988. Full Text

Georgiadis AG, **Muh SJ**, **Silverton CD**, **Weir RM**, and Laker MW. Response to Letter to the Editor on "A Prospective Double-Blind Placebo Controlled Trial of Topical Tranexamic Acid in Total Knee Arthroplasty". *J Arthroplasty* 2020; 35(4):1161-1162. PMID: 31902613. Full Text

Gulledge CM, **Lizzio VA**, **Smith DG**, **Guo E**, and **Makhni EC**. What Are the Floor and Ceiling Effects of Patient-Reported Outcomes Measurement Information System Computer Adaptive Test Domains in Orthopaedic Patients? A Systematic Review. *Arthroscopy* 2020; 36(3):901-912. PMID: 31919023. Full Text

Jebastin JAS, **Perry KD**, **Chitale DA**, **Mott MP**, **Sanchez J**, Fritchie KJ, **Palanisamy N**, and **Williamson SR**. Atypical Lipomatous Tumor/Well-Differentiated Liposarcoma With Features Mimicking Spindle Cell Lipoma. *Int J Surg Pathol* 2020; 28(3):336-340. PMID: 31672072. Full Text

Jelsema TR, **Tam AC**, and **Moeller JL**. Injectable Ketorolac and Corticosteroid Use in Athletes: A Systematic Review. *Sports Health* 2020; 12(6):521-527. PMID: 32877323. Full Text

Jiang Y, Chen C, Zhang X, Chen C, Zhou Y, Ni G, **Muh S**, and Lemos S. Shoulder muscle activation pattern recognition based on sEMG and machine learning algorithms. *Comput Methods Programs Biomed* 2020; 197:105721. PMID: 32882593. Full Text

Jildeh TR, Shkokani L, **Meta F**, **Tramer JS**, and **Okoroha KR**. Concussion Management for the Orthopaedic Surgeon. *JBJS Rev* 2020; 8(11):e2000055. PMID: 33186210. Full Text

Jildeh TR, **Taylor KA**, **Tramer JS**, **Khalil LS**, Hasan L, **Okoroha KR**, and **Moutzouros V**.

Risk Factors for Postoperative Opioid Use in Arthroscopic Shoulder Labrum Surgery. *Arthroscopy* 2020; 36(7):18131820. PMID: 32200066. Full Text

Johnson CD, Outerleys J, Jamison ST, Tenforde AS, **Ruder M**, and Davis IS. Comparison of Tibial Shock during Treadmill and Real-World Running. *Med Sci Sports Exerc* 2020; 52(7):1557-1562. PMID: 31985578. Full Text

Kadado A, **Slotkin S**, Akioyamen NO, El-Alam A, and **North WT**. Total Knee Arthroplasty: Opioid-Free Analgesia in a Patient with Opioid-Induced Hyperalgesia: A Case Report. *JBJS Case Connect* 2020; 10(3)e2000024. PMID: 32618610. Full Text

Karnuta JM, Luu BC, Haeberle HS, Saluan PM, Frangiamore SJ, Stearns KL, Farrow LD, Nwachukwu BU, Verma NN, **Makhni EC**, Schickendantz MS, and Ramkumar PN. Machine Learning Outperforms Regression Analysis to Predict Next-Season Major League Baseball Player Injuries: Epidemiology and Validation of 13,982 Player-Years from Performance and Injury Profile Trends, 2000-2017. *Orthop J Sports Med* 2020; 8(11). PMID: 33241060. Full Text

Khalil LS, **Cross AG**, Savoie FH, 3rd, and **Makhni EC**. Primary Repair of Proximal Ulnar Collateral Ligament Ruptures in Pediatric Overhead Athletes. *Arthrosc Tech* 2020; 9(5)e639-e643. PMID: 32489838. Full Text

Khalil LS, **Darrith B**, **Franovic S**, **Davis JJ**, **Weir RM**, and **Banka TR**. Patient-Reported Outcomes Measurement Information System (PROMIS) Global Health Short Forms Demonstrate Responsiveness in Patients Undergoing Knee Arthroplasty. *J Arthroplasty* 2020; 35(6):1540-1544. PMID: 32037211. Full Text

Khalil LS, **Jildeh TR**, **Taylor KA**, **Gulledge CM**, **Smith DG**, Sandberg ML, **Makhni EC**, **Okoroha KR**, and **Moutzouros V**. The Relationship Between Shoulder Range of Motion and Elbow Stress in College Pitchers. *J Shoulder Elbow Surg* 2020; Epub ahead of print. PMID: 32650073. Full Text

Khalil LS, **Jildeh TR**, **Ussef N**, **Rahman T**, Carter E, Pawloski M, Tandron M, and **Moutzouros V**. Extensor Mechanism Ruptures and Reruptures: Perioperative Opioid Management. *J Knee Surg* 2020; Epub ahead of print. PMID: 32643781. Request Article

Khalil LS, Mehran N, Toor A, Matar RN, and Kharrazi FD. National Basketball Association combine performance after a partial meniscectomy. *Musculoskelet Surg* 2020; Epub ahead of print. PMID: 31989533. Full Text

Khalil LS, **Meta FS**, **Tramer JS**, **Klochko CL**, **Scher C**, **Van Holsbeeck M**, **Kolowich PA**, **Makhni EC**, **Moutzouros V**, and **Okoroha KR**. Elbow Torque is Reduced in Asymptomatic College Pitchers with Elbow Laxity: A Dynamic Ultrasound Study. *Arthroscopy* 2020; Epub ahead of print. PMID: 33359823. Full Text

Koolmees D, Bernstein DN, and **Makhni EC**. Time-Driven Activity-Based Costing Provides a Lower and More Accurate Assessment of Costs in the Field of Orthopaedic Surgery as Compared to Traditional Accounting Methods. *Arthroscopy* 2020; Epub ahead of print. PMID: 33232748. Full Text

Kuhlmann NA, **Taylor KA**, Roche CP, **Franovic S**, Chen C, Carofino BC, Flurin PH, Wright TW, Schoch BS, Zuckerman JD, and **Muh SJ**. Acute versus delayed reverse total shoulder arthroplasty for proximal humerus fractures in the elderly: Mid-term outcomes. *Seminars in*

Arthroplasty 2020; 30(2):89-95. PMID: Not assigned. Full Text

Lawrence RL, Braman JP, and Ludewig PM. Shoulder kinematics impact subacromial proximities: a review of the literature. *Braz J Phys Ther* 2020; 24(3):219-230. PMID: 31377124. Full Text

Lawrence RL, **Ruder MC**, **Zauel R**, and **Bey MJ**. Instantaneous helical axis estimation of glenohumeral kinematics: The impact of rotator cuff pathology. *J Biomech* 2020; 109:109924. PMID: 32807327. Full Text

Lee ECS, Roach NT, Clouthier AL, Bicknell RT, **Bey MJ**, Young NM, and Rainbow MJ. Threedimensional scapular morphology is associated with rotator cuff tears and alters the abduction moment arm of the supraspinatus. *Clin Biomech (Bristol, Avon)* 2020; 78:105091. PMID: 32580097. Full Text

Lizzio VA, **Smith DG**, **Guo EW**, **Cross AG**, **Gulledge CM**, **Koolmees DS**, Chalmers PN, and **Makhni EC**. The Effect of the Crow Hop on Elbow Stress During an Interval Throwing Program. *Am J Sports Med* 2020; Epub ahead of print. PMID: 33378223. Full Text

Mahan MC, **Yu CC**, **Shields R**, **van Holsbeeck M**, and Zaltz I. Impingement-Free Hip Flexion in Asymptomatic Young Adult Women. *J Bone Joint Surg Am* 2020; 102(21S Suppl 1):22-26. PMID: 32453117. Full Text

Makhni EC. Meaningful Clinical Applications of Patient-Reported Outcome Measures in Orthopaedics. *J Bone Joint Surg Am* 2020; 103(1):84-91. PMID: 33079895. Full Text

Makhni EC, **Gulledge CM**, **Kuhlmann NA**, and **Muh SJ**. Open Acromioclavicular Joint Reconstruction with Semitendinosus Allograft Utilizing the Cerclage Technique. *Arthrosc Tech* 2020; 9(4): e505-e511. PMID: 32368471. Full Text

Makhni EC, Makhni S, and Ramkumar PN. Artificial Intelligence for the Orthopaedic Surgeon: An Overview of Potential Benefits, Limitations, and Clinical Applications. *J Am Acad Orthop Surg* 2020; Epub ahead of print. PMID: 33323681. Full Text

Makhni EC, Ramkumar PN, Cvetanovich G, and Nho SJ. Approach to the Patient with Failed Hip Arthroscopy for Labral Tears and Femoroacetabular Impingement. *J Am Acad Orthop Surg* 2020; 28(13):538-545. PMID: 32574474. Full Text

McDonald M, **Ward L**, Sorenson B, **Wortham H**, Jarski R, and **El-Yussif E**. The Effect of a 6am-9am Dedicated Orthopaedic Trauma Room on Hip Fracture Outcomes in a Community Level II Trauma Center. *J Orthop Trauma* 2020; Epub ahead of print. PMID: 32956207. Full Text

Meldau JE, **Srivastava K**, **Okoroha KR**, Ahmad CS, **Moutzouros V**, and **Makhni EC**. Cost analysis of Tommy John surgery for Major League Baseball teams. *J Shoulder Elbow Surg* 2020; 29(1):121-125. PMID: 31668501. Full Text

Moeller JL. Social Media and the Sports Medicine Physician. *Clin J Sport Med* 2020; Epub ahead of print. PMID: 32852301. Full Text

Moeller JL, and Galasso L. Pelvic Region Avulsion Fractures in Adolescent Athletes: A Series of 242 Cases. *Clin J Sport Med* 2020; Epub ahead of print. PMID: 32941369. Full Text

Moutzouros V, **Jildeh TR**, **Khalil LS**, **Schwartz K**, Hasan L, Matar RN, and **Okoroha KR**. A Multimodal Protocol to Diminish Pain Following Common Orthopedic Sports Procedures: Can We Eliminate Postoperative Opioids? *Arthroscopy* 2020; 36(8):2249-2257. PMID: 32353620. Full Text

Nakamura A, **Ali SA**, and Kapoor M. Antisense oligonucleotide-based therapies for the treatment of osteoarthritis: Opportunities and roadblocks. *Bone* 2020; 138:115461. PMID: 32485363. Full Text

Nwachuwu BU, Rasio J, Beck EC, **Okoroha KR**, Sullivan SW, **Makhni EC**, and Nho SJ. PROMIS Physical Function Has a Lower Effect Size and is Less Responsive than Legacy Hip Specific Patient Reported Outcomes Measures Following Arthroscopic Hip Surgery. *Arthroscopy* 2020; 36(12):2992-2997. PMID: 32679295. Full Text

Okoroha KR, **Ussef N**, **Jildeh TR**, **Khalil LS**, Hasan L, Bench C, **Zeni F**, **Eller E**, and **Moutzouros V**. Comparison of Tendon Lengthening With Traditional Versus Accelerated Rehabilitation After Achilles Tendon Repair: A Prospective Randomized Controlled Trial. *Am J Sports Med* 2020; 48(7):1720-1726. PMID: 32203675. Full Text

Oravec D, **Zauel R**, **Flynn MJ**, and **Yeni YN**. Vertebral stiffness measured via tomosynthesis-based digital volume correlation is strongly correlated with reference values from micro-CT-based DVC. *Med Eng Phys* 2020; 84:169-173. PMID: 32977915. Full Text

Patel BH, **Okoroha KR**, **Jildeh TR**, Lu Y, Baker JD, Nwachukwu BU, Foster MG, Allen AA, and Forsythe B. Adductor injuries in the National Basketball Association: an analysis of return to play and player performance from 2010 to 2019. *Phys Sportsmed* 2020; 48(4):450-457. PMID: 32202444. Request Article

Rahman TM, Frisch NB, **Darrith B**, Patel I, and **Silverton CD**. Incidence of Pseudotumors in a Dual Modular Stem Construct with and Without Metal-on-Metal Bearing Surface. *J Am Acad Orthop Surg* 2020; 29(2): e92-e97. PMID: 32568995. Full Text

Rios-Arce ND, Schepper JD, Dagenais A, Schaefer L, **Daly-Seiler CS**, **Gardinier JD**, Britton RA, McCabe LR, and Parameswaran N. Post-antibiotic gut dysbiosis-induced trabecular bone loss is dependent on lymphocytes. *Bone* 2020; 134:115269. PMID: 32061677. Full Text

Roberts KC, Moser SE, Collins AC, McCardel BR, Schultz KA, Schaffer NE, **Tramer JS**, Carpenter CA, Pierce JM, Edwards A, Dubois KM, and Brummett CM. Prescribing and Consumption of Opioids After Primary, Unilateral Total Hip and Knee Arthroplasty in Opioid-Naive Patients. *J Arthroplasty* 2020; 35(4):960-965.e961. PMID: 31924487. Full Text

Sedighi A, **Rashedi E**, and Nussbaum MA. A head-worn display ("smart glasses") has adverse impacts on the dynamics of lateral position control during gait. *Gait Posture* 2020; 81:126-130. PMID: 32717669. Full Text

Singleton IM, **Garfinkel RJ**, Malone JB, Temkit MH, and Belthur MV. Determinants of caregiver satisfaction in pediatric orthopedics. *J Pediatr Orthop B* 2020; Epub ahead of print. PMID: 32694425. Full Text

Tramer JS, **Khalil LS**, **Fidai MS**, Meldau J, Sheena GJ, **Muh SJ**, **Moutzouros V**, and **Makhni EC**. Mental health and tobacco use are correlated with PROMIS upper extremity and pain

interference scores in patients with shoulder pathology. *Musculoskelet Surg* 2020; Epub ahead of print. PMID: 32661838. Full Text

Tran G, **Khalil LS**, **Wrubel A**, **Klochko CL**, **Davis JJ**, and **Soliman SB**. Incidental findings detected on preoperative CT imaging obtained for robotic-assisted joint replacements: clinical importance and the effect on the scheduled arthroplasty. *Skeletal Radiol* 2020; Epub ahead of print. PMID: 33140168. Full Text

Umeh ON, **Beekman R**, **D'sa H**, and **Friedman BJ**. Elderly Man With Progressive Nail Atrophy: Challenge. *Am J Dermatopathol* 2020; Epub ahead of print. PMID: 32932300. Full Text

Weber AE, Alluri RK, **Makhni EC**, Bolia IK, Mayer EN, Harris JD, and Nho SJ. Anatomic Evaluation of the Interportal Capsulotomy Made with the Modified Anterior Portal versus Standard Anterior Portal: Comparable Utility with Decreased Capsule Morbidity. *Hip Pelvis* 2020; 32(1):42-49. PMID: 32158728. Full Text

Yeni YN, **Oravec D**, **Drost J**, **Bevins N**, **Morrison C**, and **Flynn MJ**. Bone health assessment via digital wrist tomosynthesis in the mammography setting. *Bone* 2020; 144:115804. PMID: 33321264. Full Text

Zheng JP, He X, Liu F, Yin S, Wu S, **Yang M**, Zhao J, Dai X, Jiang H, Yu L, Yin Q, Ju D, Li C, Lipovich L, Xie Y, Zhang K, Li HJ, Zhou J, and Li L. YY1 directly interacts with myocardin to repress the triad myocardin/SRF/CArG box-mediated smooth muscle gene transcription during smooth muscle phenotypic modulation. *Sci Rep* 2020; 10(1):21781. PMID: 33311559. Full Text

Otolaryngology – Head and Neck Surgery

Amit M, Liu C, Gleber-Netto FO, Kini S, **Tam S**, Benov A, Aashiq M, El-Naggar AK, Moreno AC,
Rosenthal DI, Glisson BS, Ferrarotto R, Wong MK, Migden MR, Baruch EN, Li G, Khanna A, Goepfert RP, Nagarajan P, Weber RS, Myers JN, and Gross ND. Inclusion of extranodal extension in the lymph node classification of cutaneous squamous cell carcinoma of the head and neck. *Cancer* 2020; Epub ahead of print. PMID: 33320343. Full Text

Amit M, Liu C, Netto Gleber FO, Kini S, **Tam S**, Benov A, Aashiq M, El-Naggar AK, Moreno AC, Rosenthal DI, Glisson BS, Ferrarotto R, Wong MK, Migden MR, Li G, Khanna A, Goepfert RP, Nagarajan P, Weber RS, Myers JN, and Gross ND. Integrating depth of invasion in T classification improves the prognostic performance of the American Joint Committee on Cancer primary tumor staging system for cutaneous squamous cell carcinoma of the head and neck. *Eur J Cancer* 2020; 144:169-177. PMID: 33352413. Full Text

Amit M, **Tam S**, Bader T, Sorkin A, and Benov A. Pausing cancer screening during the severe acute respiratory syndrome coronavirus 2pandemic: Should we revisit the recommendations? *Eur J Cancer* 2020; 134:86-89. PMID: 32473542. Full Text

Asmaro K, **Rock J**, and **Craig J**. Expanded Endonasal Approach for Resection of Extradural Infratemporal Fossa Trigeminal Schwannoma: 2-Dimensional Operative Video. *Oper Neurosurg*
(Hagerstown) 2020; 19(4): E396-E397. PMID: 32348506. Full Text

Bauer AM, **Angster K**, Schuman AD, Thompson BG, and Telian SA. Aberrant AICA Injury During Translabyrinthine Approach. *Otol Neurotol* 2020; 41(10):1423-1426. PMID: 33003181.

Full Text

Chang SS. The Patient Perspective-A Valuable but Untapped Resource in Otolaryngology-Head and Neck Surgery. *JAMA Otolaryngol Head Neck Surg* 2020; 146(5):497-499. PMID: 32271365. Full Text

Craig JR, and **Deeb RH**. Reconstruction of Anterior Table Frontal Sinus Defects with Pericranial Flap and Titanium Mesh. *Laryngoscope* 2020; Epub ahead of print. PMID: 33258483. Full Text

Craig JR, Tataryn RW, Aghaloo TL, Pokorny AT, Gray ST, Mattos JL, and Poetker DM. Management of odontogenic sinusitis: multidisciplinary consensus statement. *Int Forum Allergy Rhinol* 2020; 10(7):901912. PMID: 32506807. Full Text

Deeb R. Surgical Considerations in Patients of Middle Eastern Descent. *Otolaryngol Clin North Am* 2020; 53(2):283-298. PMID: 31982175. Full Text

Dhillon VK, Randolph GW, Stack BC, Jr., Lindeman B, Bloom G, Sinclair CF, Woodson G, Brooks JA, Childs LF, Esfandiari NH, Evangelista L, Guardiani E, Quintanilla-Dieck L, Naunheim MR, Shindo M, **Singer M**, Tolley N, Angelos P, Kupfer R, Banuchi V, Liddy W, and Tufano RP. Immediate and partial neural dysfunction after thyroid and parathyroid surgery: Need for recognition, laryngeal exam, and early treatment. *Head Neck* 2020; 42(12):3779-3794. PMID: 32954575. Full Text

Ellis MM, **Jones LR**, **Siddiqui F**, **Sunkara PR**, and **Ozog DM**. The Efficacy of Surgical Excision Plus Adjuvant Multimodal Therapies in the Treatment of Keloids: A Systematic Review and Meta-Analysis. *Dermatol Surg* 2020; 46(8):1054-1059. PMID: 32224709. Full Text

Goosmann M, **Chang S**, and **Craig J**. Treating sinonasal crusting and infection after palatal and sinonasal cancer resection with topical antibiotic irrigations. *Oral Oncol* 2020; Epub ahead of print. PMID: 33243563. Full Text

Goyal VK, Ahmad A, **Turfe Z**, **Peterson EI**, and **Craig JR**. Predicting Odontogenic Sinusitis in Unilateral Sinus Disease: A Prospective, Multivariate Analysis. *Am J Rhinol Allergy* 2020; Epub ahead of print. PMID: 32646233. Full Text

Ibrahim S, Byrd C, and **Kubek D**. Cervical chrondrocutaneous branchial remnant: A case report. *Otolaryngology Case Reports* 2020; 17. PMID: Not assigned. Full Text

Iwata AJ, **Chang SS**, **Ghanem TA**, and **Singer MC**. In Response to Regarding Surgical Impact of a Dedicated Endocrine Surgeon on an Academic Otolaryngology Department. *Laryngoscope* 2020; 130(11): E705. PMID: 32216099. Full Text

Krane NA, Fagin A, **Ghanem TA**, Cannady SB, Petrisor D, and Wax MK. Simultaneous maxillary and mandibular reconstruction with a single Osteocutaneous fibula free flap: A description of three cases. *Microsurgery* 2020; Epub ahead of print. PMID: 32956515. Full Text

Law RH, Bazzi TD, **Van Harn M**, **Craig JR**, and **Deeb RH**. Predictors of Long-Term Nasal Obstruction Symptom Evaluation Score Stability Following Septoplasty With Inferior Turbinate Reduction. *Laryngoscope* 2020; Epub ahead of print. PMID: 33141435. Full Text

Law RH, **Ko AB**, **Jones LR**, **Peterson EL**, **Craig JR**, and **Deeb RH**. Postoperative pain with or without nasal splints after septoplasty and inferior turbinate reduction. *Am J Otolaryngol* 2020;

41(6):102667. PMID: 32823039. Full Text

Lechner MG, Bernardo AC, Lampe A, Praw SS, **Tam SH**, and Angell TE. Changes in Stage Distribution and Disease-Specific Survival in Differentiated Thyroid Cancer with Transition to American Joint Committee on Cancer 8th Edition: A Systematic Review and Meta-Analysis. *Oncologist* 2020; Epub ahead of print. PMID: 32864832. Full Text

Macki M, Mahajan A, Shatz R, **Air EL**, **Novikova M**, Fakih M, Elmenini J, **Kaur M**, **Bouchard KR**, **Funk BA**, and **Schwalb JM**. Prevalence of Alternative Diagnoses and Implications for Management in Idiopathic Normal Pressure Hydrocephalus Patients. *Neurosurgery* 2020; 87(5):999-1007. PMID: 32472677. Full Text

Mann EA, Nandkumar S, Addy N, Demko BG, Freedman NS, Gillespie MB, Headapohl W, Kirsch DB, Phillips BA, Rosen IM, Schneider LD, Stepnowsky CJ, **Yaremchuk KL**, and Eydelman MB. Study Design Considerations for Sleep Disordered Breathing Devices. *J Clin Sleep Med* 2020; 16(3):441-449. PMID: 31992406. Full Text

Margalit DN, Sacco AG, Cooper JS, Ridge JA, Bakst RL, Beadle BM, Beitler JJ, **Chang SS**, Chen AM, Galloway TJ, Koyfman SA, Mita C, Robbins JR, Tsai CJ, Truong MT, Yom SS, and **Siddiqui F**. Systematic review of postoperative therapy for resected squamous cell carcinoma of the head and neck: Executive summary of the American Radium Society appropriate use criteria. *Head Neck* 2020; 43(1):367-391. PMID: 33098180. Full Text

Peleman JR, **Tarwade P**, **Han X**, **Penning DH**, and **Craig JR**. Hemodynamic Changes with 1:1000 Epinephrine on Wrung-Out Pledgets Before and During Sinus Surgery. *Ann Otol Rhinol Laryngol* 2020; Epub ahead of print. PMID: 32945177. Full Text

Peterson JD, **Goyal V**, Puricelli MD, Thatcher A, and Smith RJ. Neonatal Lateral Epiglottic Defects. *Ann Otol Rhinol Laryngol* 2020; Epub ahead of print. PMID: 32772542. Full Text

Piker EG, Jacobson GP, Romero D, Wang Y, and **Smith K**. The Clinical Significance of the Failure to Perceive Vertigo in the Postcaloric Period Despite a Robust Caloric Response. *Am J Audiol* 2020; 29(1):50-58. PMID: 32073288. Full Text

Plawecki AM, **Singer MC**, **Peterson EL**, **Yaremchuk KL**, and **Deeb RH**. Impact of a specialty trained billing team on an academic otolaryngology practice. *Am J Otolaryngol* 2020; 41(6):102720. PMID: 32977062. Full Text

Shukairy MK, **Burmeister C**, **Ko AB**, and **Craig JR**. Recognizing odontogenic sinusitis: A national survey of otolaryngology chief residents. *Am J Otolaryngol* 2020; 41(6):102635. PMID: 32653733. Full Text

Singer MC, Marchal F, Angelos P, Bernet V, Boucai L, Buchholzer S, Burkey B, Eisele D, Erkul E, Faure F, Freitag SK, Gillespie MB, Harrell RM, Hartl D, Haymart M, Leffert J, Mandel S, Miller BS, Morris J, Pearce EN, Rahmati R, Ryan WR, Schaitkin B, Schlumberger M, Stack BC, Van Nostrand D, Wong KK, and Randolph G. Salivary and lacrimal dysfunction after radioactive iodine for differentiated thyroid cancer: American Head and Neck Society Endocrine Surgery Section and Salivary Gland Section joint multidisciplinary clinical consensus statement of otolaryngology, ophthalmology, nuclear medicine and endocrinology. *Head Neck* 2020; 42(11):3446-3459. PMID: 32812307. Full Text

Swegal W, **Deeb R**, Greene J, **Peterson E**, **Perri MB**, **Bardossy AC**, **Zervos M**, and **Jones LR**. Changes in Nasal Staphylococcus Colonization and Infection Rates After Nasal Surgery.

Facial Plast Surg Aesthet Med 2020; Epub ahead of print. PMID: 32392437. Full Text

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**. Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Tsai CJ, Galloway TJ, Margalit DN, Bakst RL, Beadle BM, Beitler JJ, **Chang S**, Chen A, Cooper J, Koyfman SA, Ridge JA, Robbins J, Truong MT, Yom SS, and **Siddiqui F**. Ipsilateral radiation for squamous cell carcinoma of the tonsil: American Radium Society appropriate use criteria executive summary. *Head Neck* 2020; 43(1):392-406. PMID: 33068064. Full Text

Wang X, Langer EM, Daniel CJ, Janghorban M, **Wu V**, Wang XJ, and Sears RC. Altering MYC phosphorylation in the epidermis increases the stem cell population and contributes to the development, progression, and metastasis of squamous cell carcinoma. *Oncogenesis* 2020; 9(9):79. PMID: 32895364. Full Text

Yaremchuk K. Why and When to Treat Snoring. *Otolaryngol Clin North Am* 2020; 53(3):351-365. PMID: 32336469. Full Text

Yassin-Kassab A, **Bhargava P**, **Tibbetts RJ**, **Griggs ZH**, **Peterson EI**, and **Craig JR**. Comparison of bacterial maxillary sinus cultures between odontogenic sinusitis and chronic rhinosinusitis. *Int Forum Allergy Rhinol* 2020; Epub ahead of print. PMID: 32656998. Full Text

Yoo F, Kuan EC, Batra PS, Chan CK, Tajudeen BA, and Craig JR. Predictors of rhinorrhea response after posterior nasal nerve cryoablation for chronic rhinitis. *Int Forum Allergy Rhinol* 2020; 10(7):913-919. PMID: 32445248. Full Text

Zhao EE, Koochakzadeh S, Nguyen SA, **Yoo F**, Pecha P, and Schlosser RJ. Orbital complications of acute bacterial rhinosinusitis in the pediatric population: A systematic review and meta-analysis. *Int J Pediatr Otorhinolaryngol* 2020; 135:110078. PMID: 32408012. Full Text

Zhao K, Kim K, **Craig JR**, and Palmer JN. Using 3D printed sinonasal models to visualize and optimize personalized sinonasal sinus irrigation strategies. *Rhinology* 2020; 58(3):266-272. PMID: 32441708. Request Article

Pathology and Laboratory Medicine

Abou Shaar R, **Zia S**, **Alhamar M**, **Romano T**, **Shaw B**, **Keller C**, and **Friedman BJ**. Salivary gland hyalinizing clear cell carcinoma with cutaneous metastasis: a rare and deceptive tumor. *J Cutan Pathol* 2020; 48(1):86-89. PMID: 32640078. Full Text

A, Bonert M, Naqvi A, Wang C, Trpkov K, Dettmar P, Wintzer HO, Stoehr R, Hes O, Williamson SR, Gibson IW, and Hartmann A. Langerhans Cell Histiocytosis Associated With Renal Cell Carcinoma Is a Neoplastic Process: Clinicopathologic and Molecular Study of 7 Cases. *Am J Surg Pathol* 2020; 44(12):1658-1665. PMID: 32910018. Full Text

Ahsan BU, **Alhamar M**, **Hogan KM**, **Schultz D**, **Zuchelli T**, and **Zhang Z**. Endometrial clear cell carcinoma with metastasis to the common hepatic duct: A rare etiology of obstructive

jaundice, diagnosed by biliary cytology brushing specimen. *Cytopathology* 2020; 31(3):240-242. PMID: 32049406. Full Text

Alanee S, **Deebajah M**, **Taneja K**, **Cole D**, **Pantelic M**, **Peabody J**, **Williamson SR**, **Gupta N**, **Dabaja A**, and **Menon M**. Post prostatectomy Pathologic Findings of Patients with Clinically Significant Prostate Cancer and no Significant PI-RADS Lesions on Preoperative Magnetic Resonance Imaging. *Urology* 2020; 146:183-188. PMID: 32946907. Full Text

Alhamar M, **Ahsan B**, **Hogan K**, and **Raoufi M**. Appendiceal intussusception presenting as a caecal mass. *Malays J Pathol* 2020; 42(3):483-486. PMID: 33361733. Request Article

Alhamar M, **Vladislav T**, Smith SC, Gao Y, Cheng L, **Favazza LA**, Alani AM, Ittmann MM, Riddle ND, **Whiteley LJ**, **Gupta NS**, **Carskadon S**, **Gomez-Gelvez JC**, **Chitale DA**, **Palanisamy N**, Hes O, Trpkov K, and **Williamson SR**. Gene Fusion Characterization of Rare Aggressive Prostate Cancer Variants - Adenosquamous Carcinoma, Pleomorphic Giant Cell Carcinoma, and Sarcomatoid Carcinoma: An Analysis of 19 Cases. *Histopathology* 2020; 77. PMID: 32639612. Full Text

Antar AI, **Otrock ZK**, Abou Dalle I, El-Cheikh J, and Bazarbachi A. Pharmacologic Therapies to Prevent Relapse of Acute Myeloid Leukemia After Allogeneic Hematopoietic Stem Cell Transplantation. *Front Oncol* 2020; 10:596134. PMID: 33224890. Full Text

Antar AI, **Otrock ZK**, Jabbour E, Mohty M, and Bazarbachi A. FLT3 inhibitors in acute myeloid leukemia: ten frequently asked questions. *Leukemia* 2020; 34(3). PMID: 31919472. Full Text

Aurora L, **Peterson E**, **Gui H**, **Zeld N**, **McCord J**, Pinto Y, **Cook B**, **Sabbah HN**, **Keoki Williams L**, Snider J, and **Lanfear DE**. Suppression Tumorigenicity 2 (ST2) Turbidimetric Immunoassay Compared to Enzyme-Linked Immunosorbent Assay in Predicting Survival in Heart Failure Patients with Reduced Ejection Fraction. *Clin Chim Acta* 2020; 510:767-771. PMID: 32926842. Request Article

Baine MK, Hsieh MS, Lai WV, Egger JV, Jungbluth A, Daneshbod Y, Beras A, Spencer R, Lopardo J, Bodd F, **Montecalvo J**, Sauter JL, Chang JC, Buonocore DJ, Travis WD, Sen T, Poirier JT, Rudin CM, and Rekhtman N. Small Cell Lung Carcinoma Subtypes Defined by ASCL1, NEUROD1, POU2F3 and YAP1: Comprehensive Immunohistochemical and Histopathologic Characterization. *J Thorac Oncol* 2020; 15(12):1823-1835. PMID: 33011388. Full Text

Bradford CR, Ferlito A, **Devaney KO**, Mäkitie AA, and Rinaldo A. Prognostic factors in laryngeal squamous cell carcinoma. *Laryngoscope Investig Otolaryngol* 2020; 5(1):74-81. PMID: 32128433. Full Text

Caines A, **Allo G**, and **Siddiqui Y**. Gastric varices from metastatic ovarian cancer with splenic involvement. *Practical Gastroenterology* 2020; 44(2):40-44. PMID: Not assigned. Request Article

Carroll KC, Reid JL, Thornberg A, Whitfield NN, Trainor D, Lewis S, Wakefield T, Davis TE, Church KG, **Samuel L**, Mills R, Jim P, Young S, and Nolte FS. Clinical Performance of the Novel GenMark Dx ePlex(R) Blood Culture ID Gram-Positive Panel. *J Clin Microbiol* 2020; 58(4). PMID: 31996444. Full Text

Chen Y, **Sadasivan SM**, **She R**, **Datta I**, **Taneja K**, **Chitale D**, **Gupta N**, Davis MB, Newman LA, **Rogers CG**, Paris PL, **Li J**, **Rybicki BA**, and **Levin AM**. Breast and prostate cancers

harbor common somatic copy number alterations that consistently differ by race and are associated with survival. *BMC Med Genomics* 2020; 13(1):116. PMID: 32819446. Full Text

Cho R, **Myers DT**, **Onwubiko IN**, and **Williams TR**. Extraosseous multiple myeloma: imaging spectrum in the abdomen and pelvis. *Abdom Radiol (NY)* 2020; Epub ahead of print. PMID: 32870348. Full Text

Cook B, **McCord J**, **Hudson M**, **Al-Darzi W**, **Moyer M**, **Jacobsen G**, and **Nowak R**. Baseline high sensitivity cardiac troponin I level below limit of quantitation rules out acute myocardial infarction in the emergency department. *Crit Pathw Cardiol* 2020; Epub ahead of print. PMID: 32639243. Full Text

Das R, McGrath K, Seiser N, Smith K, Uttam S, Brand RE, Fasanella KE, Khalid A, Chennat JS, Sarkaria S, Singh H, Slivka A, Zeh HJ, Zureikat AH, Hogg ME, Lee K, Paniccia A, Ongchin MC, Pingpank JF, Boone BA, Dasyam AK, Bahary N, Gorantla VC, Rhee JC, Thomas R, Ellsworth S, Landau MS, Ohori NP, Henn P, Shyu S, **Theisen BK**, and Singhi AD. Tumor Size Differences Between Preoperative Endoscopic Ultrasound and Postoperative Pathology for Neoadjuvant-Treated Pancreatic Ductal Adenocarcinoma Predict Patient Outcome. *Clin Gastroenterol Hepatol* 2020; Epub ahead of print. PMID: 33278573. Full Text

Dedigama-Arachchige P, **Carskadon S**, **Li J**, **Loveless I**, **Alhamar M**, **Peabody JO**, **Stricker H**, **Chitale DA**, **Rogers CG**, **Menon M**, **Gupta NS**, Bismar TA, **Williamson SR**, and **Palanisamy N**. Clonal evaluation of prostate cancer molecular heterogeneity in biopsy samples by dual immunohistochemistry and dual RNA in situ hybridization. *Mod Pathol* 2020; 33(9):1791-1801. PMID: 32238875. Full Text

Fatima S, **D'sa H**, **Chaffins ML**, **Menon M**, and **Friedman BJ**. An Elderly Male with a Chronic Rash on the Right Foot. *Indian J Dermatol* 2020; 65(3):222-224. PMID: 32565566. Full Text

Favazza LA, Parseghian CM, Kaya C, Nikiforova MN, Roy S, Wald AI, Landau MS, Proksell SS, Dueker JM, Johnston ER, Brand RE, Bahary N, Gorantla VC, Rhee JC, Pingpank JF, Choudry HA, Lee K, Paniccia A, Ongchin MC, Zureikat AH, Bartlett DL, and Singhi AD. KRAS amplification in metastatic colon cancer is associated with a history of inflammatory bowel disease and may confer resistance to antiEGFR therapy. *Mod Pathol* 2020; 33(9):1832-1843. PMID: 32376853. Full Text

Filkins L, Hauser JR, Robinson-Dunn B, **Tibbetts R**, Boyanton BL, Jr., and Revell P. American Society for Microbiology provides 2020 Guidelines for Detection and Identification of Group B Streptococcus. *J Clin Microbiol* 2020; 59(1). PMID: 33115849. Full Text

Friedman BJ, **Robinson G**, and **Kohen L**. Dermoscopic Features of Spitz Tumor With LMNA-NTRK1 Fusion. *Dermatol Pract Concept* 2021; 11(1):e2020101. PMID: 33354405. Request Article

Gadde R, **Arora K**, Felicella MM, Arora S, Cheng L, **Park H**, **Gupta NS**, Salamat MS, and **Williamson SR**. Cystic Trophoblastic Tumor in a Primary Central Nervous System Post-Chemotherapy Germ Cell Tumor: The First Case Report. *Int J Surg Pathol* 2020; 28(8):925-928. PMID: 32498578. Full Text

Gadde R, and **Samuel L**. Answer to March 2020 Photo Quiz. *J Clin Microbiol* 2020; 58(3). PMID: 32094123. Full Text

Gadde R, and **Samuel L**. Photo Quiz: Subcutaneous Infection in an Immunocompetent Patient

Handling a Wooden Wheelbarrow. *J Clin Microbiol* 2020; 58(3). PMID: 32094122. Full Text

Gestrich C, **Cowden D**, and Harbhajanka A. Cytomorphology of glioblastoma metastic to a cervical lymph node diagnosed by fine needle aspiration (FNA): A case report and review of literature. *Diagn Cytopathol* 2020; 48(6):567-560. PMID: 32160396. Full Text

Hamid MS, **Steen DW**, **Ormsby AH**, Lin X, and **Le KH**. Inflamed nonlimbal scleral dermoid masquerading as nodular scleritis. *J aapos* 2020; 24(5):319-321. PMID: 32931936. Full Text

Hatfield BS, King CR, Udager AM, **Williamson SR**, Gandhi JS, Amin MB, Spruill L, Lindsey KG, Pillappa R, Roseman JT, 2nd, Mochel MC, and Smith SC. Peyronie Disease: Clinicopathologic Study of 71 Cases with Emphasis on Histopathologic Patterns and Prevalent Metaplastic Ossification. *Hum Pathol* 2020; 104:9-17. PMID: 32681945. Full Text

Jebastin JAS, **Perry KD**, **Chitale DA**, **Mott MP**, **Sanchez J**, Fritchie KJ, **Palanisamy N**, and **Williamson SR**. Atypical Lipomatous Tumor/Well-Differentiated Liposarcoma With Features Mimicking Spindle Cell Lipoma. *Int J Surg Pathol* 2020; 28(3):336-340. PMID: 31672072. Full Text

Jebastin Thangaiah J, Vickery J, Selwanes W, Al-Haddad E, **Perry KD**, **Palanisamy N**, Poulik JM, **Williamson SR**, **Chitale DA**, and Shehata BM. A Novel COL1A1-CAMTA1 Rearrangement in Cranial Fasciitis. *Int J Surg Pathol* 2020; 28(6):678-682. PMID: 32192385. Full Text

Kryvenko ON, **Williamson SR**, Schwartz LE, and Epstein JI. Gleason score 5+3=8 (grade group 4) prostate cancer - a rare occurrence with contemporary grading. *Hum Pathol* 2020; 97:40-51. PMID: 31923450. Full Text

Li P, Zhang D, Zhou J, Li P, **Shen Y**, Pan Z, Evans AG, and Liao X. Hepatic involvement by T-cell neoplasms: a clinicopathologic study of 40 cases. *Hum Pathol* 2020; 106:1-12. PMID: 33010300. Full Text

Mahajan M, **Venkatesulu BP**, **Sallam O**, **Taneja K**, **Scott M**, and **Brar I**. Unmasking lymphoma immune reconstitution inflammatory syndrome in a patient with pyrexia of unknown origin: a case report. *J Egypt Natl Canc Inst* 2020; 32(1):8. PMID: 32372315. Full Text

McCord J, **Hana A**, **Cook B**, **Hudson MP**, **Miller J**, Akoegbe G, Mueller C, **Moyer M**, Jacobsen G, and **Nowak R**. The Role of Cardiac Testing with the 0/1-Hour High-Sensitivity Cardiac Troponin Algorithm Evaluating for Acute Myocardial Infarction. *Am Heart J* 2020; Epub ahead of print. PMID: 33373603. Full Text

Nasr SH, Kudose SS, Said SM, Santoriello D, Fidler ME, **Williamson SR**, Damgard SE, Sethi S, Leung N, D'Agati VD, and Markowitz GS. Immunotactoid glomerulopathy is a rare entity with monoclonal and polyclonal variants. *Kidney Int* 2020; Epub ahead of print. PMID: 32818517. Full Text

Omark J, Masunaga Y, Hannibal M, **Shaw B**, Fukami M, Kato F, Saitsu H, Kagami M, and Ogata T. Kagami-Ogata syndrome in a patient with 46,XX,t(2;14)(q11.2;q32.2)mat disrupting MEG3. *J Hum Genet* 2020; Epub ahead of print. PMID: 33067531. Request Article

Onwubiko I, **Kasperek G**, **Laforest RA**, **Philip SG**, **Kuriakose P**, and **Otrock ZK**. Predictors of response and outcome of patients with acquired haemophilia A. *Haemophilia* 2020;

26(5):e244-e246. PMID: 32469118. Full Text

Oska S, **Zarbo A**, **Yeager D**, **Friedman BJ**, and **Shwayder T**. Melanoma arising in a patient with ataxiatelangiectasia: A call for full skin examinations in this patient population. *Pediatr Dermatol* 2020; 37(4):767-768. PMID: 32413934. Full Text

Ozog DM, Sexton JZ, **Narla S**, Pretto-Kernahan CD, Mirabelli C, **Lim HW**, **Hamzavi IH**, **Tibbetts RJ**, and **Mi QS**. The Effect of Ultraviolet C Radiation Against Different N95 Respirators Inoculated with SARSCoV-2. *Int J Infect Dis* 2020; 100:224-229. PMID: 32891736. Full Text

Pagano MB, Treml A, Stephens LD, Joshi S, Li Y, **Lopez-Plaza I**, Poyyapakkam S, Schwartz J, Tanhehco Y, and Zantek ND. Entrustable professional activities for apheresis medicine education. *Transfusion* 2020; Epub ahead of print. PMID: 32757215. Full Text

Paul T, Yadav DK, Alhamar M, and Dabak V. Primary Pleural Extranodal Marginal Zone Lymphoma Presenting as Bilateral Chylothorax. *Case Rep Oncol* 2020; 13(2):929-934. PMID: 32884542. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Rodgers SA, **Suneja A**, **Yoshida A**, **Abouljoud MS**, and **Otrock ZK**. Paradoxical embolic strokes in a liver transplant recipient with atrial septal defect undergoing therapeutic plasma exchange. *J Clin Apher* 2020; Epub ahead of print. PMID: 33058311. Full Text

Rodgers SA, and **Williamson SR**. Xanthogranulomatous Ureteritis Mimicking Ureteral Involvement by Cancer in a Radical Cystectomy Specimen. *Int J Surg Pathol* 2020; Epub ahead of print. PMID: 32493143. Full Text

Roshandel D, Chen Z, Canty AJ, Bull SB, Natarajan R, Paterson AD, **Bhan A**, **Jones JK**, **Kruger D**, **Edwards PA**, **Remtema H**, **Angus E**, **Galprin A**, **McLellan M**, **Thomas A**, **Carey JD**, and **Whitehouse F**. DNA methylation age calculators reveal association with diabetic neuropathy in type 1 diabetes. *Clin Epigenetics* 2020; 12(1):52. PMID: 32248841. Full Text

Sadasivan SM, **Chen Y**, **Gupta NS**, **Han X**, **Bobbitt KR**, **Chitale DA**, **Williamson SR**, Rundle AG, Tang D, and **Rybicki BA**. The interplay of GDF15 (growth differentiation factor 15) expression and M2 macrophages during prostate carcinogenesis. *Carcinogenesis* 2020; 41(8):1074-1082. PMID: 32614434. Full Text

Samuel L. Point-of-Care Testing in Microbiology. *Clin Lab Med* 2020; 40(4):483-494. PMID: 33121617. Full Text

Sardana R, Mishra SK, **Williamson SR**, Mohanty A, and Mohanty SK. Immune checkpoints and their inhibitors: Reappraisal of a novel diagnostic and therapeutic dimension in the urologic malignancies. *Semin Oncol* 2020; 47(6):367-379. PMID: 33160642. Full Text

Schoenfeld AJ, Bandlamudi C, Lavery JA, **Montecalvo J**, Namakydoust A, Rizvi H, Egger JV, Concepcion CP, Paul S, Arcila ME, Daneshbod Y, Chang JC, Sauter JL, Beras A, Ladanyi M, Jacks T, Rudin CM, Taylor BS, Donoghue MTA, Heller G, Hellmann MD, Rekhtman N, and

Riely GJ. The Genomic Landscape of SMARCA4 Alterations and Associations with Outcomes in Patients with Lung Cancer. *Clin Cancer Res* 2020; 26(21):5701-5708. PMID: 32709715. Full Text

Sein Myint NN, Kunaviktikul W, and **Stark A**. A contemporary understanding of organizational climate in healthcare setting: A concept analysis. *Nurs Forum* 2020; Epub ahead of print. PMID: 33020958. Full Text

Shallal A, **Markowitz N**, and **Tibbetts R**. The Brief Case: Cough in an Immunocompromised Patient. *J Clin Microbiol* 2020; 58(11). PMID: 33087542. Full Text

Shallal A, **Markowitz N**, and **Tibbetts R**. Closing the Brief Case: Cough in an Immunocompromised Patient. *J Clin Microbiol* 2020; 58(11). PMID: 33087543. Full Text

Sharma Y, Nasr SH, Larsen CP, **Kemper A**, **Ormsby AH**, and **Williamson SR**. COVID-19-Associated Collapsing Focal Segmental Glomerulosclerosis: A Report of 2 Cases. *Kidney Med* 2020; 2(4):493-497. PMID: 32775990. Full Text

Slota AA, Malik D, and Hall D. Pseudo-Thrombocytosis Caused by Extreme Microcytosis in a Patient with Alpha Thalassemia Trait. *Indian J Hematol Blood Transfus* 2020; 36(4):779-780. PMID: 33100731. Full Text

Thanikachalam K, **Damarla V**, **Seixas T**, **Dobrosotskaya I**, **Wollner I**, **Kwon D**, **Winters K**, **Raoufi M**, **Li J**, **Siddiqui F**, and **Khan G**. Neoadjuvant Phase II Trial of Chemoradiotherapy in Patients With Resectable and Borderline Resectable Pancreatic Cancer. *Am J Clin Oncol* 2020; 43(6):435-441. PMID: 32251119. Full Text

Umeh ON, **Beekman R**, **D'sa H**, and **Friedman BJ**. Elderly Man With Progressive Nail Atrophy: Challenge. *Am J Dermatopathol* 2020; Epub ahead of print. PMID: 32932300. Full Text

van Leenders G, van der Kwast TH, Grignon DJ, Evans AJ, Kristiansen G, Kweldam CF, Litjens G, McKenney JK, Melamed J, Mottet N, Paner GP, Samaratunga H, Schoots IG, Simko JP, Tsuzuki T, Varma M, Warren AY, Wheeler TM, **Williamson SR**, and Iczkowski KA. The 2019 International Society of Urological Pathology (ISUP) Consensus Conference on Grading of Prostatic Carcinoma. *Am J Surg Pathol* 2020; 44(8):e87-e99. PMID: 32459716. Full Text

Warrington JS, Swanson K, Dodd M, Lo SY, Haghamad A, Duque TB, and **Cook B**. Measuring What Matters: How the Laboratory Contributes Value in the Opioid Crisis. *J Appl Lab Med* 2020; 5(6):1378-1390. PMID: 33147341. Full Text

Wheeler SE, Peck Palmer OM, Greene DN, Park JY, **Winston-McPherson G**, Amukele TK, and PérezStable EJ. Examining Laboratory Medicine's Role in Eliminating Health Disparities. *Clin Chem* 2020; 66(10):1266-1271. PMID: 32888006. Full Text

White RJ, Jerjes-Sanchez C, Bohns Meyer GM, Pulido T, Sepulveda P, Wang KY, Grunig E, Hiremath S, Yu Z, Gangcheng Z, Yip WLJ, Zhang S, Khan A, Deng CQ, Grover R, Tapson VF, **Awdish R**, and **Cajigas H**. Combination Therapy with Oral Treprostinil for Pulmonary Arterial Hypertension. A DoubleBlind Placebo-controlled Clinical Trial. *Am J Respir Crit Care Med* 2020; 201(6):707-717. PMID: 31765604. Full Text

Williamson SR, Cardili L, **Whiteley LJ**, **Sanchez J**, and **Kis O**. Sclerosing TSC1 Mutated

Renal Cell Carcinoma: An Unusual Pattern Mimicking MITF Family Translocation Renal Cell Carcinoma. *Genes Chromosomes Cancer* 2020; 59(10):591-594. PMID: 32418252. Full Text

Williamson SR, Gill AJ, Argani P, Chen YB, Egevad L, Kristiansen G, Grignon DJ, and Hes O. Report From the International Society of Urological Pathology (ISUP) Consultation Conference on Molecular Pathology of Urogenital Cancers: III: Molecular Pathology of Kidney Cancer. *Am J Surg Pathol* 2020; 44(7)e47-e65. PMID: 32251007. Full Text

Yaguchi G, **Tang HJ**, **Deebajah M**, **Keeley J**, **Pantelic M**, **Williamson S**, **Gupta N**, **Peabody JO**, **Menon M**, **Dabaja A**, and Alanee S. The effect of multiplicity of PI-RADS 3 lesions on cancer detection rate of confirmatory targeted biopsy in patients diagnosed with prostate cancer and managed with active surveillance. *Urol Oncol* 2020; 38(6):599. PMID: 32265090. Full Text

Yuan L, Oshilaja O, Sierk A, Zhang G, Booth CN, Brainard J, and Dyhdalo KS. Metastatic breast cancer diagnosed on cervical cytology. *Cytopathology* 2020; 32(1):127-131. PMID: 32789952. Full Text

Zhang SX, Carroll KC, Lewis S, Totten M, Mead P, **Samuel L**, Steed LL, Nolte FS, Thornberg A, Reid JL, Whitfield NN, and Babady NE. Multi-center Evaluation of a PCR-based Digital Microfluidics and Electrochemical Detection System for the Rapid Identification of 15 Fungal Pathogens Directly from Positive Blood Cultures. *J Clin Microbiol* 2020; 58(5). PMID: 32075904. Full Text

Zhang Y, **Qin Y**, **Chopp M**, **Li C**, **Kemper A**, **Liu X**, **Wang X**, **Zhang L**, and **Zhang ZG**. Ischemic Cerebral Endothelial Cell-Derived Exosomes Promote Axonal Growth. *Stroke* 2020; 51(12):3701-3712. PMID: 33138691. Full Text

Pharmacy

Ali D, Barra ME, Blunck J, Brophy GM, Brown CS, Caylor M, Clark SL, Hensler D, **Jones M**, Lamer-Rosen A, Levesque M, Mahmoud LN, Mahmoud SH, May C, Nguyen K, Panos N, Roels C, Shewmaker J, Smetana K, Traeger J, Shadler A, and Cook AM. Stress-Related Gastrointestinal Bleeding in Patients with Aneurysmal Subarachnoid Hemorrhage: A Multicenter Retrospective Observational Study. *Neurocrit Care* 2020; Epub ahead of print. PMID: 33150575. Full Text

Alosaimy S, Jorgensen SCJ, Lagnf AM, Melvin S, Mynatt RP, Carlson TJ, Garey KW, Allen D, Venugopalan V, Veve M, Athans V, Saw S, Yost CN, **Davis SL**, and Rybak MJ. Real-world Multicenter Analysis of Clinical Outcomes and Safety of Meropenem-Vaborbactam in Patients Treated for Serious Gram-Negative Bacterial Infections. *Open Forum Infect Dis* 2020; 7(3):ofaa051. PMID: 32161775. Full Text

Alosaimy S, **Sabagha NL**, Lagnf AM, Zasowski EJ, Morrisette T, Jorgensen SCJ, Trinh TD, Mynatt RP, and Rybak MJ. Monotherapy with Vancomycin or Daptomycin versus Combination Therapy with βLactams in the Treatment of Methicillin-Resistant Staphylococcus Aureus Bloodstream Infections: A Retrospective Cohort Analysis. *Infect Dis Ther* 2020; 9(2):325-339. PMID: 32248513. Full Text

August BA, Gortney JS, and Mendez J. Evaluating interprofessional socialization: Matched student selfassessments surrounding underserved clinic participation. *Curr Pharm Teach Learn* 2020; 12(8):926-931. PMID: 32564994. Request Article

Cheng JWM, Colucci V, **Kalus JS**, and Spinler SA. Focused Updates: SGLT2 Inhibitors in Patients With Heart Failure and/or Chronic Kidney Disease. *Ann Pharmacother* 2020; 55(2):252-260. PMID: 32536199. Full Text

Dingman JS, **Smith ZR**, **Coba VE**, **Peters MA**, and **To L**. Argatroban dosing requirements in extracorporeal life support and other critically ill populations. *Thromb Res* 2020; 189:69-76. PMID: 32182522. Full Text

Doh J, **Hencken L**, **Mlynarek L**, and **MacDonald N**. Utilization of a Standardized Discharge Checklist to Improve the Transition of Care for Patients Receiving Parenteral Nutrition. *Nutr Clin Pract* 2020; Epub ahead of print. PMID: 33037705. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Hanni C, Petrovitch E, Ali M, Gibson W, Giuliano C, Holzhausen J, **Makowski C**, Pallisco A, **Patel N**, Sutter D, **To L**, and Yost R. Outcomes associated with apixaban vs warfarin in patients with renal dysfunction. *Blood Adv* 2020; 4(11):2366-2371. PMID: 32463871. Full Text

Hutton M, **Kenney RM**, Vazquez JA, and Davis SL. Influence of Body Weight Category on Outcomes in Candidemia Patients Treated With Anidulafungin. *J Pharm Pract* 2020; Epub ahead of print. PMID: 32648506. Full Text

Hutton MA, Sundaram A, **Perri MB**, **Zervos MJ**, and **Herc ES**. Assessment of invitrosynergy of daptomycin or vancomycin plus ceftaroline for daptomycin non-susceptible Staphylococcus aureus. *Diagn Microbiol Infect Dis* 2020; 98(3):115126. PMID: 32861155. Full Text

Jiang C, **Stuart M**, **Makowski C**, Jennings DL, and **To L**. Safety and Efficacy of a Percutaneously pInserted Ventricular Support Device Purge Solution Heparin 25 U/mL. *Ann Pharmacother* 2020; 55(2):174-180. PMID: 32741200. Full Text

Jorgensen SCJ, Murray KP, Lagnf AM, Melvin S, Bhatia S, Shamim MD, Smith JR, Brade KD, Simon SP, Nagel J, Williams KS, Ortwine JK, Veve MP, Truong J, Huang DB, **Davis SL**, and Rybak MJ. A Multicenter Evaluation of Vancomycin-Associated Acute Kidney Injury in Hospitalized Patients with Acute Bacterial Skin and Skin Structure Infections. *Infect Dis Ther* 2020; 9(1):89-106. PMID: 31983021. Full Text

Jorgensen SCJ, Trinh TD, Zasowski EJ, Lagnf AM, Bhatia S, Melvin SM, Simon SP, Rosenberg JR, Steed ME, Estrada SJ, Morrisette T, **Davis SL**, and Rybak MJ. Evaluation of the INCREMENT-CPE, Pitt Bacteremia and qPitt Scores in Patients with Carbapenem-Resistant Enterobacteriaceae Infections Treated with Ceftazidime-Avibactam. *Infect Dis Ther* 2020; 9(2):291-304. PMID: 32088843. Full Text

Jorgensen SCJ, Trinh TD, Zasowski EJ, Lagnf AM, Simon SP, Bhatia S, Melvin SM, Steed ME, Finch NA, Morrisette T, Estrada SJ, Rosenberg JR, **Davis SL**, and Rybak MJ. Real-world experience with ceftolozane-tazobactam for multidrug-resistant gram-negative bacterial infections. *Antimicrob Agents Chemother* 2020; 64(4). PMID: 31932379. Full Text

Liu J, Mercuro NJ, **Davis SL**, Palmo T, Kashyap S, Patel TS, Petty LA, Yarnold PR, Kaye KS, and Scheetz MH. Antimicrobial never events: Objective application of a framework to assess vancomycin appropriateness. *Infect Control Hosp Epidemiol* 2020; Epub ahead of print.:1-3. PMID: 33371928. Full Text

Martirosov AL, **Smith ZR**, **Hencken L**, **MacDonald NC**, **Griebe K**, **Fantuz P**, **Grafton G**, **Hegab S**, **Ismail R**, **Jackson B**, **Kelly B**, **Miller M**, and **Awdish R**. Improving transitions of care for critically ill adult patients on pulmonary arterial hypertension medications. *Am J Health Syst Pharm* 2020; 77(12):958-965. PMID: 32495842. Full Text

Mercuro NJ, **Gill CM**, **Kenney RM**, **Alangaden GJ**, and **Davis SL**. Treatment and outcomes of Enterococcus faecium bloodstream infections in solid organ transplant recipients. *Transpl Infect Dis* 2020; 22(2)e13251. PMID: 31997476. Full Text

Mercuro NJ, Lodise TP, **Kenney RM**, **Rezik B**, **Vemulapalli RC**, **Costandi MJ**, and **Davis SL**. Impact of unit-specific metrics and prescribing tools on a family medicine ward. *Infect Control Hosp Epidemiol* 2020; 41(11):1272-1278. PMID: 32605686. Full Text

Mohammad I, Berlie HD, Lipari M, Martirosov AL, Duong AA, Faraj M, Bacon O, and Garwood CL. Ambulatory Care Practice in the COVID-19 Era: Redesigning Clinical Services and Experiential Learning. *J Am Coll Clin Pharm* 2020; Epub ahead of print. PMID: 32838219. Full Text

Morrison A, **Brar I**, **Willens D**, and **Thomas E**. Collaboration Improves PrEP Care for Providers and Patients. *Am J Med* 2020; 133(5):e212. PMID: 32450956. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol* 2020; 92(10):1791-1792. PMID: 32314799. Full Text

Morrison AR, **Kenney RM**, and **Davis SL**. Outpatient Clostridioides difficile infections: An opportunity for antimicrobial stewardship programs. *Infect Control Hosp Epidemiol* 2020; 41(8):969-971. PMID: 32484121. Full Text

Shallal A, **Kenney R**, and **Weinmann A**. Missed Vaccine Opportunities to S. pneumoniae and Influenza in Patients Admitted During the COVID-19 Pandemic. *Infect Control Hosp Epidemiol* 2020; Epub ahead of print. PMID: 33100230. Full Text

Stuart MM, **Smith ZR**, **Payter KA**, **Martz CR**, **To L**, **Swiderek JL**, **Coba VE**, and **Peters MA**. Pharmacist-driven discontinuation of antipsychotics for ICU delirium: A quasi-experimental study. *JACCP Journal of the American College of Clinical Pharmacy* 2020; 3(6):1009-1014. PMID: Not assigned. Full Text

Summers BB, Yates M, Cleveland KO, Gelfand MS, and Usery J. Fidaxomicin Compared With Oral Vancomycin for the Treatment of Severe Clostridium difficile-Associated Diarrhea: A Retrospective Review. *Hosp Pharm* 2020; 55(4):268-272. PMID: 32742016. Full Text

Thomson JM, Huynh HH, Drone HM, Jantzer JL, Tsai AK, and Jancik JT. Experience in an Urban Level 1 Trauma Center with Tranexamic Acid in Pediatric Trauma: A Retrospective Chart Review. *J Intensive Care Med* 2020; Epub ahead of print. PMID: 32090705. Full Text

Wagner JL, Carreno JJ, **Kenney RM**, **Kilgore PE**, and **Davis SL**. Antimicrobial Stewardship Metrics that Matter. *Infectious Diseases in Clinical Practice* 2020; 28(2):89-93. PMID: Not assigned. Full Text

Wagner JL, Rhodes NJ, Scheetz MH, Bosso JA, Goff DA, Rybak MJ, and **Davis SL**. Opportunities for antibiotic stewardship among carbapenem-treated patients within 18 North American hospitals. *Int J Antimicrob Agents* 2020; 55(6):105970. PMID: 32283176. Full Text

Plastic Surgery

Klassen AF, Dominici L, Fuzesi S, Cano SJ, **Atisha D**, Locklear T, Gregorowitsch ML, Tsangaris E, Morrow M, King T, and Pusic AL. Development and Validation of the BREAST-Q Breast-Conserving Therapy Module. *Ann Surg Oncol* 2020; 27(7):2238-2247. PMID: 31965369. Full Text

Mundy LR, Rosenberger LH, Rushing CN, **Atisha D**, Pusic AL, Hollenbeck ST, Hyslop T, and Hwang ES. The Evolution of Breast Satisfaction and Well-Being after Breast Cancer: A Propensity-Matched Comparison to the Norm. *Plast Reconstr Surg* 2020; 145(3):595-604. PMID: 32097289. Full Text

Siddiqui A, Ueno C, Agarwal J, Chang EI, Chrysopoulo M, Davidson C, Khuthaila D, Manahan MA, Matros E, Newman LA, Newman M, Sowden M, Tessler O, Whitacre E, and Lee BT. Evidence-Based Performance Measures for Autologous Breast Reconstruction: An American Society of Plastic Surgeons Quality Performance Measure Set. *Plast Reconstr Surg* 2020; 145(2):284e-294e. PMID: 31985618. Full Text

Venkatesh KP, **Ambani SW**, Arakelians ARL, Johnson JT, and Solari MG. Head and Neck Microsurgeon Practice Patterns and Perceptions Regarding Venous Thromboembolism Prophylaxis. *J Reconstr Microsurg* 2020; 36(8):549-555. PMID: 32408367. Request Article

Worden A, **Yoho DJ**, **Houin H**, **Moquin K**, **Hamzavi I**, **Saab I**, and **Siddiqui A**. Factors Affecting Healing in the Treatment of Hidradenitis Suppurativa. *Ann Plast Surg* 2020; 84(4):436-440. PMID: 31688123. Full Text

Public Health Sciences

Affan M, Mahajan A, Rehman T, Kananeh M, **Schultz L**, and **Cerghet M**. The effect of race on clinical presentation and outcomes in neurosarcoidosis. *J Neurol Sci* 2020; 417:117073. PMID: 32771711. Full Text

Arena SK, and **Peterson E**. Impact of a Blood Pressure Practice Initiative on Attitude, Practice Behavior, and Knowledge among Outpatient Rehabilitation Providers: An Observational Study. *Cardiopulmonary Physical Therapy Journal* 2020; 31(2):47-56. PMID: Not assigned. Full Text

Arena SK, Wilson CM, and **Peterson E**. Targeted Population Health Utilizing Direct Referral to HomeBased Older Person Upstreaming Prevention Physical Therapy from a Community-Based Senior Center. *Cardiopulmonary Physical Therapy Journal* 2020; 31(1):11-21. PMID: Not assigned. Full Text

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Averin A, Silvia A, **Lamerato L**, Richert-Boe K, **Kaur M**, Sundaresan D, Shah N, Hatfield M, Lawrence T, Lyman GH, and Weycker D. Risk of chemotherapy-induced febrile neutropenia in patients with metastatic cancer not receiving granulocyte colony-stimulating factor prophylaxis in US clinical practice. *Support Care Cancer* 2020; Epub ahead of print. PMID: 32880732. Full Text

Baird DD, Patchel SA, Saldana TM, Umbach DM, **Cooper T**, **Wegienka G**, and Harmon QE. Uterine fibroid incidence and growth in an ultrasound-based, prospective study of young African Americans. *Am J Obstet Gynecol* 2020; 223(3):402. PMID: 32105679. Full Text

Bakas S, Ormond DR, Alfaro KD, Smits M, Cooper LAD, Verhaak R, and **Poisson LM**. iGLASS: Imaging integration into the Glioma Longitudinal AnalySiS Consortium. *Neuro Oncol* 2020; 22(10):1545-1546. PMID: 32644158. Full Text

Bayard S, **Susick L**, Kyei I, **Chen Y**, Davis MB, Gyan K, and Newman LA. Brief report: Global health initiatives and breast oncology capacity-building in Africa. *Am J Surg* 2020; 219(4):563-565. PMID: 32008719. Full Text

Belsky JB, Filbin MR, **Rivers EP**, **Bobbitt KR**, **Jaehne AK**, Wisnik CA, Maciejewski KR, Li F, and **Morris DC**. F-Actin is associated with a worsening qSOFA score and intensive care unit admission in emergency department patients at risk for sepsis. *Biomarkers* 2020; 25(5):391-396. PMID: 32421363. Request Article

Bergman D, **Modh A**, **Schultz L**, **Snyder J**, **Mikkelsen T**, **Shah M**, Ryu S, **Siddiqui MS**, and **Walbert T**. Randomized prospective trial of fractionated stereotactic radiosurgery with chemotherapy versus chemotherapy alone for bevacizumab-resistant high-grade glioma. *J Neurooncol* 2020; 148(2):353-361. PMID: 32444980. Full Text

Bevins NB, Silosky MS, Badano A, Marsh RM, **Flynn MJ**, and Walz-Flannigan AI. Practical application of AAPM Report 270 in display quality assurance: A report of Task Group 270. *Med Phys* 2020; 47(9): e920e928. PMID: 32681556. Full Text

Bier A, **Hong X**, **Cazacu S**, Goldstein H, Rand D, **Xiang C**, **Jiang W**, Ben-Asher HW, **Attia M**, Brodie A, **She R**, **Poisson LM**, and Brodie C. miR-504 modulates the stemness and mesenchymal transition of glioma stem cells and their interaction with microglia via delivery by extracellular vesicles. *Cell Death Dis* 2020; 11(10):899. PMID: 33093452. Full Text

Bossick AS, Katon JG, Gray KE, Ma EW, and Callegari LS. Concomitant Bilateral SalpingoOophorectomy at Hysterectomy: Differences by Race and Menopausal Status in the Veterans Affair Health Care System, 2007-2014. *J Womens Health (Larchmt)* 2020; 29(12):1513-1519. PMID: 33095114. Request Article

Brasky TM, Bethea TN, Wesselink AK, **Wegienka GR**, Baird DD, and Wise LA. Dietary Fat Intake and Risk of Uterine Leiomyomata: A Prospective Ultrasound Study. *Am J Epidemiol* 2020; 189(12):15381546. PMID: 32556077. Full Text

Bryson TD, **Pandrangi TS**, **Khan SZ**, **Xu J**, **Pavlov TS**, **Ortiz PA**, **Peterson E**, and **Harding**

P. The deleterious role of the prostaglandin E2 EP3 receptor in angiotensin II hypertension. *Am J Physiol Heart Circ Physiol* 2020; 318(4):H867-h882. PMID: 32142358. Full Text

Byun JS, Singhal S, Park S, Yi DI, Yan T, Caban A, Jones A, Mukhopadhyay P, Gil SM, Hewitt SM, Newman L, **Davis MB**, Jenkins BD, Sepulveda JL, De Siervi A, Napoles AM, Vohra NA, and Gardner K. Racial Differences in the Association between Luminal Master Regulator Gene Expression Levels and Breast Cancer Survival. *Clin Cancer Res* 2020; 26(8):1905-1914. PMID: 31911546. Full Text

Caldwell MT, Hambrick N, **Vallee P**, Thomas CSD, Sutton A, Daniels G, **Goyal N**, **Manteuffel J**, **Joseph CLM**, and Guetterman TC. "They're Doing Their Job": Women's Acceptance of Emergency Department Contraception Counseling. *Ann Emerg Med* 2020; 76(4):515-526. PMID: 31959536. Full Text

Cassidy-Bushrow AE, **Burmeister C**, **Lamerato L**, Lemke LD, Mathieu M, O'Leary BF, Sperone FG, **Straughen JK**, and Reiners JJ, Jr. Prenatal airshed pollutants and preterm birth in an observational birth cohort study in Detroit, Michigan, USA. *Environ Res* 2020; 189:109845. PMID: 32678729. Request Article

Chaudhry F, **Bulka H**, **Rathnam AS**, Said OM, Lin J, **Lorigan H**, Bernitsas E, Rube J, Korzeniewski SJ, **Memon AB**, Levy PD, **Schultz L**, Javed A, Lisak R, and **Cerghet M**. COVID-19 in multiple sclerosis patients and risk factors for severe infection. *J Neurol Sci* 2020; 418:117147. PMID: 32980780. Full Text

Chen Y, **Sadasivan SM**, **She R**, **Datta I**, **Taneja K**, **Chitale D**, **Gupta N**, Davis MB, Newman LA, **Rogers CG**, Paris PL, **Li J**, **Rybicki BA**, and **Levin AM**. Breast and prostate cancers harbor common somatic copy number alterations that consistently differ by race and are associated with survival. *BMC Med Genomics* 2020; 13(1):116. PMID: 32819446. Full Text

Chen Y, **Susick L**, Davis M, **Bensenhaver J**, **Nathanson SD**, **Burns J**, and Newman LA. Evaluation of Triple-Negative Breast Cancer Early Detection via Mammography Screening and Outcomes in African American and White American Patients. *JAMA Surg* 2020; 155(5):440-442. PMID: 32074266. Full Text

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12): e0291. PMID: 33251520. Full Text

Chipps B, Mosnaim G, Mathur SK, Shaikh A, Khoury S, Gopalan G, Palli SR, **Lamerato L**, Casciano J, Dotiwala Z, and Settipane R. Add-on tiotropium versus step-up inhaled corticosteroid plus long-acting beta-2-agonist in real-world patients with asthma. *Allergy Asthma Proc* 2020; 41(4):248-255. PMID: 32414426. Request Article

Cocco MP, **White E**, **Xiao S**, Hu D, Mak A, Sleiman P, **Yang M**, **Bobbitt KR**, **Gui H**, **Levin AM**, **Hochstadt S**, **Whitehouse K**, **Rynkowski D**, Barczak AJ, Abecasis G, Blackwell TW, Kang HM, Nickerson DA, Germer S, Ding J, **Lanfear DE**, Gilliland F, Gauderman WJ, Kumar R, Erle DJ, Martinez F, Hakonarson H, Burchard EG, and **Williams LK**. Asthma and its relationship to mitochondrial copy number: Results from the Asthma Translational Genomics Collaborative (ATGC) of the Trans-Omics for Precision Medicine (TOPMed) program. *PLoS One* 2020; 15(11):e0242364. PMID: 33237978. Full Text

Cook B, **McCord J**, **Hudson M**, **Al-Darzi W**, **Moyer M**, **Jacobsen G**, and **Nowak R**. Baseline high sensitivity cardiac troponin I level below limit of quantitation rules out acute myocardial infarction in the emergency department. *Crit Pathw Cardiol* 2020; Epub ahead of print. PMID: 32639243. Full Text

Corley DA, Sedki M, Ritzwoller DP, Greenlee RT, **Neslund-Dudas C**, Rendle KA, Honda SA, Schottinger JE, Udaltsova N, Vachani A, Kobrin S, Li CI, and Haas JS. Cancer Screening during COVID-19: A Perspective from NCI's PROSPR consortium. *Gastroenterology* 2020; Epub ahead of print. PMID: 33096099. Full Text

Darst BF, Wan P, Sheng X, Bensen JT, Ingles SA, **Rybicki BA**, Nemesure B, John EM, Fowke JH, Stevens VL, Berndt SI, Huff CD, Strom SS, Park JY, Zheng W, Ostrander EA, Walsh PC, Srivastava S, Carpten J, Sellers TA, Yamoah K, Murphy AB, Sanderson M, Crawford DC, Gapstur SM, Bush WS, Aldrich MC, Cussenot O, Yeager M, Petrovics G, Cullen J, **Neslund-Dudas C**, Kittles RA, Xu J, Stern MC, Kote-Jarai Z, Govindasami K, Chokkalingam AP, Multigner L, Parent ME, Menegaux F, CancelTassin G, Kibel AS, Klein EA, Goodman PJ, Drake BF, Hu JJ, Clark PE, Blanchet P, Casey G, Hennis AJM, Lubwama A, Thompson IM, Jr., Leach R, Gundell SM, Pooler L, Xia L, Mohler JL, Fontham ETH, Smith GJ, Taylor JA, Eeles RA, Brureau L, Chanock SJ, Watya S, Stanford JL, Mandal D, Isaacs WB, Cooney K, Blot WJ, Conti DV, and Haiman CA. A Germline Variant at 8q24 Contributes to Familial Clustering of Prostate Cancer in Men of African Ancestry. *Eur Urol* 2020; 78(3):316-320. PMID: 32409115. Full Text

Darvishi P, Batchala PP, Patrie JT, **Poisson LM**, Lopes MB, Jain R, Fadul CE, Schiff D, and Patel SH. Prognostic Value of Preoperative MRI Metrics for Diffuse Lower-Grade Glioma Molecular Subtypes. *AJNR Am J Neuroradiol* 2020; 41(5):815-821. PMID: 32327434. Full Text

Davatzikos C, Barnholtz-Sloan JS, Bakas S, Colen R, Mahajan A, Quintero CB, Font JC, Puig J, Jain R, Sloan AE, Badve C, Marcus DS, Choi YS, Lee SK, Chang JH, **Poisson LM**, **Griffith B**, Dicker AP, Flanders AE, Booth TC, Rathore S, Akbari H, Sako C, Bilello M, Shukla G, Kazerooni AF, Brem S, Lustig R, Mohan S, Bagley S, Nasrallah M, and O'Rourke DM. AI-based Prognostic Imaging Biomarkers for Precision Neurooncology: the ReSPOND Consortium. *Neuro Oncol* 2020; 22(6):886-888. PMID: 32152622. Full Text

David Nathanson S, **Leonard-Murali S**, **Burmeister C**, **Susick L**, and **Baker P**. Clinicopathological Evaluation of the Potential Anatomic Pathways of Systemic Metastasis from Primary Breast Cancer Suggests an Orderly Spread Through the Regional Lymph Nodes. *Ann Surg Oncol* 2020; 27(12):48104818. PMID: 32720039. Full Text

Davis M, Martini R, Newman L, Elemento O, White J, Verma A, **Datta I**, **Adrianto I**, **Chen Y**, Gardner K, Kim HG, Colomb WD, Eltoum IE, Frost AR, Grizzle WE, Sboner A, Manne U, and Yates C. Identification of Distinct Heterogenic Subtypes and Molecular Signatures Associated with African Ancestry in Triple Negative Breast Cancer Using Quantified Genetic Ancestry Models in Admixed Race Populations. *Cancers (Basel)* 2020; 12(5). PMID: 32414099. Full Text

Dedigama-Arachchige P, **Carskadon S**, **Li J**, **Loveless I**, **Alhamar M**, **Peabody JO**, **Stricker H**, **Chitale DA**, **Rogers CG**, **Menon M**, **Gupta NS**, Bismar TA, **Williamson SR**, and **Palanisamy N**. Clonal evaluation of prostate cancer molecular heterogeneity in biopsy samples by dual immunohistochemistry and dual RNA in situ hybridization. *Mod Pathol* 2020; 33(9):1791-1801. PMID: 32238875. Full Text

Dos Santos JM, Joiakim A, Kaplan DJ, Putt DA, Perez Bakovic G, Servoss SL, **Rybicki BA**,

Dombkowski AA, and Kim H. Levels of plasma glycan-binding auto-IgG biomarkers improve the accuracy of prostate cancer diagnosis. *Mol Cell Biochem* 2020; Epub ahead of print. PMID: 32816187. Full Text

Dotiwala Z, Casciano J, Davis JR, Fox K, Gopalan G, Rastogi S, **Lamerato L**, and Mathur SK. Effect of clinically significant thresholds of eosinophil elevation on health care resource use in asthma. *Ann Allergy Asthma Immunol* 2020; 125(2):182-189. PMID: 32371242. Full Text

Du Z, Weinhold N, Song GC, Rand KA, Van Den Berg DJ, Hwang AE, Sheng X, Hom V, Ailawadhi S, Nooka AK, Singhal S, Pawlish K, Peters ES, Bock C, Mohrbacher A, Stram A, Berndt SI, Blot WJ, Casey G, Stevens VL, Kittles R, Goodman PJ, Diver WR, Hennis A, Nemesure B, Klein EA, **Rybicki BA**, Stanford JL, Witte JS, Signorello L, John EM, Bernstein L, Stroup AM, Stephens OW, Zangari M, Van Rhee F, Olshan A, Zheng W, Hu JJ, Ziegler R, Nyante SJ, Ingles SA, Press MF, Carpten JD, Chanock SJ, Mehta J, Colditz GA, Wolf J, Martin TG, Tomasson M, Fiala MA, Terebelo H, **Janakiraman N**, Kolonel L, Anderson KC, Le Marchand L, Auclair D, Chiu BC, Ziv E, Stram D, Vij R, Bernal-Mizrachi L, Morgan GJ, Zonder JA, Huff CA, Lonial S, Orlowski RZ, Conti DV, Haiman CA, and Cozen W. A metaanalysis of genome-wide association studies of multiple myeloma among men and women of African ancestry. *Blood Adv* 2020; 4(1):181-190. PMID: 31935283. Full Text

Frendl DM, Epstein MM, Fouayzi H, **Krajenta R**, **Rybicki BA**, and Sokoloff MH. Prostate-specific antigen testing after the US Preventive Services Task Force recommendation: a population-based analysis of electronic health data. *Cancer Causes Control* 2020; 31(9):861-867. PMID: 32556947. Full Text

Gan X, **Chopp M**, **Xin H**, **Wang F**, **Golembieski W**, **Lu M**, He L, and **Liu Z**. Targeted tPA overexpression in denervated spinal motor neurons promotes stroke recovery in mice. *J Cereb Blood Flow Metab* 2020; 41(1):92-104. PMID: 31987011. Full Text

Garman L, Pelikan RC, Rasmussen A, Lareau CA, Savoy KA, Deshmukh US, Bagavant H, **Levin AM**, Daouk S, Drake WP, and Montgomery CG. Single Cell Transcriptomics Implicate Novel Monocyte and T Cell Immune Dysregulation in Sarcoidosis. *Front Immunol* 2020; 11:567342. PMID: 33363531. Full Text

Garman L, Pezant N, Pastori A, Savoy KA, Li C, **Levin AM**, Iannuzzi MC, **Rybicki BA**, **Adrianto I**, and Montgomery CG. Genome-Wide Association Study of Ocular Sarcoidosis Confirms HLA Associations and Implicates Barrier Function and Autoimmunity in African Americans. *Ocul Immunol Inflamm* 2020; Epub ahead of print.:1-6. PMID: 32141793. Request Article

Ghanem AI, **Modh A**, **Burmeister C**, Mahmoud O, and **Elshaikh MA**. Does the Interval Between Hysterectomy and Start of Adjuvant Radiation Treatment Influence Survival in Women With Endometrial Carcinoma?: A National Cancer Database analysis. *Am J Clin Oncol* 2020; 43(8):602-606. PMID: 32398405. Full Text

Gibbs J, deFilippi C, Peacock F, Mahler S, **Nowak R**, Christenson R, Apple F, **Jacobsen G**, and **McCord J**. The utility of risk scores when evaluating for acute myocardial infarction using high-sensitivity cardiac troponin I. *Am Heart J* 2020; 227:1-8. PMID: 32634671. Full Text

Gonzalez H, Imam Z, Wong R, **Li J**, **Lu M**, **Trudeau S**, **Gordon S**, Imam M, and Gish R. Normal alkaline phosphatase levels are dependent on race/ethnicity: NationalGEP Health and Nutrition Examination Survey data. *BMJ Open Gastroenterol* 2020; 7(1). PMID: 33055108. Full Text

Gordon SC, **Wu KH**, Lindor K, Bowlus CL, Rodriguez CV, Anderson H, Boscarino JA, **Trudeau S**, **Rupp LB**, Haller IV, Romanelli RJ, VanWormer JJ, Schmidt MA, Daida YG, Sahota A, Vincent J, **Zhang T**, **Li J**, and **Lu M**. Ursodeoxycholic Acid Treatment Preferentially Improves Overall Survival Among African Americans With Primary Biliary Cholangitis. *Am J Gastroenterol* 2020; 115(2):262-270. PMID: 31985529. Full Text

Goyal VK, Ahmad A, **Turfe Z**, **Peterson EI**, and **Craig JR**. Predicting Odontogenic Sinusitis in Unilateral Sinus Disease: A Prospective, Multivariate Analysis. *Am J Rhinol Allergy* 2020; Epub ahead of print. PMID: 32646233. Full Text

Guerra-Londono CE, **Han X**, and **Penning DH**. Postoperative Pulmonary Complications in the Morbidly Obese: The Role of Tidal Volume and the Type of Abdominal Surgery. *Respir Care* 2020; 65(12):19081915. PMID: 32694181. Full Text

Gui H, **Levin AM**, Hu D, Sleiman P, **Xiao S**, Mak AC, **Yang M**, Barczak AJ, Huntsman S, Eng C, **Hochstadt S**, **Zhang E**, **Whitehouse K**, **Simons S**, **Cabral W**, **Takriti S**, Abecasis G, Blackwell TW, Kang HM, Nickerson DA, Germer S, **Lanfear DE**, Gilliland F, Gauderman WJ, Kumar R, Erle DJ, Martinez FD, Hakonarson H, Burchard EG, and **Williams LK**. Mapping the 17q12-21.1 Locus for Variants Associated with Early-onset Asthma in African Americans. *Am J Respir Crit Care Med* 2020; Epub ahead of print. PMID: 32966749. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Jansen EC, **She R**, Rukstalis MM, and **Alexander GL**. Sleep Duration and Quality in Relation to Fruit and Vegetable Intake of US Young Adults: a Secondary Analysis. *Int J Behav Med* 2020; Epub ahead of print. PMID: 32016881. Request Article

Kananeh MF, **Brady PD**, **Mehta CB**, **Louchart LP**, **Rehman MF**, **Schultz LR**, Lewis A, and Varelas PN. Factors that affect consent rate for organ donation after brain death: A 12-year registry. *J Neurol Sci* 2020; 416:117036. PMID: 32693247. Full Text

Kassem Z, **Sitarik A**, **Levin AM**, Lynch SV, **Havstad S**, Fujimura K, Kozyrskyj A, Ownby DR, **Johnson CC**, Yong GJM, **Wegienka G**, and **Cassidy-Bushrow AE**. Maternal and cord blood vitamin D level and the infant gut microbiota in a birth cohort study. *Matern Health Neonatol Perinatol* 2020; 6:5. PMID: 33101701. Full Text

Lamerato L, Wittbrodt E, **Kaur M**, Datto C, and **Singla S**. Impact of opioid use on patients undergoing screening colonoscopy according to the quality of bowel preparation. *JGH Open* 2020; 4(3):490-496. PMID: 32514459. Full Text

Lanfear DE, **Luzum JA**, **She R**, **Gui H**, Donahue MP, O'Connor CM, Adams KF, Sanders-van Wijk S, **Zeld N**, Maeder MT, **Sabbah HN**, Kraus WE, Brunner-La Rocca HP, **Li J**, and **Williams LK**. Polygenic Score for Beta-Blocker Survival Benefit in European Ancestry Patients with Reduced Ejection Fraction Heart Failure. *Circ Heart Fail* 2020; 13(12):e007012. PMID: 33012170. Full Text

Laughlin-Tommaso SK, Lu D, Thomas L, Diamond MP, Wallace K, **Wegienka G**, Vines AI, Anchan RM, Wang T, Maxwell GL, Jacoby V, Marsh EE, Spies JB, Nicholson WK, Stewart EA, and Myers ER. Shortterm quality of life after myomectomy for uterine fibroids from the

COMPARE-UF Fibroid Registry. *Am J Obstet Gynecol* 2020; 222(4):345.e341-345.e322. PMID: 31678093. Full Text

Law RH, Bazzi TD, **Van Harn M**, **Craig JR**, and **Deeb RH**. Predictors of Long-Term Nasal Obstruction Symptom Evaluation Score Stability Following Septoplasty With Inferior Turbinate Reduction. *Laryngoscope* 2020; Epub ahead of print. PMID: 33141435. Full Text

Li P, Liu R, Lin J, and Ji Y. TEPI-2 and UBI: designs for optimal immuno-oncology and cell therapy dose finding with toxicity and efficacy. *J Biopharm Stat* 2020; Epub ahead of print. PMID: 32951518. Request Article

Lu M, Bowlus CL, Lindor K, Rodriguez-Watson CV, Romanelli RJ, Haller IV, Anderson H, VanWormer JJ, Boscarino JA, Schmidt MA, Daida YG, Sahota A, Vincent J, **Li J**, Trudeau S, **Rupp LB**, and **Gordon SC**. Validity of an Automated Algorithm to Identify Cirrhosis Using Electronic Health Records in Patients with Primary Biliary Cholangitis. *Clin Epidemiol* 2020; 12:1261-1267. PMID: 33204167. Full Text

Lu M, **Wu KH**, **Trudeau S**, Jiang M, Zhao J, and Fan E. A genomic signature for accurate classification and prediction of clinical outcomes in cancer patients treated with immune checkpoint blockade immunotherapy. *Sci Rep* 2020; 10(1):20575. PMID: 33239757. Full Text

Luria CJ, **Sitarik AR**, **Havstad S**, **Zoratti EM**, **Kim H**, **Wegienka GR**, **Joseph CLM**, and **CassidyBushrow AE**. Association between asthma symptom scores and perceived stress and trait anxiety in adolescents with asthma. *Allergy Asthma Proc* 2020; 41(3):210-217. PMID: 32375966. Request Article

Lynch FL, **Peterson EL**, Lu CY, **Hu Y**, Rossom RC, Waitzfelder BE, Owen-Smith AA, Hubley S, **Prabhakar D**, **Keoki Williams L**, Beck A, Simon GE, and **Ahmedani BK**. Substance use disorders and risk of suicide in a general US population: a case control study. *Addict Sci Clin Pract* 2020; 15(1):14. PMID: 32085800. Full Text

Lyons AB, Peacock A, McKenzie SA, **Jacobsen G**, Naik HB, Shi VY, **Hamzavi IH**, and Hsiao JL. Retrospective Cohort Study of Pregnancy Outcomes in Hidradenitis Suppurativa. *Br J Dermatol* 2020; 183(5):945-947. PMID: 32333790. Full Text

Maahs L, **Tang A**, **Saheli ZA**, Jacob B, Polasani R, and **Hwang C**. Real-world effectiveness of the pegfilgrastim on-body injector in preventing severe neutropenia. *J Oncol Pharm Pract* 2020; Epub ahead of print. PMID: 33323023. Full Text

Macki M, Mahajan A, Shatz R, **Air EL**, **Novikova M**, Fakih M, Elmenini J, **Kaur M**, **Bouchard KR**, **Funk BA**, and **Schwalb JM**. Prevalence of Alternative Diagnoses and Implications for Management in Idiopathic Normal Pressure Hydrocephalus Patients. *Neurosurgery* 2020; 87(5):999-1007. PMID: 32472677. Full Text

Michaels A, **Aurora L**, **Peterson E**, **Liu B**, Pinto YM, **Sabbah HN**, **Williams K**, and **Lanfear DE**. Risk Prediction in Transition: MAGGIC Score Performance at Discharge and Incremental Utility of Natriuretic Peptides. *J Card Fail* 2020; 26(1):52-60. PMID: 31751788. Full Text

Miller CJ, Runge-Morris M, **Cassidy-Bushrow AE**, **Straughen JK**, Dittrich TM, Baker TR, Petriello MC, Mor G, Ruden DM, O'Leary BF, Teimoori S, Tummala CM, Heldman S, Agarwal M, Roth K, Yang Z, and Baker BB. A Review of Volatile Organic Compound Contamination in Post-Industrial Urban Centers: Reproductive Health Implications Using a Detroit Lens. *Int J Environ Res Public Health* 2020; 17(23). PMID: 33255777. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Morris DC, **Jaehne AK**, **Chopp M**, **Zhang Z**, **Poisson L**, **Chen Y**, **Datta I**, and **Rivers EP**. Proteomic Profiles of Exosomes of Septic Patients Presenting to the Emergency Department Compared to Healthy Controls. *J Clin Med* 2020; 9(9). PMID: 32932765. Full Text

Nejad-Davarani SP, **Zakariaei N**, Chen Y, Haacke EM, **Hurst NJ**, **Siddiqui MS**, **Schultz LR**, **Snyder JM**, **Walbert T**, and **Glide-Hurst C**. Rapid Multi-contrast Brain Imaging on a 0.35T MR-linac. *Med Phys* 2020; 47(9):4064-4076. PMID: 32434276. Full Text

Nowak RM, Christenson RH, **Jacobsen G**, **McCord J**, Apple FS, Singer AJ, Limkakeng A, Jr., Peacock WF, and deFilippi CR. Performance of Novel High-Sensitivity Cardiac Troponin I Assays for 0/1-Hour and 0/2- to 3-Hour Evaluations for Acute Myocardial Infarction: Results From the HIGH-US Study. *Ann Emerg Med* 2020; 76(1):1-13. PMID: 32046869. Full Text

Ober C, McKennan CG, Magnaye KM, Altman MC, Washington C, 3rd, Stanhope C, Naughton KA, Rosasco MG, Bacharier LB, Billheimer D, Gold DR, Gress L, Hartert T, **Havstad S**, Khurana Hershey GK, Hallmark B, Hogarth DK, Jackson DJ, **Johnson CC**, Kattan M, Lemanske RF, Lynch SV, Mendonca EA, Miller RL, Naureckas ET, O'Connor GT, Seroogy CM, **Wegienka G**, White SR, Wood RA, Wright AL, **Zoratti EM**, Martinez FD, Ownby D, Nicolae DL, **Levin AM**, and Gern JE. Expression quantitative trait locus fine mapping of the 17q12-21 asthma locus in African American children: a genetic association and gene expression study. *Lancet Respir Med* 2020; 8(5):482-492. PMID: 32380068. Full Text

Ownby DR, **Havstad S**, **Wegienka G**, and **Johnson CC**. Allergic Sensitization Does Not Differ Between Childhood- and Adolescent-Onset Asthma in Women. *J Allergy Clin Immunol* 2020; 146(6):1437-1438. PMID: 32311392. Full Text

Park B, **Budzynska K**, **Almasri N**, **Islam S**, Alyas F, **Carolan RL**, **Abraham BE**, **Castro-Camero PA**, **Shreve ME**, **Rees DA**, and **Lamerato L**. Tight versus standard blood pressure control on the incidence of myocardial infarction and stroke: an observational retrospective cohort study in the general ambulatory setting. *BMC Fam Pract* 2020; 21(1):91. PMID: 32416722. Full Text

Park P, **Chang V**, Yeh HH, **Schwalb JM**, **Nerenz DR**, **Schultz LR**, **Abdulhak MM**, Easton R, PerezCruet M, Kashlan ON, Oppenlander ME, Szerlip NJ, Swong KN, and Aleem IS. Impact of Michigan's new opioid prescribing laws on spine surgery patients: analysis of the Michigan Spine Surgery Improvement Collaborative. *J Neurosurg Spine* 2020; Epub ahead of print. PMID: 33307531. Full Text

Peleman JR, **Tarwade P**, **Han X**, **Penning DH**, and **Craig JR**. Hemodynamic Changes with 1:1000 Epinephrine on Wrung-Out Pledgets Before and During Sinus Surgery. *Ann Otol Rhinol Laryngol* 2020; Epub ahead of print. PMID: 32945177. Full Text

Peters RM, El-Masri M, and **Cassidy-Bushrow AE**. Self-Reported Sensory Gating and Stress-Related Hypertension. *Nurs Res* 2020; 69(5):339-346. PMID: 32865945. Full Text

Peters RM, Solberg MA, Templin TN, and **Cassidy-Bushrow AE**. Psychometric Properties

of the Brief COPE Among Pregnant African American Women. *West J Nurs Res* 2020; 42(11):927-936. PMID: 32100645. Full Text

Plawecki AM, **Singer MC**, **Peterson EL**, **Yaremchuk KL**, and **Deeb RH**. Impact of a specialty trained billing team on an academic otolaryngology practice. *Am J Otolaryngol* 2020; 41(6):102720. PMID: 32977062. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**, **Spizarny D**, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Prabhakar D, **Peterson EL**, **Hu Y**, **Chawa S**, Rossom RC, Lynch FL, Lu CY, Waitzfelder BE, Owen-Smith AA, **Williams LK**, Beck A, Simon GE, and Ahmedani BK. Serious Suicide Attempts and Risk of Suicide Death. *Crisis* 2020; Epub ahead of print. PMID: 33151092. Request Article

Qiu S, **Divine G**, **Warner E**, and **Rao SD**. Reference Intervals for Bone Histomorphometric Measurements Based on Data from Healthy Premenopausal Women. *Calcif Tissue Int* 2020; 107(6):543550. PMID: 32814991. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Rao SD, **Miragaya J**, **Parikh N**, **Honasoge M**, **Springer K**, **Van Harn M**, and **Divine GW**. Effect of vitamin D nutrition on disease indices in patients with primary hyperparathyroidism. *J Steroid Biochem Mol Biol* 2020; 201:105695. PMID: 32407867. Request Article

Sadasivan SM, **Chen Y**, **Gupta NS**, **Han X**, **Bobbitt KR**, **Chitale DA**, **Williamson SR**, Rundle AG, Tang D, and **Rybicki BA**. The interplay of GDF15 (growth differentiation factor 15) expression and M2 macrophages during prostate carcinogenesis. *Carcinogenesis* 2020; 41(8):1074-1082. PMID: 32614434. Full Text

Schafer E, **Bazydlo M**, **Schultz L**, Park P, **Chang V**, Easton RW, **Schwalb J**, Khalil J, Perez-Cruet M, **Abdulhak M**, and Aleem I. Rates and Risk Factors Associated with 90-day Readmission Following Cervical Spine Fusion Surgery: Analysis of the Michigan Spine Surgery Improvement Collaborative (MSSIC) Registry. *Spine J* 2020; 20(5):708-716. PMID: 31958576. Full Text

Selitsky L, **Markowitz N**, **Baxa DM**, **Kaljee L**, **Miree CA**, **Islam N**, **Burse C**, **Newaz R**, **Dankerlui D**, **Jacobsen G**, and **Joseph C**. Self-report of domestic violence and forced sex are related to sexual risk behaviors in a sample of juvenile detainees. *Health Justice* 2020; 8(1):15. PMID: 32577955. Full Text

Shukairy MK, **Burmeister C**, **Ko AB**, and **Craig JR**. Recognizing odontogenic sinusitis: A national survey of otolaryngology chief residents. *Am J Otolaryngol* 2020; 41(6):102635. PMID: 32653733. Full Text

Singh SRK, **Thanikachalam K**, **Jabbour-Aida H**, **Poisson LM**, and **Khan G**. COVID-19 and Cancer: Lessons Learnt from a Michigan Hotspot. *Cancers (Basel)* 2020; 12(9). PMID: 32842584. Full Text

Sitarik A, **Havstad S**, **Kim H**, **Zoratti EM**, **Ownby D**, **Johnson CC**, and **Wegienka G**. Racial Disparities in Allergic Outcomes Persist to Age 10 Years in Black and White Children. *Ann Allergy Asthma Immunol* 2020; 124(4):342-349. PMID: 31945477. Full Text

Sitarik AR, Arora M, Austin C, Bielak LF, Eggers S, **Johnson CC**, Lynch SV, Kyun Park S, **Hank Wu KH**, Yong GJM, and **Cassidy-Bushrow AE**. Fetal and early postnatal lead exposure measured in teeth associates with infant gut microbiota. *Environ Int* 2020; 144:106062. PMID: 32871381. Full Text

Sitarik AR, **Havstad SL**, **Johnson CC**, **Jones K**, **Levin AM**, Lynch SV, Ownby DR, Rundle AG, **Straughen JK**, **Wegienka G**, **Woodcroft KJ**, Yong GJM, and **Cassidy-Bushrow AE**. Association between cesarean delivery types and obesity in preadolescence. *Int J Obes (Lond)* 2020; 44(10):20232034. PMID: 32873910. Request Article

Skiba V, **Novikova M**, **Suneja A**, **McLellan B**, and **Schultz L**. Use of Positive Airway Pressure in Mild Cognitive Impairment to Delay Progression to Dementia. *J Clin Sleep Med* 2020; 16(6):863-870. PMID: 32039755. Full Text

Snyder JM, **Pawloski JA**, and **Poisson LM**. Developing Real-world Evidence-Ready Datasets: Time for Clinician Engagement. *Curr Oncol Rep* 2020; 22(5):45. PMID: 32297007. Full Text

Spradling PR, Xing J, **Rupp LB**, Moorman AC, **Gordon SC**, **Lu M**, Teshale EH, Boscarino JA, Schmidt MA, Daida YG, and Holmberg SD. Low Uptake of Direct-acting Antiviral Therapy Among Hepatitis C Patients with Advanced Liver Disease and Access to Care, 2014-2017. *J Clin Gastroenterol* 2020; 55(1):77-83. PMID: 32250999. Full Text

Stinson LF, Gay MCL, Koleva PT, Eggesbø M, Johnson CC, Wegienka G, du Toit E, Shimojo N, Munblit D, Campbell DE, Prescott SL, Geddes DT, and Kozyrskyj AL. Human Milk From Atopic Mothers Has Lower Levels of Short Chain Fatty Acids. *Front Immunol* 2020; 11:1427. PMID: 32903327. Full Text **Su WK**, Lehto MR, Degnan DD, Yih Y, Duffy VG, and DeLaurentis P. Healthcare Professionals Risk Assessments for Alert Overrides in High-Risk IV Infusions Using Simulated Scenarios. *Risk Anal* 2020; 40(7):1342-1354. PMID: 32339316. Request Article

Swegal W, **Deeb R**, Greene J, **Peterson E**, **Perri MB**, **Bardossy AC**, **Zervos M**, and **Jones LR**. Changes in Nasal Staphylococcus Colonization and Infection Rates After Nasal Surgery. *Facial Plast Surg Aesthet Med* 2020; Epub ahead of print. PMID: 32392437. Full Text

Tabriz AA, **Neslund-Dudas C**, Turner K, Rivera MP, Reuland DS, and Lafata JE. How Health Care Organizations Implement Shared Decision Making When It Is Required for Reimbursement: The Case of Lung Cancer Screening. *Chest* 2020; 159(1):413-425. PMID: 32798520. Full Text

Thanikachalam K, **Damarla V**, **Seixas T**, **Dobrosotskaya I**, **Wollner I**, **Kwon D**, **Winters K**, **Raoufi M**, **Li J**, **Siddiqui F**, and **Khan G**. Neoadjuvant Phase II Trial of Chemoradiotherapy in Patients with Resectable and Borderline Resectable Pancreatic Cancer. *Am J Clin Oncol* 2020; 43(6):435-441. PMID: 32251119. Full Text

Upson K, Harmon QE, Heffron R, Hall JE, Wise LA, **Wegienka G**, Tokar EJ, and Baird DD. Depot Medroxyprogesterone Acetate Use and Blood Lead Levels in a Cohort of Young

Women. *Environ Health Perspect* 2020; 128(11):117004. PMID: 33206002. Full Text

Varma A, **Trudeau S**, **Zhou Y**, **Jafri SM**, **Krajenta R**, **Lamerato L**, **Brown K**, Luzzi V, **Lu M**, and **Gordon SC**. African Americans Demonstrate Significantly Lower Serum Alanine Aminotransferase Compared to Non-African Americans. *J Racial Ethn Health Disparities* 2020; Epub ahead of print. PMID: 33230736. Request Article

Veenstra J, Buechler CR, **Robinson G**, **Chapman S**, Adelman M, Tisack A, Dimitrion P, **Todter E**, **Kohen L**, and **Lim HW**. Antecedent Immunosuppressive Therapy for Immune-Mediated Inflammatory Diseases in the Setting of a COVID-19 Outbreak. *J Am Acad Dermatol* 2020; 83(6):1696-1703. PMID: 32735965. Full Text

Verma S, **Peterson EL**, **Liu B**, **Sabbah HN**, **Williams LK**, and **Lanfear DE**. Effectiveness of beta blockers in patients with and without a history of myocardial infarction. *Eur J Clin Pharmacol* 2020; 76(8):1161-1168. PMID: 32440720. Full Text

Viarasilpa T, **Panyavachiraporn N**, **Marashi SM**, **Van Harn M**, **Kowalski RG**, and **Mayer SA**. Prediction of Symptomatic Venous Thromboembolism in Critically Ill Patients: The ICU-Venous Thromboembolism Score. *Crit Care Med* 2020; 48(6):e470-e479. PMID: 32187076. Full Text

Wallace K, Zhang S, Thomas L, Stewart EA, Nicholson WK, **Wegienka GR**, Wise LA, Laughlin-Tommaso SK, Diamond MP, Marsh EE, Jacoby VL, Anchan RM, Venable S, Larry GM, Lytle B, Wang T, and Myers ER. Comparative effectiveness of hysterectomy versus myomectomy on one-year health-related quality of life in women with uterine fibroids. *Fertil Steril* 2020; 113(3):618-626. PMID: 32192594. Full Text

Wang C, **Chopp M**, **Huang R**, **Li C**, **Zhang Y**, **Golembieski W**, **Lu M**, Hazan Z, **Zhang ZG**, and **Zhang L**. Delayed (21 Days) Post Stroke Treatment With RPh201, a Botany-Derived Compound, Improves Neurological Functional Recovery in a Rat Model of Embolic Stroke. *Front Neurosci* 2020; 14:813. PMID:
32848574. Full Text

Wang L, **Chopp M**, **Szalad A**, **Lu X**, **Zhang Y**, **Wang X**, **Cepparulo P**, **Lu M**, **Li C**, and **Zhang ZG**. Exosomes Derived from Schwann Cells Ameliorate Peripheral Neuropathy in Type II Diabetic Mice. *Diabetes* 2020; 69(4):749-759. PMID: 31915154. Full Text

Wasade VS, and **Schultz L**. Reply to: Effect of seizure timing on long-term survival in brain tumor patients. *Epilepsy Behav* 2020; Epub ahead of print. PMID: 33239218. Full Text

Wasade VS, Viarasilpa T, Balki I, **Osman G**, **Gaddam A**, Dharaiya D, **Pellumbi N**, **Snyder J**, **Walbert T**, Spanaki M, and **Schultz L**. Effect of seizure timing on long-term survival in patients with brain tumor. *Epilepsy Behav* 2020; 111:107307. PMID: 32693378. Full Text

Xin H, **Liu Z**, **Buller B**, **Li Y**, **Golembieski W**, **Gan X**, **Wang F**, **Lu M**, **Ali MM**, **Zhang ZG**, and **Chopp M**. MiR-17-92 enriched exosomes derived from multipotent mesenchymal stromal cells enhance axon-myelin remodeling and motor electrophysiological recovery after stroke. *J Cereb Blood Flow Metab* 2020; Epub ahead of print. PMID: 32811262. Full Text

Yao Y, **Liu Q**, **Adrianto I**, **Wu X**, **Glassbrook J**, **Khalasawi N**, **Yin C**, **Yi Q**, Dong Z, Geissmann F, **Zhou L**, and **Mi QS**. Histone deacetylase 3 controls lung alveolar macrophage development and homeostasis. *Nat Commun* 2020; 11(1):3822. PMID: 32732898. Full Text

Yassin-Kassab A, **Bhargava P**, **Tibbetts RJ**, **Griggs ZH**, **Peterson EI**, and **Craig JR**. Comparison of bacterial maxillary sinus cultures between odontogenic sinusitis and chronic rhinosinusitis. *Int Forum Allergy Rhinol* 2020; Epub ahead of print. PMID: 32656998. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Zervos TM, **Bazydlo M**, **Tundo K**, **Macki M**, and **Rock J**. Risk Factors Associated With Symptomatic Deep Vein Thrombosis Following Elective Spine Surgery: A Case Control Study. *World Neurosurg* 2020; 144:e460-e465. PMID: 32889183. Full Text

Zhou L, **Adrianto I**, **Wang J**, **Wu X**, **Datta I**, and **Mi QS**. Single-Cell RNA-Seq Analysis Uncovers Distinct Functional Human NKT Cell Sub-Populations in Peripheral Blood. *Front Cell Dev Biol* 2020; 8:384. PMID: 32528956. Full Text

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh M**. Increased risk of recurrence in early-stage endometrial carcinoma after delays in adjuvant radiation treatment. *Int J Gynecol Cancer* 2020; 31(1):73-77. PMID: 33087415. Full Text

Pulmonary and Critical Care Medicine

l Feghali KA, **Wu QC**, **Devpura S**, **Liu C**, **Ghanem AI**, **Wen NW**, **Ajlouni M**, **Simoff MJ**, **Movsas B**, and **Chetty IJ**. Correlation of normal lung density changes with dose after stereotactic body radiotherapy (SBRT) for early stage lung cancer. *Clin Transl Radiat Oncol* 2020; 22:1-8. PMID: 32140574. Full Text

Awdish RLA. The Liminal Space. *N Engl J Med* 2020; 383(4):e17. PMID: 32492299. Full Text

Bajwa F, Koenig G, Hegab S, Parikh S, and Ananthasubramaniam K. A Case Series of Epicardial Lipomatosis Masquerading as Extracardiac Pathology on Echocardiography: Role of Multimodality Imaging in Clarifying Misdiagnosis. *CASE (Phila)* 2020; 4(5):389-392. PMID: 33117935. Full Text

Berry LL, and **Adawi Awdish RL**. Health Care Organizations Should Be as Generous as Their Workers. *Ann Intern Med* 2020; Epub ahead of print. PMID: 33076692. Full Text

Chami HA, **Diaz-Mendoza J**, Chua A, Duggal A, Jenkins AR, Knight S, Patolia S, Tamae-Kakazu M, Raghu G, and Wilson KC. Transbronchial Biopsy and Cryobiopsy in the Diagnosis of Hypersensitivity Pneumonitis among Patients with Interstitial Lung Disease. *Ann Am Thorac Soc* 2020; 18(1):148-161. PMID: 32810411. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Chen AC, Pastis NJ, Jr., Mahajan AK, Khandhar SJ, **Simoff MJ**, Machuzak MS, Cicenia J, Gildea TR, and Silvestri GA. Robotic Bronchoscopy for Peripheral Pulmonary Lesions: A Multicenter Pilot and Feasibility Study (BENEFIT). *Chest* 2020; Epub ahead of print. PMID:

32822675. Full Text

Duong TB, Ceglar S, **Reaume M**, and Lee C. Imaging Approach to Cavitary Lung Disease. *Ann Am Thorac Soc* 2020; 17(3):367-371. PMID: 32108500. Full Text

Hoffert M, **Kerr H**, **Hegab S**, **Whitehouse S**, **Kokas M**, **MacLean L**, **Van Harn MG**, and **Baker-Genaw K**. Designing a Yoga Intervention Program to Improve Well-Being for Physician Trainees: Challenges and Lessons Learned. *Int J Yoga Therap* 2020; Epub ahead of print. PMID: 33157552. Full Text

Jayaprakash N, **Pflaum C**, **Gardner-Gray J**, **Hurst G**, **Coba V**, **Kinni H**, and **Deledda J**. Critical Care Delivery Solutions in the Emergency Department: Evolving Models in Caring for ICU Boarders. *Ann Emerg Med* 2020; 76(6):709-716. PMID: 32653331. Full Text

Jenkins AR, Chua A, Chami H, **Diaz-Mendoza J**, Duggal A, Knight S, Patolia S, Tamae-Kakazu M, Raghu G, and Wilson KC. Questionnaires or Serum IgG Testing in the Diagnosis of Hypersensitivity Pneumonitis among Patients with Interstitial Lung Disease. *Ann Am Thorac Soc* 2020; 18(1):130-147. PMID: 32780584. Full Text

Kim HS, Khemasuwan D, **Diaz-Mendoza J**, and Mehta AC. Management of tracheo-oesophageal fistula in adults. *Eur Respir Rev* 2020; 29(158). PMID: 33153989. Full Text

Kotecha A, Raghavan D, Yadav SK, A AS, and Arsene C. New insights on patient-related risk factors for venous thromboembolism in patients with solid organ cancers. *Int J Hematol* 2020; 112(4):477-486. PMID: 32632822. Full Text

Lamb CR, Desai NR, Angel L, Chaddha U, Sachdeva A, Sethi S, Bencheqroun H, Mehta H, Akulian J, Argento AC, **Diaz-Mendoza J**, Musani A, and Murgu S. Use of Tracheostomy During the COVID-19 Pandemic: CHEST/AABIP/AIPPD: Expert Panel Report. *Chest* 2020; 158(1499-1514). PMID: 32512006. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

Martirosov AL, **Smith ZR**, **Hencken L**, **MacDonald NC**, **Griebe K**, **Fantuz P**, **Grafton G**, **Hegab S**, **Ismail R**, **Jackson B**, **Kelly B**, **Miller M**, and **Awdish R**. Improving transitions of care for critically ill adult patients on pulmonary arterial hypertension medications. *Am J Health Syst Pharm* 2020; 77(12):958-965. PMID: 32495842. Full Text

Matar R, Alrahmani L, Monzer N, **Debiane LG**, Berbari E, Fares J, Fitzpatrick F, and Murad MH. Clinical Presentation and Outcomes of Pregnant Women with COVID-19: A Systematic Review and MetaAnalysis. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32575114. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol*

2020; 92(10):1791-1792. PMID: 32314799. Full Text

Moskowitz A, Huang DT, Hou PC, Gong J, Doshi PB, Grossestreuer AV, Andersen LW, Ngo L, Sherwin RL, Berg KM, Chase M, Cocchi MN, McCannon JB, Hershey M, Hilewitz A, Korotun M, Becker LB, Otero RM, **Uduman J**, Sen A, and Donnino MW. Effect of Ascorbic Acid, Corticosteroids, and Thiamine on Organ Injury in Septic Shock: The ACTS Randomized Clinical Trial. *Jama* 2020; 324(7):642-650. PMID: 32809003. Full Text

Nemeh H, **Coba V**, Chulkov M, **Gupta A**, **Yeldo N**, **Chamogeorgakis T**, **Tanaka D**, **Allenspach L**, **Simanovski J**, and Shanti C. Lung Transplantation for the Treatment of Vaping Induced, Irreversible, End Stage Lung Injury. *Ann Thorac Surg* 2020; Epub ahead of print. PMID: 33130115. Full Text Patolia S, Tamae Kakazu M, Chami H, Chua A, **Diaz-Mendoza J**, Duggal A, Jenkins AR, Knight SL, Raghu G, and Wilson KC. Bronchoalveolar Lavage Lymphocytes in the Diagnosis of Hypersensitivity Pneumonitis among Patients with Interstitial Lung Disease: A Systematic Review. *Ann Am Thorac Soc* 2020; 17(11):1455-1467. PMID: 32757946. Full Text

Raghu G, Document S, Remy-Jardin M, Ryerson CJ, Myers JL, Kreuter M, Vasakova M, Bargagli E, Chung JH, Collins BF, Bendstrup E, Chami HA, Chua AT, Corte TJ, Dalphin JC, Danoff SK, **DiazMendoza J**, Duggal A, Egashira R, Ewing T, Gulati M, Inoue Y, Jenkins AR, Johannson KA, Johkoh T, Tamae-Kakazu M, Kitaichi M, Knight SL, Koschel D, Lederer DJ, Mageto Y, Maier LA, Matiz C, Morell F,Nicholson AG, Patolia S, Pereira CA, Renzoni EA, Salisbury ML, Selman M, Walsh SLF, Wuyts WA, and Wilson KC. Diagnosis of Hypersensitivity Pneumonitis in Adults: An Official ATS/JRS/ALAT Clinical Practice Guideline. *Am J Respir Crit Care Med* 2020; 202(3):e36-e39. PMID: 32706311. Full Text

Reaume M, Duong T, **Song T**, and **Diaz-Mendoza J**. The pulmonary nodule following lung transplantation. *Clin Imaging* 2020; 72:37-41. PMID: 33202293. Full Text

Reaume M, Farishta M, Costello JA, Gibb T, and Melgar TA. Analysis of lawsuits related to diagnostic errors from point-of-care ultrasound in internal medicine, paediatrics, family medicine and critical care in the USA. *Postgrad Med J* 2020; 97(1143):55-58. PMID: 32457206. Full Text

Stuart MM, **Smith ZR**, **Payter KA**, **Martz CR**, **To L**, **Swiderek JL**, **Coba VE**, and **Peters MA**. Pharmacist-driven discontinuation of antipsychotics for ICU delirium: A quasi-experimental study. *JACCP Journal of the American College of Clinical Pharmacy* 2020; 3(6):1009-1014. PMID: Not assigned. Full Text

Wahidi MM, Shojaee S, Lamb CR, Ost D, Maldonado F, Eapen G, Caroff DA, Stevens MP, **Ouellette DR**, Lilly C, Gardner DD, Glisinski K, Pennington K, and Alalawi R. The Use of Bronchoscopy During the COVID-19 Pandemic: CHEST/AABIP Guideline and Expert Panel Report. *Chest* 2020; 158(3):1268-1281. PMID: 32361152. Full Text

White RJ, Jerjes-Sanchez C, Bohns Meyer GM, Pulido T, Sepulveda P, Wang KY, Grunig E, Hiremath S, Yu Z, Gangcheng Z, Yip WLJ, Zhang S, Khan A, Deng CQ, Grover R, Tapson VF, **Awdish R**, and **Cajigas H**. Combination Therapy with Oral Treprostinil for Pulmonary Arterial Hypertension. A DoubleBlind Placebo-controlled Clinical Trial. *Am J Respir Crit Care Med* 2020; 201(6):707-717. PMID: 31765604. Full Text

Zhang Y, Shi L, **Simoff MJ**, O JW, and Lavin J. Biopsy frequency and complications among lung cancer patients in the United States. *Lung Cancer Manag* 2020; 9(4):Lmt40. PMID: 33318758. Full Text

Radiation Oncology

Al Feghali KA, **Wu QC**, **Devpura S**, **Liu C**, **Ghanem AI**, **Wen NW**, **Ajlouni M**, **Simoff MJ**, **Movsas B**, and **Chetty IJ**. Correlation of normal lung density changes with dose after stereotactic body radiotherapy (SBRT) for early stage lung cancer. *Clin Transl Radiat Oncol* 2020; 22:1-8. PMID: 32140574. Full Text

Bagher-Ebadian H, and **Chetty IJ**. Technical Note: ROdiomX: A Validated Software for Radiomics Analysis of Medical Images in Radiation Oncology. *Med Phys* 2020; Epub ahead of print. PMID: 33169367. Full Text

Bergman D, **Modh A**, **Schultz L**, **Snyder J**, **Mikkelsen T**, **Shah M**, Ryu S, **Siddiqui MS**, and **Walbert T**. Randomized prospective trial of fractionated stereotactic radiosurgery with chemotherapy versus chemotherapy alone for bevacizumab-resistant high-grade glioma. *J Neurooncol* 2020; 148(2):353-361. PMID: 32444980. Full Text

Chun SG, Simone CB, 2nd, Amini A, **Chetty IJ**, Donington J, Edelman MJ, Higgins KA, Kestin LL, **Movsas B**, Rodrigues GB, Rosenzweig KE, Slotman BJ, **Rybkin, II**, Wolf A, and Chang JY. American Radium Society Appropriate Use Criteria: Radiation Therapy for Limited-Stage SCLC 2020. *J Thorac Oncol* 2020; 16(1):66-75. PMID: 33166720. Full Text

Dai Z, **Carver E**, **Liu C**, **Lee J**, **Feldman A**, **Zong W**, **Pantelic M**, **Elshaikh M**, and **Wen N**. Segmentation of the Prostatic Gland and the Intraprostatic Lesions on Multiparametic Magnetic Resonance Imaging Using Mask Region-Based Convolutional Neural Networks. *Adv Radiat Oncol* 2020; 5(3):473-481. PMID: 32529143. Full Text

Dumas M, Laugeman E, Sevak P, **Snyder KC**, **Mao W**, **Chetty IJ**, **Ajlouni M**, and **Wen N**. Technical Note: Comparison of the internal target volume (ITV) contours and dose calculations on 4DCT, average CBCT, and 4DCBCT imaging for lung stereotactic body radiation therapy (SBRT). *J Appl Clin Med Phys* 2020; Epub ahead of print. PMID: 33044040. Full Text

Ellis MM, **Jones LR**, **Siddiqui F**, **Sunkara PR**, and **Ozog DM**. The Efficacy of Surgical Excision Plus Adjuvant Multimodal Therapies in the Treatment of Keloids: A Systematic Review and Meta-Analysis. *Dermatol Surg* 2020; 46(8):1054-1059. PMID: 32224709. Full Text

Elshaikh MA, **Modh A**, Jhingran A, Biagioli MC, Coleman RL, Gaffney DK, Harkenrider MM, Heskett K, Jolly S, Kidd E, Lee LJ, Li L, Portelance L, Sherertz T, Venkatessan AM, Wahl AO, Yashar CM, and Small W, Jr. Executive summary of the American Radium Society® Appropriate Use Criteria for management of uterine carcinosarcoma. *Gynecol Oncol* 2020; 158(2):460-466. PMID: 32475772. Full Text

Ennis RD, **Movsas B**, Park C, Sandler HM, Smith BD, Wilson L, and Deweese TL. Examinations in Radiation Oncology: Listening, Learning, and Looking Forward Together. *Int J Radiat Oncol Biol Phys* 2020; 106(1):29-31. PMID: 31647971. Full Text

Ghanem AI, **Modh A**, **Burmeister C**, Mahmoud O, and **Elshaikh MA**. Does the Interval Between Hysterectomy and Start of Adjuvant Radiation Treatment Influence Survival in Women With Endometrial Carcinoma?: A National Cancer Database analysis. *Am J Clin Oncol* 2020; 43(8):602-606. PMID: 32398405. Full Text

Hagan M, Kapoor R, Michalski J, Sandler H, **Movsas B**, Chetty I, Lally B, Rengan R, Robinson C, Rimner A, Simone C, Timmerman R, Zelefsky M, DeMarco J, Hamstra D, Lawton C, Potters

L, Valicenti R, Mutic S, Bosch W, Abraham C, Caruthers D, Brame R, Palta JR, Sleeman W, and Nalluri J. VA-Radiation Oncology Quality Surveillance Program. *Int J Radiat Oncol Biol Phys* 2020; 106(3):639-647. PMID: 31983560. Full Text

Higgins KA, Simone CB, 2nd, Amini A, **Chetty IJ**, Donington J, Edelman MJ, Chun SG, Kestin LL, **Movsas B**, Rodrigues GB, Rosenzweig KE, Slotman BJ, **Rybkin, II**, Wolf A, and Chang JY. American Radium Society™ , Appropriate Use Criteria on Radiation Therapy for Extensive-stage Small Cell Lung Cancer. *J Thorac Oncol* 2020; 16(1):54-65. PMID: 33011389. Full Text

Jagsi R, Griffith KA, Vicini F, Boike T, Burmeister J, Dominello MM, Grills I, Hayman JA, Moran JM, Paximadis P, Radawski JD, **Walker EM**, and Pierce LJ. Toward Improving Patients' Experiences of Acute Toxicity From Breast Radiotherapy: Insights From the Analysis of Patient-Reported Outcomes in a Large Multicenter Cohort. *J Clin Oncol* 2020; 38(34):4019-4029. PMID: 32986529. Full Text

Keall PJ, Sawant A, Berbeco RI, Booth JT, Cho B, Cerviño LI, Cirino E, Dieterich S, Fast MF, Greer PB, Munck Af Rosenschöld P, **Parikh PJ**, Poulsen PR, Santanam L, Sherouse GW, Shi J, and Stathakis S. AAPM Task Group 264: The Safe Clinical Implementation of MLC Tracking in Radiotherapy. *Med Phys* 2020; Epub ahead of print. PMID: 33260251. Full Text

Kumar S, Nahum AE, and **Chetty IJ**. Monte-Carlo-computed dose, kerma and fluence distributions in heterogeneous slab geometries irradiated by small megavoltage photon fields. *Phys Med Biol* 2020; 65(17):175012. PMID: 32485691. Request Article

Laucis AM, Jagsi R, Griffith KA, Dominello MM, **Walker EM**, Abu-Isa EI, Dilworth JT, Vicini F, Kocheril PG, Browne CH, Mietzel MA, Moran JM, Hayman JA, and Pierce LJ. The Role of Facility Variation on Racial Disparities in Use of Hypofractionated Whole Breast Radiotherapy. *Int J Radiat Oncol Biol Phys* 2020; 107(5):949-958. PMID: 32376311. Full Text

Li B, Sarria GR, Hermansen M, Hao J, Martinez D, Garcia B, Liu J, McLeod M, Castaneda S, Oladeru OT, Lee B, Sarria GJ, Gay H, **Chetty IJ**, and Roa D. Impact of a SBRT/SRS longitudinal telehealth training pilot course in Latin America. *Crit Rev Oncol Hematol* 2020; 154:103072. PMID: 32805497. Full Text

Liu SW, Woody NM, Wei W, Appachi S, Contrera KJ, Tsai JC, **Ghanem AI**, Matia B, Joshi NP, Geiger JL, Ku JA, Burkey BB, Scharpf J, Prendes BL, Caudell JJ, Dunlap NE, Adelstein DJ, Porceddu S, Liu H, **Siddiqui F**, Lee NY, Koyfman S, and Lamarre ED. Evaluating compliance with process-related quality metrics and survival in oral cavity squamous cell carcinoma: Multi-institutional oral cavity collaboration study. *Head Neck* 2020; 43(1):60-69. PMID: 32918373. Full Text

Lukovic J, Henke L, Gani C, Kim TK, Stanescu T, Hosni A, Lindsay P, Erickson B, Khor R, Eccles C, pBoon C, Donker M, Jagavkar R, Nowee ME, Hall WA, **Parikh P**, and Dawson LA. MRI-Based Upper Abdominal Organs-at-Risk Atlas for Radiation Oncology. *Int J Radiat Oncol Biol Phys* 2020; 106(4):743753. PMID: 31953061. Full Text

Margalit DN, Sacco AG, Cooper JS, Ridge JA, Bakst RL, Beadle BM, Beitler JJ, **Chang SS**, Chen AM, Galloway TJ, Koyfman SA, Mita C, Robbins JR, Tsai CJ, Truong MT, Yom SS, and **Siddiqui F**.Systematic review of postoperative therapy for resected squamous cell carcinoma of the head and neck: Executive summary of the American Radium Society appropriate use criteria. *Head Neck* 2020; 43(1):367-391. PMID: 33098180. Full Text

Morris ED, **Aldridge K**, **Ghanem AI**, **Zhu S**, and Glide-Hurst CK. Incorporating sensitive

cardiac substructure sparing into radiation therapy planning. *J Appl Clin Med Phys* 2020; Epub ahead of print. PMID: 33073454. Full Text

Nejad-Davarani SP, **Zakariaei N**, Chen Y, Haacke EM, **Hurst NJ**, **Siddiqui MS**, **Schultz LR**, **Snyder JM**, **Walbert T**, and **Glide-Hurst C**. Rapid Multi-contrast Brain Imaging on a 0.35T MR-linac. *Med Phys* 2020; 47(9):4064-4076. PMID: 32434276. Full Text

Parikh PJ, and Chapman W, Jr. Same results, 20% of the cost: Short-course total neoadjuvant therapy. *Int J Radiat Oncol Biol Phys* 2020; 106(4):672-673. PMID: 31924409. Full Text

Pugh SL, Rodgers JP, Yeager KA, Chen RC, **Movsas B**, Bonanni R, Dignam J, and Bruner DW. Characteristics of Participation in Patient-Reported Outcomes and Electronic Data Capture Components of NRG Oncology Clinical Trials. *Int J Radiat Oncol Biol Phys* 2020; 108(4):950-959. PMID: 32590048. Full Text

Shumway DA, Kapadia N, **Walker EM**, Griffith KA, Do TT, Feng M, Boike T, Helfrich Y, **DePalma B**, Gillespie EF, Miller A, Hayman J, Jagsi R, and Pierce LJ. Development of an Illustrated Scale for Acute Radiation Dermatitis in Breast Cancer Patients. *Pract Radiat Oncol* 2020; Epub ahead of print. PMID: 32947041. Request Article

Sood A, **Keeley J**, **Palma-Zamora I**, **Arora S**, **Dalela D**, **Olson P**, **Hanna R**, **Cotter D**, **Jeong W**, **Elshaikh M**, **Rogers CG**, **Peabody JO**, **Menon M**, and **Abdollah F**. Ten-year disease progression and mortality rates in men who experience biochemical recurrence versus persistence after radical prostatectomy and undergo salvage radiation therapy: A post-hoc analysis of RTOG 9601 trial data. *Urol Oncol* 2020; 38(6):599. PMID: 32229186. Full Text

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**. Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Thanikachalam K, **Damarla V**, **Seixas T**, **Dobrosotskaya I**, **Wollner I**, **Kwon D**, **Winters K**, **Raoufi M**, **Li J**, **Siddiqui F**, and **Khan G**. Neoadjuvant Phase II Trial of Chemoradiotherapy in Patients With Resectable and Borderline Resectable Pancreatic Cancer. *Am J Clin Oncol* 2020; 43(6):435-441. PMID: 32251119. Full Text

Tsai CJ, Galloway TJ, Margalit DN, Bakst RL, Beadle BM, Beitler JJ, **Chang S**, Chen A, Cooper J, Koyfman SA, Ridge JA, Robbins J, Truong MT, Yom SS, and **Siddiqui F**. Ipsilateral radiation for squamous cell carcinoma of the tonsil: American Radium Society appropriate use criteria executive summary. *Head Neck* 2020; 43(1):392-406. PMID: 33068064. Full Text

Vscariello I, Evans S, Parker S, Schofield D, **Miller B**, Gardner S, Fong de Los Santos L, Hallemeier C, Jordan L, Kim E, and Ford E. A multi-institutional assessment of COVID-19-related risk in radiation oncology. *Radiother Oncol* 2020; 153:296-302. PMID: 33096163. Full Text

Wen N, Cao Y, and Cai J. Editorial: Magnetic Resonance Imaging for Radiation Therapy. *Front Oncol* 2020; 10:483. PMID: 32351888. Full Text

Xiao C, **Hurst N**, and **Movsas B**. The State of the Science in Patient-Reported Outcomes for Patients with Lung Cancer. *Semin Respir Crit Care Med* 2020; 41(3):377-385. PMID:

32450592. Full Text

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh M**. Increased risk of recurrence in early-stage endometrial carcinoma after delays in adjuvant radiation treatment. *Int J Gynecol Cancer* 2020; 31(1):73-77. PMID: 33087415. Full Text

Zong W, **Lee JK**, **Liu C**, **Carver EN**, **Feldman AM**, **Janic B**, **Elshaikh MA**, **Pantelic MV**, **Hearshen D**, **Chetty IJ**, **Movsas B**, and **Wen N**. A Deep Dive into Understanding Tumor Foci Classification using Multiparametric MRI Based on Convolutional Neural Network. *Med Phys* 2020; 47(9):4077-4086. PMID: 32449176. Full Text

Rehabilitation Services

Pepin ME, and **Chan D**. Applying a clinical decision-making model to a patient with severe shoulder pain ultimately diagnosed as neuralgic amyotrophy. *Physiother Theory Pract* 2020; Epub ahead of print.:1-12. PMID: 32892675. Request Article

Wilson CM, and **Stanczak JF**. Palliative pain management using transcutaneous electrical nerve stimulation (TENS). *Rehabilitation Oncology* 2020; 38(1):E1-E6. PMID: Not assigned. Full Text

Research Administration

Caldwell S, Sagaser K, Nelson Z, **Frey J**, Wardrop J, Boomer T, McCullough R, and Schwartz S. Deletion rescue resulting in segmental homozygosity: A mechanism underlying discordant NIPT results. *Am J Med Genet A* 2020; 182(11):2666-2670. PMID: 32798301. Full Text

Dehghani A, **Soltanian-Zadeh H**, and Hossein-Zadeh GA. Global Data-Driven Analysis of Brain Connectivity during Emotion Regulation by EEG Neurofeedback. *Brain Connect* 2020; 10(6):302-315. PMID: 32458692. Request Article

Hatton SN, Huynh KH, Bonilha L, Abela E, Alhusaini S, Altmann A, Alvim MKM, Balachandra AR, eBartolini E, Bender B, Bernasconi N, Bernasconi A, Bernhardt B, Bargallo N, Caldairou B, Caligiuri ME, Carr SJA, Cavalleri GL, Cendes F, Concha L, **Davoodi-Bojd E**, Desmond PM, Devinsky O, Doherty CP, Domin M, Duncan JS, Focke NK, Foley SF, Gambardella A, Gleichgerrcht E, Guerrini R, Hamandi K, Ishikawa A, Keller SS, Kochunov PV, Kotikalapudi R, Kreilkamp BAK, Kwan P, Labate A, Langner S, Lenge M, Liu M, Lui E, Martin P, Mascalchi M, Moreira JCV, Morita-Sherman ME, O'Brien TJ, Pardoe HR, Pariente JC, Ribeiro LF, Richardson MP, Rocha CS, Rodríguez-Cruces R, Rosenow F, Severino M, Sinclair B, **Soltanian-Zadeh H**, Striano P, Taylor PN, Thomas RH, Tortora D, Velakoulis D, Vezzani A, Vivash L, von Podewils F, Vos SB, Weber B, Winston GP, Yasuda CL, Zhu AH, Thompson PM, Whelan CD, Jahanshad N, Sisodiya SM, and McDonald CR. White matter abnormalities across different epilepsy syndromes in adults: an ENIGMA-Epilepsy study. *Brain* 2020; 143(8):2454-2473. PMID: 32814957. Full Text

Hosseini MP, Tran TX, Pompili D, Elisevich K, and **Soltanian-Zadeh H**. Multimodal data analysis of epileptic EEG and rs-fMRI via deep learning and edge computing. *Artif Intell Med* 2020; 104:101813. PMID: 32498996. Full Text

Jamali-Dinan SS, **Soltanian-Zadeh H**, **Bowyer SM**, Almohri H, Dehghani H, Elisevich K, and NazemZadeh MR. A Combination of Particle Swarm Optimization and Minkowski Weighted K-Means Clustering: Application in Lateralization of Temporal Lobe Epilepsy. *Brain Topogr* 2020; 33(4):519-532. PMID: 32347472. Full Text

Larivière S, Rodríguez-Cruces R, Royer J, Caligiuri ME, Gambardella A, Concha L, Keller SS, Cendes F, Yasuda C, Bonilha L, Gleichgerrcht E, Focke NK, Domin M, von Podewills F, Langner S, Rummel C, Wiest R, Martin P, Kotikalapudi R, O'Brien TJ, Sinclair B, Vivash L, Desmond PM, Alhusaini S, Doherty CP, Cavalleri GL, Delanty N, Kälviäinen R, Jackson GD, Kowalczyk M, Mascalchi M, Semmelroch M, Thomas RH, **Soltanian-Zadeh H**, **Davoodi-Bojd E**, Zhang J, Lenge M, Guerrini R, Bartolini E, Hamandi K, Foley S, Weber B, Depondt C, Absil J, Carr SJA, Abela E, Richardson MP, Devinsky O, Severino M, Striano P, Tortora D, Hatton SN, Vos SB, Duncan JS, Whelan CD, Thompson PM, Sisodiya SM, Bernasconi A, Labate A, McDonald CR, Bernasconi N, and Bernhardt BC. Network-based atrophy modeling in the common epilepsies: A worldwide ENIGMA study. *Sci Adv* 2020; 6(47). PMID: 33208365. Full Text

LaTourette PC, David EM, Pacharinsak C, Jampachaisri K, **Smith JC**, and Marx JO. Effects of Standard and Sustained-release Buprenorphine on the Minimum Alveolar Concentration of Isoflurane in C57BL/6 Mice. *J Am Assoc Lab Anim Sci* 2020; 59(3):298-304. PMID: 32268932. Full Text

Mehdizavareh MH, Hemati S, and **Soltanian-Zadeh H**. Enhancing performance of subject-specific models via subject-independent information for SSVEP-based BCIs. *PLoS One* 2020; 15(1): e0226048. PMID: 31935220. Full Text

Reshef E, **Sabbah HN**, and Nussinovitch U. Effects of protective controlled coronary reperfusion on left ventricular remodeling in dogs with acute myocardial infarction: A pilot study. *Cardiovasc Revasc Med* 2020; 21(12):1579-1584. PMID: 32417208. Full Text

Sisodiya SM, Whelan CD, Hatton SN, Huynh K, Altmann A, Ryten M, Vezzani A, Caligiuri ME, Labate A, Gambardella A, Ives-Deliperi V, Meletti S, Munsell BC, Bonilha L, Tondelli M, Rebsamen M, Rummel C, Vaudano AE, Wiest R, Balachandra AR, Bargalló N, Bartolini E, Bernasconi A, Bernasconi N, Bernhardt B, Caldairou B, Carr SJA, Cavalleri GL, Cendes F, Concha L, Desmond PM, Domin M, Duncan JS, Focke NK, Guerrini R, Hamandi K, Jackson GD, Jahanshad N, Kälviäinen R, Keller SS, Kochunov P, Kowalczyk MA, Kreilkamp BAK, Kwan P, Lariviere S, Lenge M, Lopez SM, Martin P, Mascalchi M, Moreira JCV, Morita-Sherman ME, Pardoe HR, Pariente JC, Raviteja K, Rocha CS, Rodríguez-Cruces R, Seeck M, Semmelroch M, Sinclair B, **Soltanian-Zadeh H**, Stein DJ, Striano P, Taylor PN, Thomas RH, Thomopoulos SI, Velakoulis D, Vivash L, Weber B, Yasuda CL, Zhang J, Thompson PM, and McDonald
CR. The ENIGMA-Epilepsy working group: Mapping disease from large data sets. *Hum Brain Mapp* 2020; Epub ahead of print. PMID: 32468614. Full Text

Rheumatology

Coit P, Ortiz-Fernandez L, Lewis EE, McCune WJ, **Maksimowicz-McKinnon K**, and Sawalha AH. A longitudinal and transancestral analysis of DNA methylation patterns and disease activity in lupus patients. *JCI Insight* 2020; 5(22). PMID: 33108347. Full Text

Liaqat H, **Shirvanian N**, Ammad Ud Din M, and **Amin A**. Cocaine-related vasculitis. *Clinical Case Reports* 2020; 8(12):3640-3641. PMID: 33364016. Full Text

Ortiz-Fernández L, Saruhan-Direskeneli G, Alibaz-Oner F, Kaymaz-Tahra S, Coit P, Kong X, Kiprianos AP, Maughan RT, Aydin SZ, Aksu K, Keser G, Kamali S, Inanc M, Springer J, Akar S, Onen F, Akkoc N, Khalidi NA, Koening C, Karadag O, Kiraz S, Forbess L, Langford CA, McAlear CA, Ozbalkan Z, Yavuz S, Çetin GY, Alpay-Kanitez N, Chung S, Ates A, Karaaslan Y,

McKinnon-Maksimowicz K, Monach PA, Ozer HTE, Seyahi E, Fresko I, Cefle A, Seo P, Warrington KJ, Ozturk MA, Ytterberg SR, Cobankara V, Onat AM, Duzgun N, Bıcakcıgil M, Yentür SP, Lally L, Manfredi AA, Baldissera E, Erken E, Yazici A, Kısacık B, Kaşifoğlu T, Dalkilic E, Cuthbertson D, Pagnoux C, Sreih A, Reales G, Wallace C, Wren JD, Cunninghame-Graham DS, Vyse TJ, Sun Y, Chen H, Grayson PC, Tombetti E, Jiang L, Mason JC, Merkel PA, Direskeneli H, and Sawalha AH. Identification of susceptibility loci for Takayasu arteritis through a large multi-ancestral genome-wide association study. *Am J Hum Genet* 2020; 108(1):84-99. PMID: 33308445. Request Article

Yousif PA, **Moshrefi H**, **Meysami A**, and **Alkhatib AH**. Lupus-Induced Vasculitis and Multiple Organ Dysfunction Syndrome as the First Presentation of Systemic Lupus Erythematosus (SLE) in Pregnancy. *Am J Case Rep* 2020; 21:e921299. PMID: 32284523. Full Text

Yousif PA, **Moshrefi HR**, **Mohamed MA**, and **Meysami A**. A Rare and Fatal Case of Hemophagocytic Lymphohistiocytosis Associated with Sarcoidosis. *Am J Case Rep* 2020; 21: e921306. PMID: 32315294. Request Article

Sleep Medicine

Begum J, and **Skiba V**. When Using Two Patient Identifiers is Not Enough with CPAP Therapy. *J Clin Sleep Med* 2020; 16(4):639-642. PMID: 32003731. Full Text

Cheng P, Casement MD, **Kalmbach DA**, **Castelan AC**, and **Drake CL**. Digital Cognitive Behavioral Therapy for Insomnia Promotes Later Health Resilience During the Coronavirus Disease 19 (COVID-19) Pandemic. *Sleep* 2020; Epub ahead of print. PMID: 33249492. Full Text

Cheng P, Cuellar R, Johnson DA, **Kalmbach DA**, **Joseph CL**, **Cuamatzi Castelan A**, **Sagong C**, Casement MD, and **Drake CL**. Racial discrimination as a mediator of racial disparities in insomnia disorder. *Sleep Health* 2020; 6(5):543-549. PMID: 32928711. Full Text

Cheng P, **Kalmbach D**, **Fellman-Couture C**, Arnedt JT, **Cuamatzi-Castelan A**, and **Drake CL**. Risk of excessive sleepiness in sleep restriction therapy and cognitive behavioral therapy for insomnia: a randomized controlled trial. *J Clin Sleep Med* 2020; 16(2):193-198. PMID: 31992407. Full Text

Cheng P, **Kalmbach DA**, **Castelan AC**, **Murugan N**, and **Drake CL**. Depression prevention in digital cognitive behavioral therapy for insomnia: Is rumination a mediator? *J Affect Disord* 2020; 273:434-441. PMID: 32560938. Full Text

Cheng P, Walch O, Huang Y, Mayer C, **Sagong C**, **Cuamatzi Castelan A**, Burgess HJ, **Roth T**, Forger DB, and **Drake CL**. Predicting circadian misalignment with wearable technology: Validation of wrist-worn actigraphy and photometry in night shift workers. *Sleep* 2020; Epub ahead of print. PMID: 32918087. Full Text

Heggeness LF, Bean CAL, **Kalmbach DA**, and Ciesla JA. Cognitive risk, coping-oriented substance use, and increased avoidance tendencies among depressed outpatients: A prospective investigation. *J Clin Psychol* 2020; 76(12):2249-2263. PMID: 32478424. Full Text

Ivgy-May N, Hajak G, van Osta G, Braat S, Chang Q, and **Roth T**. Efficacy and safety of esmirtazapine in adult outpatients with chronic primary insomnia: a randomized, double-blind placebo-controlled study, and open-label extension. *J Clin Sleep Med* 2020; 16(9):1455-1467. PMID: 32351205. Full Text

Kalmbach DA, Buysse DJ, **Cheng P**, **Roth T**, **Yang A**, and **Drake CL**. Nocturnal cognitive arousal is associated with objective sleep disturbance and indicators of physiologic hyperarousal in good sleepers and individuals with insomnia disorder. *Sleep Med* 2020; 71:151-160. PMID: 32247571. Full Text

Kalmbach DA, **Cheng P**, O'Brien LM, Swanson LM, **Sangha R**, Sen S, Guille C, **Cuamatzi-Castelan A**, Henry AL, **Roth T**, and **Drake CL**. A randomized controlled trial of digital cognitive behavioral therapy for insomnia in pregnant women. *Sleep Med* 2020; 72:82-92. PMID: 32559716. Full Text

Kalmbach DA, **Cheng P**, **Roth T**, **Sagong C**, and **Drake CL**. Objective sleep disturbance is associated with poor response to cognitive and behavioral treatments for insomnia in postmenopausal women. *Sleep Med* 2020; 73:82-92. PMID: 32799029. Full Text

Kalmbach DA, **Roth T**, **Cheng P**, Ong JC, Rosenbaum E, and **Drake CL**. Mindfulness and nocturnal rumination are independently associated with symptoms of insomnia and depression during pregnancy. *Sleep Health* 2020; 6(2):185-191. PMID: 32146168. Full Text

Kalmbach DA, Sen S, and **Drake CL**. Poor sleep is a health crisis for physicians and nurses. *Sleep Med* 2020; 67:256-257. PMID: 32046921. Full Text

Marques DR, Gomes AA, Clemente V, **Drake CL**, **Roth T**, Morin CM, and de Azevedo MHP. Typologies of individuals vulnerable to insomnia: a two-step cluster analysis. *Sleep and Biological Rhythms* Epub ahead of print. PMID: Not assigned. Request Article

Mohindra M, Bird S, Charest J, Huyghe T, and Calleja-Gonzalez J. Urgent wake up call for the NBA. *J Clin Sleep Med* 2020; Epub ahead of print. PMID: 33112229. Full Text

Roehrs T, **Withrow D**, **Koshorek G**, **Verkler J**, **Bazan L**, and **Roth T**. Sleep and Pain in Subjects with Fibromyalgia and Comorbid Insomnia: Double-blind, Crossover, Study of Suvorexant 20 mg versus Placebo. *J Clin Sleep Med* 2020; 16(3):415-421. PMID: 31992394. Full Text

Roehrs TA, Auciello J, Tseng J, and Whiteside G. Current and potential pharmacological treatment options for insomnia in patients with alcohol use disorder in recovery. *Neuropsychopharmacol Rep* 2020; 40(3):211-223. PMID: 32543111. Full Text

Skiba V, **Novikova M**, **Suneja A**, **McLellan B**, and **Schultz L**. Use of Positive Airway Pressure in Mild Cognitive Impairment to Delay Progression to Dementia. *J Clin Sleep Med* 2020; 16(6):863-870. PMID: 32039755. Full Text

Svetnik V, Snyder ES, Tao P, **Roth T**, Lines C, and Herring WJ. How well can a large number of polysomnography sleep measures predict subjective sleep quality in insomnia patients? *Sleep Med* 2020; 67:137-146. PMID: 31926466. Full Text

Swanson LM, **Kalmbach DA**, Raglan GB, and O'Brien LM. Perinatal Insomnia and Mental Health: a Review of Recent Literature. *Curr Psychiatry Rep* 2020; 22(12):73. PMID: 33104878. Full Text

Weaver TE, **Drake CL**, Benes H, Stern T, Maynard J, Thein SG, Andry JM, Sr., Hudson JD, Chen D, Carter LP, Bron M, Lee L, Black J, and Bogan RK. Effects of Solriamfetol on Quality of

Life Measures From a 12-Week Phase 3 Randomized Trial. *Ann Am Thorac Soc* 2020; 17(8):998-1007. PMID: 32353246. Full Text

Weaver TE, Mathias SD, Crosby RD, Bron M, Bujanover S, Menno D, Villa KF, and **Drake C**. Relationship between sleep efficacy endpoints and measures of functional status and health-related quality of life in participants with narcolepsy or obstructive sleep apnea treated for excessive daytime sleepiness. *J Sleep Res* 2020; Epub ahead of print. PMID: 33051943. Full Text

Surgery

Al-Darzi W, **Alalwan Y**, **Askar F**, **Sadiq O**, **Venkat D**, **Gonzalez H**, **Galusca D**, **Yoshida A**, and **Jafri SM**. Risk Factors and Outcomes of Intracardiac Thrombosis During Orthotopic Liver Transplantation. *Transplant Proc* 2020; Epub ahead of print. PMID: 33246584. Full Text

Andrews E, **Lezotte J**, and **Ackerman AM**. Lingual compression for acute macroglossia in a COVID-19 positive patient. *BMJ Case Rep* 2020; 13(7). PMID: 32675133. Full Text

Asai M, **Wood E**, and **Reickert CA**. Extraperineal enterocele in male: A case report and literature review. *Int J Surg Case Rep* 2020; 72:524-527. PMID: 32698280. Full Text

Bendix SD, **Peterson EL**, **Kabbani LS**, **Weaver MR**, and **Lin JC**. The Impact of Endovenous Ablation Assessment Based on Great Saphenous Vein Size, Gender, Clinical Severity, and Patient Reported Outcomes. *J Vasc Surg Venous Lymphat Disord* 2020; 9(1):128-136. PMID: 32353593. Full Text

Bergquist JR, **Li AY**, Chang EM, Scott GD, Dua MM, and Visser BC. Nearing the Summit: Associating Liver Partitioning and Portal Ligation for Staged Hepatectomy (ALPPS) in Progressive Carcinoid Disease. *Dig Dis Sci* 2020; 65(12):3482-3485. PMID: 32307614. Full Text

Bergquist JR, **Li AY**, Javadi CS, Chima RS, Frye JS, and Visser BC. Too Big to Fail: Successful Resection of a Large Hepatocellular Carcinoma with Portal Tumor Thrombus. *Dig Dis Sci* 2020; Epub ahead of print. PMID: 33140182. Full Text

Brescia AA, Clark MJ, Theurer PF, Lall SC, **Nemeh HW**, Downey RS, Martin DE, Dabir RR, Asfaw ZE, Robinson PL, **Harrington SD**, Gandhi DB, Waljee JF, Englesbe MJ, Brummett CM, Prager RL, Likosky DS, Kim KM, and Lagisetty KH. Establishment and Implementation of Evidence-Based Opioid Prescribing Guidelines in Cardiac Surgery. *Ann Thorac Surg* 2020; Epub ahead of print. PMID: 33285132. Full Text

Brescia AA, Vu JV, He C, Li J, **Harrington SD**, Thompson MP, Norton EC, Regenbogen SE, Syrjamaki JD, Prager RL, and Likosky DS. Determinants of Value in Coronary Artery Bypass Grafting. *Circ Cardiovasc Qual Outcomes* 2020; 13(11):e006374. PMID: 33176461. Full Text

Brown CS, Albright J, Henke PK, Mansour MA, **Weaver M**, and Osborne NH. Modeling the Elective Vascular Surgery Recovery After COVID-19: Implications for Moving Forward. *J Vasc Surg* 2020; Epub ahead of print. PMID: 33248121. Full Text

Chamogeorgakis T, **Cowger J**, **Apostolou D**, **Tanaka D**, and **Nemeh H**. Right Ventricular Device HeartWare Implant to the Right Atrium with Fixation to the Chest Wall in Patient with Biventricular Support. *Asaio j* 2020; 66(8):e102-e104. PMID: 32740361. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Chen Y, **Susick L**, Davis M, **Bensenhaver J**, **Nathanson SD**, **Burns J**, and Newman LA. Evaluation of Triple-Negative Breast Cancer Early Detection via Mammography Screening and Outcomes in African American and White American Patients. *JAMA Surg* 2020; 155(5):440-442. PMID: 32074266. Full Text

Citterio F, Henry M, **Kim DY**, Kim MS, Han DJ, Kenmochi T, Mor E, Tisone G, Bernhardt P, Hernandez Gutierrez MP, and Watarai Y. Wound healing adverse events in kidney transplant recipients receiving everolimus with reduced calcineurin inhibitor exposure or current standard-of-care: insights from the 24month TRANSFORM study. *Expert Opin Drug Saf* 2020; 19(10):1339-1348. PMID: 32633157. Request
Article

Clark-Sienkiewicz SM, **Hecht LM**, **Pester B**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Racial Differences in Psychological Symptoms and Eating Behaviors Among Bariatric Surgery Candidates. *J Racial Ethn Health Disparities* 2020; Epub ahead of print. PMID: 32367444. Request Article

Collins KM, and Doyle MBM. Revisiting the organ procurement organization-based organ procurement center in the COVID era. *Am J Transplant* 2020; 20(11):3263-3264. PMID: 32503083. Full Text

D'John M, and **Jabbar F**. Primary gallbladder paraganglioma: A case report and review of literature. *Int J Surg Case Rep* 2020; 75:451-453. PMID: 33076192. Full Text

David Nathanson S, **Leonard-Murali S**, **Burmeister C**, **Susick L**, and **Baker P**. Clinicopathological Evaluation of the Potential Anatomic Pathways of Systemic Metastasis from Primary Breast Cancer Suggests an Orderly Spread Through the Regional Lymph Nodes. *Ann Surg Oncol* 2020; 27(12):4810-4818. PMID: 32720039. Full Text

Davis FM, Albright J, Battaglia M, Eliason J, Coleman D, Mouawad N, **Knepper J**, Mansour MA, Corriere M, Osborne NH, and Henke PK. Fenestrated Repair Improves Perioperative Outcomes but Lacks a Hospital Volume Association for Complex Abdominal Aortic Aneurysms. *J Vasc Surg* 2020; Epub ahead of print. PMID: 32473343. Full Text

de Meireles A, **Carlin AM**, Cain-Nielsen A, Stricklen A, Ross R, Finks JF, Varban OA, and Ghaferi AA. Association Between Surgeon Practice Knowledge and Venous Thromboembolism. *Obes Surg* 2020; 30(6):2274-2279. PMID: 32062847. Full Text

De Roo AC, Morris AM, Vu JV, Schuman AD, Abbott KL, **Kandagatla P**, Hardiman KM, and Hendren S. Characteristics of Patients Seeking Second Opinions at a Multidisciplinary Colorectal Cancer Clinic. *Dis Colon Rectum* 2020; 63(6):788-795. PMID: 32109918. Full Text

Decker JT, **Kandagatla P**, Wan L, Bernstein R, Ma JA, Shea LD, and Jeruss JS. Cyclin E overexpression confers resistance to trastuzumab through noncanonical phosphorylation of SMAD3 in HER2+ breast cancer. *Cancer Biol Ther* 2020; 21(11):994-1004. PMID: 33054513. Request Article

Dingman JS, **Smith ZR**, **Coba VE**, **Peters MA**, and **To L**. Argatroban dosing requirements in extracorporeal life support and other critically ill populations. *Thromb Res* 2020; 189:69-76. PMID: 32182522. Full Text

Diwan TS, Lee TC, **Nagai S**, Benedetti E, Posselt A, Bumgardner G, Noria S, Whitson BA, Ratner L, Mason D, Friedman J, Woodside KJ, and Heimbach J. Obesity, Transplantation, and Bariatric Surgery: An Evolving Solution for a Growing Epidemic. *Am J Transplant* 2020; 20(8):2143-2155. PMID: 31965711. Full Text

Docimo S, Jr., Jacob B, **Seras K**, and Ghanem O. Closed Facebook groups and COVID-19: an evaluation of utilization prior to and during the pandemic. *Surg Endosc* 2020; Epub ahead of print. PMID: 32926250. Full Text

Dougherty MC, Kulenkamp JE, **Boyajian H**, Koh JL, Lee MJ, and Shi LL. National trends in the diagnosis and repair of SLAP lesions in the United States. *J Orthop Surg (Hong Kong)* 2020; 28(1). PMID: 31876225. Full Text

Draxler MS, **Al-Adas Z**, **Abbas D**, **Kavousi Y**, **Kabbani LS**, **Lin JC**, **Weaver MR**, **Shepard AD**, and **Nypaver TJ**. Outcome Benefit of Arterial Duplex Stent Imaging After Superficial Femoral Artery Stent Implantation. *J Vasc Surg* 2020; 73(1):179-188. PMID: 32437951. Full Text

Ehlers AP, Thumma JR, Finks JF, **Carlin AM**, Ghaferi AA, and Varban OA. Evaluation of Patient Reported Gastroesophageal Reflux Severity at Baseline and at One-Year after Bariatric Surgery. *Ann Surg* 2020; Epub ahead of print. PMID: 33214432. Full Text

Fitzgerald DC, Simpson AN, Baker RA, Wu X, Zhang M, Thompson MP, **Paone G**, Delucia A, 3rd, and Likosky DS. Determinants of hospital variability in perioperative red blood cell transfusions during coronary artery bypass graft surgery. *J Thorac Cardiovasc Surg* 2020; Epub ahead of print. PMID: 32631660. Full Text

Flum DR, Davidson GH, Monsell SE, Shapiro NI, Odom SR, Sanchez SE, Drake FT, Fischkoff K, **Johnson J**, **Patton JH**, Evans H, Cuschieri J, Sabbatini AK, Faine BA, Skeete DA, Liang MK, Sohn V, McGrane K, Kutcher ME, Chung B, Carter DW, Ayoung-Chee P, Chiang W, Rushing A, Steinberg S, Foster CS, Schaetzel SM, Price TP, Mandell KA, Ferrigno L, Salzberg M, DeUgarte DA, Kaji AH, Moran GJ, Saltzman D, Alam HB, Park PK, Kao LS, Thompson CM, Self WH, Yu JT, Wiebusch A, Winchell RJ, Clark S, Krishnadasan A, Fannon E, Lavallee DC, Comstock BA, Bizzell B, Heagerty PJ, Kessler LG, and Talan DA. A Randomized Trial Comparing Antibiotics with Appendectomy for Appendicitis. *N Engl J Med* 2020; 383(20):1907-1919. PMID: 33017106. Full Text

Goettman MA, **Riccardi ML**, **Vang L**, **Dughayli MS**, and **Faraj CH**. Robotic assistance in ventral hernia repair may decrease the incidence of hernia recurrence. *J Minim Access Surg* 2020; 16(4):335-340. PMID: 31929224. Full Text

Hammoud ZT. Commentary: Despair and disparity. *J Thorac Cardiovasc Surg* 2020; 160(1):275. PMID: 31837766. Full Text

Hans SS, **Lee MM**, and Jain N. Ureteral stenosis following iliac artery stenting. *J Vasc Surg Cases Innov Tech* 2020; 6(3):469-472. PMID: 32923750. Full Text

Hecht LM, **Pester B**, **Braciszewski JM**, **Graham AE**, **Mayer K**, **Martens K**, **Hamann A**, **Carlin AM**, and **Miller-Matero LR**. Socioeconomic and Racial Disparities in Bariatric Surgery. *Obes Surg* 2020; 30(6):2445-2449. PMID: 31927686. Full Text

Idowu OA, **Boyajian HH**, Lindsay-Rivera K, Lee CS, Lee MJ, Shi LL, and Athiviraham A. Trends of Ulnar Collateral Ligament Reconstruction in the United States from 2003 to 2014: Analysis of 3,133 Patients. *Arthrosc Sports Med Rehabil* 2020; 2(6):e705-e710. PMID: 33364608. Full Text

Ivanics T, **Nasser H**, **Kandagatla P**, **Leonard-Murali S**, **Jones A**, **Abouljoud M**, **Gupta AH**, and **Woodward A**. Prescribing Habits of Providers and Risk Factors for Nonadherence to Opioid Prescribing Guidelines. *Am Surg* 2020; Epub ahead of print. PMID: 33295200. Full Text

Ivanics T, **Nasser H**, **Shepard A**, and **Lee A**. Aortic and superior mesenteric artery embolectomy after paradoxical embolism. *J Vasc Surg* 2020; 71(3):1027-1028. PMID: 32089198. Full Text

Ivanics T, **Rizzari M**, **Moonka D**, **Al-Kurd A**, **Delvecchio K**, **Kitajima T**, **Elsabbagh A**, **Collins K**, **Yoshida A**, **Abouljoud M**, and **Nagai S**. Re-transplantation outcomes for hepatitis C in the United States before and after DAA-introduction. *Am J Transplant* 2020; Epub ahead of print. PMID: 32794649. Full Text

Karamanos E, **Kandagatla P**, Wang H, Gupta AH, and **Siddiqui A**. Challenging the Surgical Axiom: Albumin Level Does Not Reliably Predict Development of Wound Complications in Patients Undergoing Body Contouring. *Perm J* 2020; 24. PMID: 32097112. Full Text

Kassam AF, Cortez AR, Winer LK, Conzen KD, El-Hinnawi A, Jones CM, Matsuoka L, Watkins AC, **Collins KM**, Bhati C, Selzner M, Sonnenday CJ, Englesbe MJ, Diwan TS, Dick AAS, and Cutler Quillin R, 3rd. Extinguishing burnout: National analysis of predictors and effects of burnout in abdominal transplant surgery fellows. *Am J Transplant* 2020; 21(1):307-313. PMID: 32463950. Full Text

Kitajima T, Hibi T, **Moonka D**, Sapisochin G, **Abouljoud MS**, and **Nagai S**. Center Experience Affects Liver Transplant Outcomes in Patients with Hilar Cholangiocarcinoma. *Ann Surg Oncol* 2020; 27(13):5209-5221. PMID: 32495286. Full Text

Kitajima T, **Moonka D**, **Yeddula S**, **Rizzari M**, **Collins K**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. Liver transplant waitlist outcomes in alcoholic hepatitis compared with other liver diseases: An analysis of UNOS registry. *Clin Transplant* 2020; 34(5):e13837. PMID: 32073688. Full Text

Kitajima T, and **Nagai S**. ASO Author Reflections: It Is Not a Low-Hanging Fruit: Center Experience Plays an Important Role in Improving Outcomes in Liver Transplantation for Hilar Cholangiocarcinoma. *Ann Surg Oncol* 2020; 27(13):5222-5223. PMID: 32458323. Full Text

Kitajima T, **Nagai S**, **Moonka D**, **Segal A**, and **Abouljoud MS**. It Is Not All About Pretransplant Factors: Posttransplant Complications Alter the Risk of Alcohol Relapse. *Clin Liver Dis (Hoboken)* 2020; 15(6):239-242. PMID: 32617157. Full Text

Kitajima T, **Nagai S**, **Segal A**, **Magee M**, **Blackburn S**, **Ellithorpe D**, **Yeddula S**, **Qadeer Y**, **Yoshida A**, **Moonka D**, **Brown K**, and **Abouljoud MS**. Posttransplant Complications Predict

Alcohol Relapse in Liver Transplant Recipients. *Liver Transpl* 2020; 26(3):379-389. PMID: 31872969. Full Text

Kitajima T, **Shamaa T**, Hibi T, **Moonka D**, Sapisochin G, **Abouljoud MS**, and **Nagai S**. Response to: "Surgical Volume Alone Does Not Determine Outcome Following Liver Transplant for Perihilar Cholangiocarcinoma". *Ann Surg Oncol* 2020; 27(Suppl 3):932-933. PMID: 33063257. Full Text

Lee M, Trpkovski M, and **Hans SS**. Aneurysm of the aberrant splenic artery arising from the superior mesenteric artery. *J Vasc Surg Cases Innov Tech* 2020; 6(3):324-325. PMID: 33367188. Full Text

Leiting JL, Murphy SJ, Bergquist JR, Hernandez MC, **Ivanics T**, Abdelrahman AM, Yang L, Lynch I, Smadbeck JB, Cleary SP, Nagorney DM, Torbenson MS, Graham RP, Roberts LR, Gores GJ, Smoot RL, and Truty MJ. Biliary tract cancer patient-derived xenografts: Surgeon impact on individualized medicine. *JHEP Rep* 2020; 2(2):100068. PMID: 32181445. Full Text
Leonard-Murali S, **Mohamed A**, **Woodward A**, and **Blyden D**. Thoracoacromial artery injury after tube thoracostomy for pneumothorax. *BMJ Case Rep* 2020; 13(8). PMID: 32816885. Full Text

Leonard-Murali S, **Nasser H**, **Ivanics T**, and **Genaw J**. Predictors of postoperative emergency department visits after laparoscopic bariatric surgery. *Surg Obes Relat Dis* 2020; 16(10):1483-1489. PMID: 32636172. Full Text

Levoska MA, **Griffith JL**, **Nagai S**, **Collins K**, and **Lim HW**. A multi-disciplinary approach utilizing filters for surgical procedures in erythropoietic protoporphyria. *J Am Acad Dermatol* 2020; 83(5):e329-e330. PMID: 32068036. Full Text

Lin JC, Humphries MD, Shutze WP, Aalami OO, Fischer UM, and Hodgson KJ. Telemedicine Platforms and Their Use in the Coronavirus Disease-19 Era to Deliver Comprehensive Vascular Care. *J Vasc Surg* 2020; Epub ahead of print. PMID: 32622075. Full Text

Lin JC, **Kavousi Y**, **Sullivan B**, and **Stevens C**. Analysis of Outpatient Telemedicine Reimbursement in an Integrated Healthcare System. *Ann Vasc Surg* 2020; 65:100-106. PMID: 31678131. Full Text

Lin JC, and **Nasser H**. Reply. *J Vasc Surg Venous Lymphat Disord* 2020; 8(4):698. PMID: 32553656. Full Text

Madill-Thomsen K, **Abouljoud M**, Bhatti C, Ciszek M, Durlik M, Feng S, Foroncewicz B, **Francis I**, Grat M, Jurczyk K, Klintmalm G, Krasnodebski M, McCaughan G, Miquel R, Montano-Loza A, **Moonka D**, Mucha K, Myslak M, Paczek L, Perkowska-Ptasinska A, Piecha G, Reichman T, Sanchez-Fueyo A, Tronina O, Wawrzynowicz-Syczewska M, Wiecek A, Zieniewicz K, and Halloran PF. The molecular diagnosis of rejection in liver transplant biopsies: First results of the INTERLIVER study. *Am J Transplant* 2020; 20(8):2156-2172. PMID: 32090446. Full Text

Miller-Matero LR, **Hamann A**, **LaLonde L**, **Martens KM**, Son J, **Clark-Sienkiewicz S**, **Sata M**, **Coleman JP**, **Hecht LM**, **Braciszewski JM**, and **Carlin AM**. Predictors of Alcohol Use after Bariatric Surgery. *J Clin Psychol Med Settings* 2020; Epub ahead of print. PMID: 33205321. Full Text

Morris DC, **Jaehne AK**, **Chopp M**, **Zhang Z**, **Poisson L**, **Chen Y**, **Datta I**, and **Rivers EP**.

Proteomic Profiles of Exosomes of Septic Patients Presenting to the Emergency Department Compared to Healthy Controls. *J Clin Med* 2020; 9(9). PMID: 32932765. Full Text

Nagai S, **Chau LC**, **Kitajima T**, **Yeddula S**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Moonka D**. A Share 21 Model in Liver Transplantation: Impact on Waitlist Outcomes. *Am J Transplant* 2020; 20(8):2184-2197. PMID: 32155314. Full Text

Nagai S, **Kitajima T**, **Yeddula S**, **Salgia R**, Schilke R, **Abouljoud MS**, and **Moonka D**. Effect of mandatory 6-month waiting period on waitlist and transplant outcomes in patients with hepatocellular carcinoma. *Hepatology* 2020; Epub ahead of print. PMID: 32157711. Full Text

Nasser H, **Ivanics T**, and **Carlin AM**. Factors influencing the choice between laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass. *Surg Endosc* 2020; Epub ahead of print. PMID: 32909206. Full Text

Nasser H, **Ivanics T**, **Leonard-Murali S**, and **Stefanou A**. Risk Factors for Surgical Site Infection After Laparoscopic Colectomy: An NSQIP Database Analysis. *J Surg Res* 2020; 249:25-33. PMID: 31918327. Full Text

Nasser H, **Ivanics T**, **Ranjal RS**, **Leonard-Murali S**, and **Genaw J**. Perioperative Outcomes of Robotic Versus Laparoscopic Sleeve Gastrectomy in the Superobese. *J Surg Res* 2020; 249:34-41. PMID: 31918328. Full Text

Nasser H, **Ivanics T**, Varban OA, Finks JF, Bonham A, Ghaferi AA, and **Carlin AM**. Comparison of early outcomes between Roux-en-Y gastric bypass and sleeve gastrectomy among patients with body mass index ≥ 60 kg/m(2). *Surg Endosc* 2020; Epub ahead of print. PMID: 32572625. Full Text

Nathanson SD. ASO Author Reflections: Is Breast Cancer Dissemination Lymphatic, Hematogenous, or Both; and Does It Matter? *Ann Surg Oncol* 2020; 27(Suppl 3):711-712. PMID: 32696308. Full Text

Nemeh H, **Coba V**, Chulkov M, **Gupta A**, **Yeldo N**, **Chamogeorgakis T**, **Tanaka D**, **Allenspach L**, **Simanovski J**, and Shanti C. Lung Transplantation for the Treatment of Vaping Induced, Irreversible, End Stage Lung Injury. *Ann Thorac Surg* 2020; Epub ahead of print. PMID: 33130115. Full Text

Oakes RS, Bushnell GG, Orbach SM, **Kandagatla P**, Zhang Y, Morris AH, Hall MS, LaFaire P, Decker JT, Hartfield RM, Brooks MD, Wicha MS, Jeruss JS, and Shea LD. Metastatic Conditioning of Myeloid Cells at a Subcutaneous Synthetic Niche Reflects Disease Progression and Predicts Therapeutic Outcomes. *Cancer Res* 2020; 80(3):602-612. PMID: 31662327. Full Text

Perinjelil V, Haake RS, **Ahmed A**, Al-Daoud F, Maraqa T, Mercer L, Wong K, Morris S, Scholten D, and Sachwani-Daswani G. A Single Center Review of the Dangers of Recreational Fires in the Pediatric Population. *J Burn Care Res* 2020; Epub ahead of print. PMID: 33200770. Full Text

Popoff AM. A Potential Indication for Adjuvant Therapy in Node-Negative Esophageal Squamous Cell Carcinoma. *Ann Surg Oncol* 2020; 27(11):4091-4092. PMID: 32691336. Full Text

Rizzari MD, **Safwan M**, **Sobolic M**, **Kitajima T**, **Collins K**, **Yoshida A**, **Abouljoud M**, and **Nagai S**. The Impact of Portal Vein Thrombosis on Liver Transplant Outcomes: Does Grade or Flow Rate Matter? *Transplantation* 2020; Epub ahead of print. PMID: 32217946. Full Text

Rodgers SA, **Suneja A**, **Yoshida A**, **Abouljoud MS**, and **Otrock ZK**. Paradoxical embolic strokes in a liver transplant recipient with atrial septal defect undergoing therapeutic plasma exchange. *J Clin Apher* 2020; Epub ahead of print. PMID: 33058311. Full Text

Rteil A, **Draxler M**, **Al Adas Z**, **Mohammad F**, **Kavousi Y**, and **Kabbani L**. Progressive stenosis of a popliteal artery stent graft by laminated thrombus. *J Vasc Surg Cases Innov Tech* 2020; 6(2):189-194. PMID: 32322774. Full Text

Shah R, Borrebach JD, Hodges JC, Varley PR, Wisniewski MK, Shinall MC, Jr., Arya S, Johnson J, Nelson JB, Youk A, Massarweh NN, Johanning JM, and Hall DE. Validation of the Risk Analysis Index for Evaluating Frailty in Ambulatory Patients. *J Am Geriatr Soc* 2020; 68(8):1818-1824. PMID: 32310317. Full Text

Shrivastava P, **Prashar R**, **Khoury N**, **Patel A**, **Yeddula S**, **Kitajima T**, **Nagai S**, and **Samaniego M**. Acute Kidney Injury in a Predominantly African American Cohort of Kidney Transplant Recipients With COVID-19 Infection. *Transplantation* 2020; 105(1):201-205. PMID: 33093403. Full Text

Simanovski J, and Ralph J. Readmissions After Lung Transplantation. *Prog Transplant* 2020; 30(4):365367. PMID: 32912114. Full Text

Stuart MM, **Smith ZR**, **Payter KA**, **Martz CR**, **To L**, **Swiderek JL**, **Coba VE**, and **Peters MA**. Pharmacist-driven discontinuation of antipsychotics for ICU delirium: A quasi-experimental study. *JACCP Journal of the American College of Clinical Pharmacy* 2020; 3(6):1009-1014. PMID: Not assigned. Full Text

Thanikachalam K, **Damarla V**, **Seixas T**, **Dobrosotskaya I**, **Wollner I**, **Kwon D**, **Winters K**, **Raoufi M**, **Li J**, **Siddiqui F**, and **Khan G**. Neoadjuvant Phase II Trial of Chemoradiotherapy in Patients With Resectable and Borderline Resectable Pancreatic Cancer. *Am J Clin Oncol* 2020; 43(6):435-441. PMID: 32251119. Full Text

VanBlarcom AG, **Wojack CA**, and Casida J. Cardiac Tamponade Following the Removal of Epicardial Pacing Wires: Critical Care APRN Toolkit. *AACN Adv Crit Care* 2020; 31(4):410-415. PMID: 33313709. Request Article

Varban OA, Thumma JR, **Carlin AM**, Finks JF, Ghaferi AA, and Dimick JB. Peer Assessment of Operative Videos with Sleeve Gastrectomy to Determine Optimal Operative Technique. *J Am Coll Surg* 2020; 231(4):470-477. PMID: 32629164. Full Text

Varban OA, Thumma JR, **Carlin AM**, Ghaferi AA, Dimick JB, and Finks JF. Evaluating the Impact of Surgeon Self-Awareness by Comparing Self vs Peer Ratings of Surgical Skill and Outcomes for Bariatric Surgery. *Ann Surg* 2020; Epub ahead of print. PMID: 33201111. Full Text

Wiseman A, Akalin E, Dadhania DM, DeMattos A, Doshi M, Friedewald J, Klein C, Leca N, Nicoll K, Pesavento T, Preczewski L, **Samaniego M**, Singh N, and Bloom R. Defining the Roles and Responsibilities of the Kidney Transplant Medical Director: A Necessary Step for Future Training, Mentoring, and Professional Development. *Am J Transplant* 2020; Epub ahead of print. PMID: 33021008. Full Text

Witkowski P, Philipson L, Kaufman DB, Ratner L, **Abouljoud MS**, Bellin M, Buse J, Kandeel F, Stock P, Mulligan D, Markmann JF, Kozlowski T, Andreoni K, Alejandro R, Baidal D, Hardy MA, Wickrema A, Mirmira RG, Fung J, Becker Y, Josephson MA, Bachul PJ, Pyda JS, Charlton M, Millis JM, Gaglia J, Stratta RJ, Fridell JA, Niederhaus S, Forbes RC, Jayant K, Robertson RP, Odorico J, Levy M, Harland R, Abrams PL, Olaitan OK, Kandaswamy R, Wellen J, Japour AJ, Desai CS, Naziruddin B, Balamurugan AN, Barth RN, and Ricordi C. The Demise of Islet Allotransplantation in the US: A Call for an Urgent Regulatory Update The "ISLETS FOR US" Collaborative. *Am J Transplant* 2020; Epub ahead of print. PMID: 33251712. Full Text

Worden A, **Yoho DJ**, **Houin H**, **Moquin K**, **Hamzavi I**, **Saab I**, and **Siddiqui A**. Factors Affecting Healing in the Treatment of Hidradenitis Suppurativa. *Ann Plast Surg* 2020; 84(4):436-440. PMID: 31688123. Full Text

Urology

Abdelsalam RA, Khalifeh I, Box A, Kalantarian M, Ghosh S, Abou-Ouf H, Lotfi T, Shahait M, **Palanisamy N**, and Bismar TA. Molecular characterization of prostate cancer in Middle Eastern population highlights differences with Western populations with prognostic implication. *J Cancer Res Clin Oncol* 2020; 146(7):1701-1709. PMID: 32350606. Full Text

Agochukwu NQ, Wittmann D, Boileau NR, Dunn RL, Montie J, Kim T, Miller DC, **Peabody J**, and Carlozzi NE. Reply to K.P. Weinfurt et al. *J Clin Oncol* 2020; 38(6):654-655. PMID: 31895615. Full Text

Ahlawat R, **Sood A**, **Jeong W**, Ghosh P, Keeley J, **Abdollah F**, Kher V, **Olson P**, **Farah G**, **Wurst H**, **Bhandari M**, and **Menon M**. Robotic Kidney Transplantation with Regional Hypothermia Versus Open Kidney Transplantation for Patients with End-Stage Renal Disease: An Ideal Stage 2B Study. *J Urol* 2020; 205(2):595-602. PMID: 32941100. Full Text

Ahmed Y, Hussein AA, May PR, Ahmad B, Khan A, Benkowski J, Durrani A, Khan S, Kozlowski J, Saar M, Wijburg CJ, Richstone L, Wagner A, Yuh B, Redorta JP, Dasgupta P, Khan MS, **Menon M**, **Peabody JO**, Hosseini A, Gaboardi F, Pini G, Schanne F, Mottrie A, Rha KH, Hemal A, Stockle M, Kelly J, Tan WS, Maatman TJ, Poulakis V, Kaouk J, Canda AE, Balbay MD, Wiklund P, and Guru KA. Quality of surgical care can impact survival in patients with bladder cancer after robot-assisted radical cystectomy: results from the International Robotic Cystectomy Consortium. *African Journal of Urology* 2020; 26(1). PMID: Not assigned. Full Text

Alanee S, **Deebajah M**, **Taneja K**, **Cole D**, **Pantelic M**, **Peabody J**, **Williamson SR**, **Gupta N**, **Dabaja A**, and **Menon M**. Post prostatectomy Pathologic Findings of Patients with Clinically Significant Prostate Cancer and no Significant PI-RADS Lesions on Preoperative Magnetic Resonance Imaging. *Urology* 2020; 146:183-188. PMID: 32946907. Full Text

Alanee S, **Peabody J**, and **Menon M**. AUTHOR REPLY. *Urology* 2020; 146:188. PMID: 33272426. Full Text

Alanee S, **Peabody J**, and **Menon M**. Prostate Cancer Undetected by mpMRI: Tumour Conspicuity is Reliant Upon Optimal Scan Timing and Quality. *Urology* 2020; Epub ahead of print. PMID: 33279614. Full Text

Alhamar M, **Vladislav T**, Smith SC, Gao Y, Cheng L, **Favazza LA**, Alani AM, Ittmann MM,

Riddle ND, **Whiteley LJ**, **Gupta NS**, **Carskadon S**, **Gomez-Gelvez JC**, **Chitale DA**, **Palanisamy N**, Hes O, Trpkov K, and **Williamson SR**. Gene Fusion Characterization of Rare Aggressive Prostate Cancer Variants - Adenosquamous Carcinoma, Pleomorphic Giant Cell Carcinoma, and Sarcomatoid Carcinoma: An Analysis of 19 Cases. *Histopathology* 2020; 77. PMID: 32639612. Full Text

Arora S, **Bronkema C**, Porter JR, Mottrie A, Dasgupta P, Challacombe B, Rha KH, Ahlawat RK, Capitanio U, Yuvaraja TB, Rawal S, Moon DA, Sivaraman A, Maes KK, Porpiglia F, Gautam G, Turkeri L, **Bhandari M**, **Jeong W**, **Menon M**, **Rogers CG**, and **Abdollah F**. Omission of cortical renorrhaphy during robotic partial nephrectomy: a Vattikuti Collective Quality Initiative (VCQI) database analysis. *Urology* 2020; 146:125-132. PMID: 32941944. Full Text

Bhandari M, Nallabasannagari AR, Reddiboina M, Porter JR, **Jeong W**, Mottrie A, Dasgupta P, Challacombe B, Abaza R, Rha KH, Parekh DJ, Ahlawat R, Capitanio U, Yuvaraja TB, Rawal S, Moon DA, Buffi's NM, Sivaraman A, Maes KK, Porpiglia F, Gautam G, Turkeri L, Meyyazhgan KR, Patil P, **Menon M**, and **Rogers C**. Predicting intraoperative and postoperative consequential events using machine learning techniques in patients undergoing robotic partial nephrectomy (RPN): Vattikuti Collective Quality Initiative (VCQI) database study. *BJU Int* 2020; 126(3):350-358. PMID: 32315504. Full Text

Borchert A, **Baumgarten L**, **Dalela D**, **Jamil M**, **Budzyn J**, **Kovacevic N**, **Yaguchi G**, **Palma-Zamora I**, **Perkins S**, **Bazzi M**, **Wong P**, **Sood A**, **Peabody J**, **Rogers CG**, **Dabaja A**, and **Atiemo H**. Managing Urology Consultations During COVID-19 Pandemic: Application of a Structured Care Pathway. *Urology* 2020; 141:7-11. PMID: 32330531. Full Text

Briskin R, and **Atiemo H**. Case - Unique complication of continent catheterizable stoma after bariatric surgery. *Can Urol Assoc J* 2020; Epub ahead of print. PMID: 33382367. Full Text

Bronkema C, **Arora S**, **Keeley J**, **Rakic N**, **Sood A**, **Dalela D**, **Jamil M**, **Peabody JO**, **Rogers CG**, **Menon M**, and **Abdollah F**. Impact of treatment modality on overall survival in localized ductal prostate adenocarcinoma: A national cancer database analysis. *Urol Oncol* 2020; Epub ahead of print. PMID: 33223370. Full Text

Bronkema C, **Arora S**, **Sood A**, **Dalela D**, **Keeley J**, **Borchert A**, **Baumgarten L**, **Rogers CG**, **Peabody JO**, **Menon M**, and **Abdollah F**. Rare Histological Variants of Prostate Adenocarcinoma: A National Cancer Database Analysis. *J Urol* 2020; 204(2):260-266. PMID: 32141804. Full Text

Chandrashekar DS, Chakravarthi B, Robinson AD, Anderson JC, Agarwal S, Balasubramanya SAH, Eich ML, Bajpai AK, Davuluri S, Guru MS, Guru AS, Naik G, Della Manna DL, Acharya KK, **Carskadon S**, Manne U, Crossman DK, Ferguson JE, Grizzle WE, **Palanisamy N**, Willey CD, Crowley MR, Netto GJ, Yang ES, Varambally S, and Sonpavde G. Therapeutically actionable PAK4 is amplified, overexpressed, and involved in bladder cancer progression. *Oncogene* 2020; 39(20):4077-4091. PMID: 32231273. Full Text

Chen Y, **Sadasivan SM**, **She R**, **Datta I**, **Taneja K**, **Chitale D**, **Gupta N**, Davis MB, Newman LA, **Rogers CG**, Paris PL, **Li J**, **Rybicki BA**, and **Levin AM**. Breast and prostate cancers harbor common somatic copy number alterations that consistently differ by race and are associated with survival. *BMC Med Genomics* 2020; 13(1):116. PMID: 32819446. Full Text

Cheng PJ, Keihani S, Roth JD, Pariser JJ, Elliott SP, Bose S, Khavari R, Crescenze I, Stoffel JT, Velaer KN, Elliott CS, **Raffee SM**, **Atiemo HO**, Kennelly MJ, Lenherr SM, and Myers JB.

Contemporary multicenter outcomes of continent cutaneous ileocecocystoplasty in the adult population over a 10-year period: A Neurogenic Bladder Research Group study. *Neurourol Urodyn* 2020; 39(6):1771-1780. PMID: 32506711. Full Text

Dalela D, **Sood A**, **Keeley J**, **Rogers C**, **Menon M**, and **Abdollah F**. Generalizability of prostate-specific antigen (PSA) screening trials in a "real world" setting: a nationwide survey analysis. *Urology* 2020; Epub ahead of print. PMID: 33221417. Full Text

Dedigama-Arachchige P, **Carskadon S**, **Li J**, **Loveless I**, **Alhamar M**, **Peabody JO**, **Stricker H**, **Chitale DA**, **Rogers CG**, **Menon M**, **Gupta NS**, Bismar TA, **Williamson SR**, and **Palanisamy N**. Clonal evaluation of prostate cancer molecular heterogeneity in biopsy samples by dual immunohistochemistry and dual RNA in situ hybridization. *Mod Pathol* 2020; 33(9):1791-1801. PMID: 32238875. Full Text

Elsayed AS, Gibson S, Jing Z, Wijburg C, Wagner AA, Mottrie A, Dasgupta P, **Peabody J**, Hussein AA, and Guru KA. Rates and Patterns of Recurrences, and Survival Outcomes after Robot-Assisted Radical Cystectomy: Results from the International Robotic Cystectomy Consortium. *J Urol* 2020; 205(2):407-413. PMID: 32945729. Full Text

Hiller SC, Qi J, **Leavitt D**, Frontera JR, Jafri SM, Hollingsworth JM, Dauw CA, and Ghani KR. Ureteroscopy in Patients Taking Anticoagulant or Antiplatelet Therapy: Practice Patterns and Outcomes in a Surgical Collaborative. *J Urol* 2020; Epub ahead of print. PMID: 33035142. Full Text

Hussein AA, Elsayed AS, Aldhaam NA, Jing Z, **Peabody JO**, Wijburg CJ, Wagner A, Canda AE, Khan MS, Scherr D, Schanne F, Maatman TJ, Kim E, Mottrie A, Aboumohamed A, Gaboardi F, Pini G, Kaouk J, Yuh B, Rha KH, Hemal A, Palou Redorta J, Badani K, Saar M, Stockle M, Richstone L, Roupret M,Balbay D, Dasgupta P, **Menon M**, and Guru KA. A Comparative Propensity-Score Matched Analysis of Perioperative Outcomes of Intracorporeal versus Extracorporeal Urinary Diversion after Robot-Assisted Radical Cystectomy: Results from the International Robotic Cystectomy Consortium. *BJU Int* 2020; 126(2):265-272. PMID: 32306494. Full Text

Jebastin JAS, **Perry KD**, **Chitale DA**, **Mott MP**, **Sanchez J**, Fritchie KJ, **Palanisamy N**, and **Williamson SR**. Atypical Lipomatous Tumor/Well-Differentiated Liposarcoma With Features Mimicking Spindle Cell Lipoma. *Int J Surg Pathol* 2020; 28(3):336-340. PMID: 31672072. Full Text

Jebastin Thangaiah J, Vickery J, Selwanes W, Al-Haddad E, **Perry KD**, **Palanisamy N**, Poulik JM, **Williamson SR**, **Chitale DA**, and Shehata BM. A Novel COL1A1-CAMTA1 Rearrangement in Cranial Fasciitis. *Int J Surg Pathol* 2020; 28(6):678-682. PMID: 32192385. Full Text

Kahali B, Chen Y, Feitosa MF, Bielak LF, O'Connell JR, Musani SK, Hegde Y, Chen Y, Stetson LC, Guo X, Fu YP, Smith AV, Ryan KA, Eiriksdottir G, Cohain AT, Allison M, Bakshi A, Bowden DW, Budoff MJ, Carr JJ, **Carskadon S**, Chen YI, Correa A, Crudup BF, Du X, Harris TB, Yang J, Kardia SLR, Launer LJ, Liu J, Mosley TH, Norris JM, Terry JG, **Palanisamy N**, Schadt EE, O'Donnell CJ, Yerges-Armstrong LM, Rotter JI, Wagenknecht LE, Handelman SK, Gudnason V, Province MA, Peyser PA, Halligan B, Palmer ND, and Speliotes EK. A noncoding variant near PPP1R3B promotes liver glycogen storage and MetS, but protects against myocardial infarction. *J Clin Endocrinol Metab* 2020; Epub ahead of print. PMID: 33231259. Full Text

Kamat AM, Shore N, Hahn N, **Alanee S**, Nishiyama H, Shariat S, Nam K, Kapadia E, Frenkl T,

and Steinberg G. KEYNOTE-676: Phase III study of BCG and pembrolizumab for persistent/recurrent highrisk NMIBC. *Future Oncol* 2020; 16(10):507-516. PMID: 32162533. Full Text

Kovacevic L, Lu H, **Kovacevic N**, and Lakshmanan Y. Effect of bisphosphonates on the crystallization of stone-forming salts in synthetic urine. *Investig Clin Urol* 2020; 61(3):310-315. PMID: 32377608. Full Text

Kovacevic L, Lu H, **Kovacevic N**, Thomas R, and Lakshmanan Y. Cystatin C, Neutrophil Gelatinaseassociated Lipocalin, and Lysozyme C: Urinary Biomarkers for Detection of Early Kidney Dysfunction in Children With Urolithiasis. *Urology* 2020; 143:221-226. PMID: 32505622. Full Text

Kovacevic N, Lopes NN, **Raffee S**, and **Atiemo HO**. Predicting Upper Urinary Tract Risk in the Neurogenic Bladder Patient. *Current Bladder Dysfunction Reports* 2020; 15(2):66-71. PMID: Not assigned. Full Text

Martini A, Falagario UG, Villers A, Dell'Oglio P, Mazzone E, Autorino R, Moschovas MC, Buscarini M, Bravi CA, Briganti A, Sawczyn G, Kaouk J, **Menon M**, Secco S, Bocciardi AM, Wang G, Zhou X, Porpiglia F, Mottrie A, Patel V, Tewari AK, Montorsi F, Gaston R, Wiklund NP, and Hemal AK. Contemporary Techniques of Prostate Dissection for Robot-assisted Prostatectomy. *Eur Urol* 2020; 78(4):583-591. PMID: 32747200. Full Text

Monga J, **Subramani D**, **Bharathan A**, and **Ghosh J**. Pharmacological and genetic targeting of 5lipoxygenase interrupts c-Myc oncogenic signaling and kills enzalutamide-resistant prostate cancer cells via apoptosis. *Sci Rep* 2020; 10(1):6649. PMID: 32313135. Full Text

Montorsi F, Bandini M, Briganti A, Dasgupta P, Gallina A, Gallucci M, Gill IS, Guru KA, Hemal A, **Menon M**, Moschini M, Murphy DG, Parekh DJ, Patel HD, Patel HRH, Stöckle M, Tewari AK, Wijburg CJ, Wiklund P, Wilson TG, and Mottrie A. Re-establishing the Role of Robot-assisted Radical Cystectomy After the 2020 EAU Muscle-invasive and Metastatic Bladder Cancer Guideline Panel Recommendations. *Eur Urol* 2020; 78(4):489-491. PMID: 32736929. Full Text

Nazzani S, Preisser F, Mazzone E, Tian Z, Mistretta FA, Soulieres D, Montanari E, Acquati P, Briganti A, Shariat SF, **Abdollah F**, Carmignani L, and Karakiewicz PI. Nephroureterectomy with or without Bladder Cuff Excision for Localized Urothelial Carcinoma of the Renal Pelvis. *Eur Urol Focus* 2020; 6(2):298-304. PMID: 30266210. Full Text

Palanisamy N, Yang J, Shepherd PDA, Li-Ning-Tapia EM, Labanca E, Manyam G, Ravoori M, Kundra V, Araujo JC, Efstathiou E, Pisters LL, Wan X, Wang X, Vazquez ES, Aparicio AM, **Carskadon S**, Tomlins SA, Kunju LP, Chinnaiyan AM, Broom BM, Logothetis C, Troncoso P, and Navone NM. The MD Anderson prostate cancer patient-derived xenograft series (MDA PCa PDX) captures the molecular landscape of prostate cancer and facilitates marker-driven therapy development. *Clin Cancer Res* 2020; 26(18):4933-4946. PMID: 32576626. Full Text

Peabody H, **Patel A**, Johnson A, Mirza M, Noyes SL, Schervish E, Kaul S, **Rogers CG**, Lane BR, and Semerjian A. Development of a Novel Scoring System Quantifies Opportunities to Reduce Surgery for Benign Renal Neoplasms: A Retrospective Quality Improvement Analysis within the MUSIC KIDNEY Collaborative. *J Urol* 2020; 204(6):1160-1165. PMID: 32628102. Full Text

Perkins SQ, Dabaja A, and Atiemo H. Best Approaches to Evaluation and Feedback in Post-Graduate Medical Education. *Curr Urol Rep* 2020; 21(10):36. PMID: 32789759. Full Text

Rakic N, **Keeley J**, and **Abdollah F**. Re: Radical Prostatectomy or Observation for Clinically Localized Prostate Cancer: Extended Follow-up of the Prostate Cancer Intervention Versus Observation Trial (PIVOT). *Eur Urol Oncol* 2020; 3(4):557-558. PMID: 32546347. Request Article

Rakic N, **Sood A**, **Dalela D**, **Arora S**, **Malovana U**, **Keeley J**, **Rogers C**, **Peabody J**, **Menon M**, and **Abdollah F**. A Nationwide Persistent Underutilization of Adjuvant Radiotherapy in North American Prostate Cancer Patients. *Clin Genitourin Cancer* 2020; 18(6):489-499. PMID: 32595074. Full Text

Rambhatla A. Editorial Comment. *J Urol* 2020; 204(3):556. PMID: 32574513. Full Text

Sood A, **Abdollah F**, **Jeong W**, and **Menon M**. The Precision Prostatectomy: "Waiting for Godot". *Eur Urol Focus* 2020; 6(2):227-230. PMID: 31983662. Full Text

Sood A, **Keeley J**, **Palma-Zamora I**, **Arora S**, **Dalela D**, **Olson P**, **Hanna R**, **Cotter D**, **Jeong W**, **Elshaikh M**, **Rogers CG**, **Peabody JO**, **Menon M**, and **Abdollah F**. Ten-year disease progression and mortality rates in men who experience biochemical recurrence versus persistence after radical prostatectomy and undergo salvage radiation therapy: A post-hoc analysis of RTOG 9601 trial data. *Urol Oncol* 2020; 38(6):599. PMID: 32229186. Full Text

Sood A, **Keeley J**, **Palma-Zamora I**, **Dalela D**, **Arora S**, **Peabody JO**, **Rogers CG**, Montorsi F, **Menon M**, Briganti A, and **Abdollah F**. Extended pelvic lymph-node dissection is independently associated with improved overall survival in prostate cancer patients at high-risk for lymph-node invasion. *BJU Int* 2020; 125(6). PMID: 32045096. Full Text

Tandogdu Z, Collins J, Shaw G, Rohn J, Koves B, Sachdeva A, Ghazi A, Haese A, Mottrie A, Kumar A, Sivaraman A, Tewari A, Challacombe B, Rocco B, Giedelman C, Wagner C, **Rogers CG**, Murphy DG, Pushkar D, Ogaya-Pinies G, Porter J, Ramesh Seetharam K, Graefen M, Orvieto MA, Covas Moschovas M, Schatloff O, Wiklund P, Coelho R, Valero R, de Reijke TM, Ahlering T, Rogers T, van der Poel HG, Patel V, Artibani W, Wagenlehner F, Nathan S, Erik Bjerklund Johansens T, Hawkey P, and Kelly J. Management of patients who opt for radical prostatectomy during the COVID-19 pandemic: An International Accelerated Consensus Statement. *BJU Int* 2020; Epub ahead of print. PMID: 33185026. Full Text

Tsafrir Z, **Janosek-Albright K**, **Aoun J**, **Diaz-Insua M**, **Abd-El-Barr AE**, **Schiff L**, **Talukdar S**, **Menon M**, **Munkarah A**, **Theoharis E**, and **Eisenstein D**. The impact of a wireless audio system on communication in robotic-assisted laparoscopic surgery: A prospective controlled trial. *PLoS One* 2020; 15(1)e0220214. PMID: 31923185. Full Text

Turner KA, **Rambhatla A**, Schon S, Agarwal A, Krawetz SA, Dupree JM, and Avidor-Reiss T. Male Infertility is a Women's Health Issue-Research and Clinical Evaluation of Male Infertility Is Needed. *Cells* 2020; 9(4). PMID: 32316195. Full Text

Yaguchi G, **Tang HJ**, **Deebajah M**, **Keeley J**, **Pantelic M**, **Williamson S**, **Gupta N**, **Peabody JO**, **Menon M**, **Dabaja A**, and Alanee S. The effect of multiplicity of PI-RADS 3 lesions on cancer detection rate of confirmatory targeted biopsy in patients diagnosed with prostate cancer and managed with active surveillance. *Urol Oncol* 2020; 38(6):599. PMID: 32265090. Full Text

Zeinali M, Lee M, Nadhan A, Mathur A, Hedman C, Lin E, Harouaka R, Wicha MS, Zhao L, **Palanisamy N**, Hafner M, Reddy R, Kalemkerian GP, Schneider BJ, Hassan KA, Ramnath N, and Nagrath S. HighThroughput Label-Free Isolation of Heterogeneous Circulating Tumor Cells and CTC Clusters from NonSmall-Cell Lung Cancer Patients. *Cancers (Basel)* 2020; 12(1). PMID: 31947893. Full Text.

Abstracts

Administration

Bryson T, **Debbs JC**, **She R**, **Gui H**, **Luzum JA**, **Zeld N**, **Brawner CA**, **Keteyian SJ**, **Ehrman JK**, **Williams LK**, and **Lanfear DE**. A single nucleotide polymorphism within the rxra gene predicts a favorable response to exercise in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):1012.

Debbs J, **Bryson TD**, **Zeld N**, **Aurora L**, **Gui H**, **Luzum JA**, **Peterson E**, **She R**, **Williams LK**, and **Lanfear DE**. Somalogic st2 and ntprobnp assays predict heart failure mortality as effectively as the elisa assay. *Journal of the American College of Cardiology* 2020; 75(11):1091.

Mak A, Sajuthi S, Saef B, Hu D, **Xiao S**, Sleiman P, Joo J, Lee EY, Huntsman S, Eng C, LeNoir MA, Brigino-Buenaventura E, Salazar S, Oh SS, Himes BE, Hakonarson H, **Williams L**, White MJ, Seibold MA, and Burchard EG. Whole genome sequencing association and gene-by-air-pollution interaction analyses identified kitlg as a novel baseline lung function gene candidate among African American children with asthma. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Allergy and Immunology

Ali M, Atzenhoefer M, Bodker K, Ajam T, Johnsrud D, **Saleh Z**, Wani A, Galazka P, Bajwa T, and Jan MF. Very late presentation of fulminant myocardial immune-related toxicity in a patient on pembrolizumab. *Journal of the American College of Cardiology* 2020; 75(11):3273.

Jackson D, Flynn K, Rosasco M, Gill M, Liu A, Gruchalla R, O G, Pongracic J, Kercsmar C, Hershey GK, **Zoratti E**, Teach S, Kattan M, Bacharier L, Gergen P, Wheatley L, Presnell S, Togias A, Busse W, and Altman M. The Influence of MUC5AC SNPs on expression of MUC5AC and mucus hypersecretion genes during asthma exacerbations. *Journal of Allergy and Clinical Immunology* 2020; 145(2): AB176.

Jackson DJ, Gill MA, Liu AH, Gruchalla RS, O'Connor GT, Pongracic JA, Kercsmar CM, Khurana Hershey GK, **Zoratti EM**, Teach S, Kattan M, Bacharier LB, Sigelman SM, Gergen PJ, Whalen E, Wheatley LM, Gern JE, Togias A, Busse WW, and Altman MC. Air pollution levels drive inflammatory epithelial responses in the pathogenesis of non-viral asthma exacerbations in urban children. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Levan S, Lin DL, Stamnes KA, Panzer AR, Fujimura KE, Ownby DR, Lukacs NW, **Zoratti EM**, Boushey HA, **Johnson CC**, and Lynch SV. Gut microbiome derived 12,13 dihome promotes antigen presenting cell dysfunction in vitro and airway allergic inflammation in vivo. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Turi KN, McKennan CG, Gebretsadik T, Snyder BM, Seroogy CM, Jackson DJ, **Zoratti EM**, **Havstad S**, Ober C, Lynch S, McCauley K, Yu C, Lemanske RF, Gern JE, and Hartert TV. Untargeted metabolomics reveals unconjugated bilirubin and linked pathways in arachidonic acid metabolism and oxidative stress associated with early life recurrent wheeze. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Zanobetti A, Ryan P, Blossom JC, Coull BA, Brokamp C, Heike G, **Johnson CC**, **Havstad S**, **Joseph CL**, Song Y, Mendonca E, Miller RL, Requia W, Hoepner L, Andrews H, Jackson DJ, Wright A, Beamer P, Lothrop N, Hartert TV, **Zoratti EM**, Bacharier L, Seroogy C, Gern JE, Visness C, Martinez F, and Gold DR. Neighborhood socioeconomic exposures and early-life wheeze and incident asthma. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Zoratti E, Panzer A, **Sitarik A**, **Jones K**, **Wegienka G**, **Havstad S**, Lukacs N, Boushey H, **Johnson CC**, Ownby D, and Lynch S. Prenatal Indoor Dog Exposure and Early Life Gut Microbiota in the Microbes, Asthma, Allergy and Pets Birth Cohort. *Journal of Allergy and Clinical Immunology* 2020; 145(2): AB185.

Anesthesiology

Naffouj S, **Siddiqui MB**, **Shaikh A**, Shabbir N, Shabbir A, and **Salgia RJ**. THE IMPLICATIONS OF CHRONIC OPIOID USE ON POST-TRANSPLANT CLINICAL OUTCOMES: A SYSTEMATIC REVIEW AND META-ANALYSIS. *Hepatology* 2020; 72:852A-852A.

Behavioral Health Services/Psychiatry

Imtiaz Memon R, Imran N, Aamer I, Imran Sharif M, Hassan Bodla Z, and Naveed S. 1.16 THE EFFECT OF QUARANTINE ON THE EMOTIONAL WELL-BEING OF KIDS: A SYSTEMATIC REVIEW. *Journal of the American Academy of Child and Adolescent Psychiatry* 2020; 59(10): S144.

Williams A, Miller MK, and **Olex M**. The missing link: Health literacy and cognitive function in treatment adherence in head and neck cancer. *Psycho-Oncology* 2020; 29:69.

Cardiology/Cardiovascular Research

Abdelrahim E, **Fuller B**, **Coriasso N**, **Alalwan Y**, **Hughes C**, **Aljamal A**, **Wang D**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli T**, **Villablanca P**, **Wyman J**, **O'Neill W**, and **Lee J**. Utility Of Standardized Pre-CTA Hydration Protocol On Patients Referred For Transcatheter Aortic Valve Replacement. *Journal of Cardiovascular Computed Tomography* 2020; 14(3):S37.

Al-Darzi W, and **Gindi R**. Smoldering recurrent pericarditis presenting as a loculated pericardial effusion mimicking pericardial cyst. *Journal of the American College of Cardiology* 2020; 75(11):2648.

Al-Hijji M, Eleid M, **Wang DD**, Kodali S, Kaptzan T, El Sabbagh A, Oh J, **O'Neill W**, Rihal C, and Guerrero M. TCT CONNECT-347 Overexpansion of Balloon-Expandable Aortic Transcatheter Heart Valves in the Mitral Valve Position. *Journal of the American College of Cardiology* 2020; 76(17): B149B150.

Alalwan Y, **Coriasso N**, **Aljamal A**, **Hughes CL**, **Abdelrahim E**, **Dee Wang D**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Lee J**. Targeted exclusion of proximal obstructive coronary disease on coronary computed tomography angiography for deferral of routine invasive coronary angiography prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S115.

Aljamal AO, **Alalwan Y**, **Coriasso N**, **Hughes C**, **Abdelrahim E**, **Lee JC**, **Wang DD**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli TM**, **Villablanca P**, and **Wyman JF**. Dynamic conformational changes of the left ventricular outflow tract compared to the aortic annulus and implications on transcatheter aortic valve selection and sizing. *Journal of the American College of Cardiology* 2020; 75(11):1491.

Allen B, Christenson R, Cohen SA, **Nowak RM**, Wilkerson RG, Mumma BE, Madsen T, **McCord J**, T'Veld MH, Massoomi M, Stopyra JP, Montero C, Weaver M, Yang K, and Mahler SA. European society of cardiology 0-hour/1-hour high-sensitivity troponin algorithm performance in a United States cohort. *Academic Emergency Medicine* 2020; 27: S48.

Allen B, Christenson R, Cohen SA, **Nowak RM**, Wilkerson RG, Mumma BE, Madsen T, **McCord J**, T'Veld MH, Massoomi M, Stopyra JP, Montero C, Weaver M, Yang K, and Mahler SA. One and Done? Performance of a single, low high-sensitivity troponin in a multisite United States cohort. *Academic Emergency Medicine* 2020; 27: S8.

Alrayes H, **Radjef R**, and **Tita C**. Cardiogenic shock: A bittersweet diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):2476.

Altibi A, **Jebbawi LA**, and **Patel BD**. LVOT obstruction and severe aortic regurgitation caused by anterolateral muscle bundle of the left ventricle: The embryologic remnant of the bulbo-atrioventricular flange. *Journal of the American College of Cardiology* 2020; 75(11):2972.

Anderson M, **O'Neill W**, Ghiu I, Ramzy D, and Kapur N. TCT CONNECT-185 Early Impella RP Support Improves Outcomes for Acute Right Ventricular Failure Complicated by Cardiogenic Shock. *Journal of the American College of Cardiology* 2020; 76(17): B79.

Attar D, **Lekura J**, **Kalus JS**, **Al-Darzi W**, **Williams CT**, and **Grafton GF**. Impact of A Pharmacist-Led Heart Failure Clinic on Guideline-Directed Medical Therapy. *Journal of Cardiac Failure* 2020; 26(10): S129.

Aurora L, **Grafton G**, **Nemeh H**, **Chamogeorgakis T**, **Apostolou D**, **Tanaka D**, and **Cowger J**. Indications for LVAD Explant and Predictors of Mortality after Explant in IMACS. *Journal of Heart and Lung Transplantation* 2020; 39(4): S137-S138.

Aurora L, **Snider J**, **Peterson E**, **Bryson T**, **Gui H**, **McCord J**, and **Lanfear DE**. Suppression of tumorigenicity 2 (st2) turbidimetric immunoassay and enzyme-linked immunosorbent assay: Predicting risk in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):883.

Basir M, **Gorgis S**, **Lemor A**, Ghiu I, Kelley R, McRae T, Khuddus M, Sharma R, Lim M, Nsair A, Wohns D, Mehra A, Lin L, Pinto D, Kapur N, and **O'Neill W**. TCT CONNECT-176 Diastolic Suction Alarms Are an Early Marker for Right Ventricular Failure in the Setting of Left Ventricular Mechanical Circulatory Support. *Journal of the American College of Cardiology* 2020; 76(17): B76.

Basir M, Taylor A, **Lemor A**, **Gorgis S**, Tehrani B, Truesdell A, Bharadwaj A, Kolski B, Gelormini J, Todd J, Lasorda D, Smith C, Riley R, Marso S, Federici R, and **O'Neill W**. TCT CONNECT-29 Vasopressors Have Independent Adverse Impact on Survival in Patients With Acute Myocardial Infarction Cardiogenic Shock. *Journal of the American College of Cardiology* 2020; 76(17): B13.

Bernardo M, **Jafri S**, and **Ananthasubramaniam K**. Challenges in imaging complex pericardial effusions: Incremental value of multimodality imaging. *Journal of the American College of Cardiology* 2020; 75(11):3395.

Birchak J, **Khan A**, **Singh G**, **Schuger C**, and **Maskoun W**. An unusual case of sustained ventricular tachycardia from acute pulmonary embolism. *Journal of the American College of Cardiology* 2020; 75(11):2820.

Bryce K, **Hariri IM**, **Nemeh A**, **St. John G**, and **Cowger JA**. Poor Social Support Confers Worse Survival after MCS. *Journal of Heart and Lung Transplantation* 2020; 39(4):S91.

Bryson T, **Debbs JC**, **She R**, **Gui H**, **Luzum JA**, **Zeld N**, **Brawner CA**, **Keteyian SJ**, **Ehrman JK**, **Williams LK**, and **Lanfear DE**. A single nucleotide polymorphism within the rxra gene predicts a favorable response to exercise in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):1012.

Butera B, **Lemor A**, **Ya'qoub L**, **Arman PD**, **Voeltz M**, **Koenig G**, **Alaswad K**, **O'Neill WW**, and **Basir M**. Utilization of coronary interventions and outcomes in weekend versus weekday admissions for stemi complicated by cardiogenic shock. *Journal of the American College of Cardiology* 2020; 75(11):1541.

Butera B, **Modi K**, **Cowger JA**, and **Russell C**. Eosinophilic myocarditis in a patient with biopsy proven systemic sarcoidosis who was referred for bradycardia. *Journal of the American College of Cardiology* 2020; 75(11):3098.

Butera B, **Modi K**, **Klingler D**, **McCord J**, and **Ananthasubramaniam K**. All that glitters is not gold; due diligence when interpreting pyrophosphate cardiac scans to avoid misdiagnosis of transthyretin cardiac amyloidosis. *Journal of the American College of Cardiology* 2020; 75(11):3132.

Cogswell R, Rafei AE, **Cowger J**, Joseph S, Schultz J, Estep J, John R, and Eckman P. Defining LVAD Success: A Nationwide Survey of LVAD Program Team Members. *Journal of Heart and Lung Transplantation* 2020; 39(4): S180-S181.

Coriasso N, **Alalwan Y**, **Aljamal A**, **Hughes C**, **Abdelrahim E**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli T**, **Villablanca P**, **Wyman J**, **O'Neill W**, **Wang D**, and **Lee J**. “Transcaval First” Alternative Access Strategy For Transcatheter Aortic Valve Replacement Guided By Computed Tomography Angiography. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S94.

Cowger JA, Estep JD, Rinde-Hoffman DA, Givertz MM, Anderson AS, Jacoby D, Chen L, Brieke A, Mahr C, Hall S, Ewald GA, Baker A, Chuang J, and Pinney SP. Variability in Blood Pressure Assessment in Patients Supported with HeartMate 3. *Journal of Heart and Lung Transplantation* 2020; 39(4): S156-S157.

Dabbagh M, **Singh G**, **Schuger C**, and **Cowger JA**. Recurrent syncope: A late presentation of a genetic cardiac disease. *Journal of the American College of Cardiology* 2020; 75(11):2690.

Dagher C, **Modi S**, **Gandhi N**, **Binz S**, and **Rabbani B**. A rare case of spontaneous asymptomatic ventricular tachycardia due to arrhythmogenic right ventricular dysplasia (arvd). *Journal of the American College of Cardiology* 2020; 75(11):2578.

Debbs J, **Bryson TD**, **Zeld N**, **Aurora L**, **Gui H**, **Luzum JA**, **Peterson E**, **She R**, **Williams LK**, and **Lanfear DE**. Somalogic st2 and ntprobnp assays predict heart failure mortality as effectively as the elisa assay. *Journal of the American College of Cardiology* 2020; 75(11):1091.

Do A, **Curran K**, **Hughes C**, **Solomon R**, and **Williams CT**. Predictors of poor outcomes in non-ischemic cardiogenic shock and the use of hospice in this population. *Journal of the American College of Cardiology* 2020; 75(11):822.

Do A, **Radjef R**, **Aurora L**, **Singh A**, **Tawney A**, **Kraus D**, **Jacobsen G**, and **McCord J**. Safety of evaluating for acute coronary syndrome in the emergency department using a modified heart score. *Journal of the American College of Cardiology* 2020; 75(11):127.

Eng M, Abbas A, Hahn R, **Wang DD**, Eleid M, and **O'Neill W**. TCT CONNECT-150 Real World Outcomes with Small (20-mm) Balloon Expandable Sapien 3 Valves Compared to Larger Valves (23-, 26-, and 29-mm). *Journal of the American College of Cardiology* 2020; 76(17): B64.

Eng MH, **Kargoli F**, **Frisoli TM**, **Wang DD**, **Lee JC**, **Villablanca P**, **Guerrero M**, **Greenbaum A**, **So CY**, **Kang G**, **Wyman JF**, and **O'Neill WW**. Long-term outcomes of transcatheter mitral valve replacement using a balloon expandable valve. *Journal of the American College of Cardiology* 2020; 75(11):1307.

Fram G, **Hudson MP**, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. Utility of gender-specific HStroponin I cut-points for AMI diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):64.

Gibbs J, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. A machine learning algorithm to predict acute myocardial infarction over 30 minutes. *Journal of the American College of Cardiology* 2020; 75(11):175.

Goldschmidt M, Mazimba S, Grayburn P, Hage A, Kourkoveli P, **Cowger J**, Simmons L, Moe G, Mishkin J, Platts D, Gordon R, Ajello S, Marcoff L, and Toma M. Six-month and One-year Outcomes for Repair in Patients with Functional Mitral Regurgitation from the CLASP Study. *Journal of Cardiac Failure* 2020; 26(10): S8.

Gorgis S, **Ahluwalia G**, **Hana A**, **Fram G**, **Dabbagh M**, **Dhillon D**, **Murad A**, **Khan A**, **O'Neill WW**, **Kaatz S**, and **Wang DD**. To bleed or to clot: Stroke prevention strategies in patients with atrial fibrillation or flutter after bleeding. *Journal of the American College of Cardiology* 2020; 75(11):472.

Gorgis S, **Demertzis Z**, **Malette K**, **Fram G**, **Dobesh K**, **Keteyian S**, **Alaswad K**, **Basir M**, and **Brawner C**. Percutaneous coronary revascularization is associated with higher exercise capacity after myocardial infarction. *Journal of the American College of Cardiology* 2020; 75(11):220.

Gorgis S, **Dhillon D**, **Mishra K**, **Saleh A**, **Basir M**, and **Fuller B**. Aggressive acute coronary thrombosis in ulcerative colitis flare. *Journal of the American College of Cardiology* 2020; 75(11):3302.

Gupta RC, **Singh-Gupta V**, and **Sabbah HN**. Dysregulation of H11 Kinase in the Failing Human Left Ventricular Myocardium. *Journal of Heart and Lung Transplantation* 2020; 39(4): S357.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Hariri IM, Dardas T, Kanwar M, Cogswell R, Gosev I, Molina E, Myers SL, Kirklin JK, Shah P, Pagani FD, and **Cowger JA**. Longterm Survival on LVAD Support: Limitations Driven by Development of Device Complications and End-Organ Dysfunction. *Journal of Cardiac Failure* 2020; 26(10): S143-S144.

Hariri IM, **Hannawi B**, **Grafton G**, **Nemeh HW**, **Chamogeorgakis T**, **Lanfear DE**, **Apostolou D**, **Selektor Y**, **Williams CT**, **Tita C**, **Tanaka D**, Myers SL, Kirklin JK, Pagani FD, and **Cowger JA**. Ventricular Assist Device Patient Phenotypes: What Attributes Describe Long Term Survival? *Journal of Heart and Lung Transplantation* 2020; 39(4): S181-S182.

Hines J, **Floyd M**, **Ismail R**, **Le P**, **Grafton G**, **Kelly B**, **Hegab S**, and **Awdish RL**. Clot distribution in pulmonary embolism does not influence right ventricular recovery. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Hughes CL, **Lee J**, **Coriasso N**, **Alalwan Y**, **Aljamal A**, **Wang DD**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Abdelrahim E**. Utility of ECG-gated computed tomography angiography for the improved diagnosis of bicuspid aortic valve disease prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S118-S119.

Ijaz N, Taleb I, Kyriakopoulos CP, **Demetrzis Z**, **Peruri A**, Richins TJ, Dranow L, Tang D, **Nemeh H**, Stehlik J, Koliopoulou AG, Selzman CH, Alharethi R, **Cowger J**, Shah P, and Drakos SG. A Novel Risk Score Predicts Early Right Ventricular Failure after Lvad: A Derivation-validation Multicenter Study. *Journal of Cardiac Failure* 2020; 26(10):S149.

Isseh IN, **Dagher C**, **Sharma S**, **Basir MB**, and **Parikh S**. Escalation of temporary mechanical circulatory support in the setting of deteriorating cardiogenic shock. *Catheterization and Cardiovascular Interventions* 2020; 95: S178.

Isseh IN, **Gorgis S**, **Dagher C**, **Sharma S**, **Basir MB**, and **Parikh S**. Escalating Temporary Mechanical Circulatory Support in Worsening Cardiogenic Shock: Feasibility in Advanced Heart Failure Therapy Candidates. *Journal of Cardiac Failure* 2020; 26(10): S55.

Karacsonyi J, **Alaswad K**, Choi J, Khatri J, Jaffer FA, Poomipanit P, Forouzandeh F, Koutouzis M, Tsiafoutis I, Patel M, Mahmud E, Krestyaninov O, Jefferson B, Patel T, Shah A, handwaney R, Wollmuth J, Sheikh A, Yeh R, Tamez H, Jaber W, Samady H, Malik B, Potluri S, Uretsky B, Doing A, Dattilo P, Elbarouni B, Love M, Vemmou E, Nikolakopoulos I, Xenogiannis I, Rangan B, Garcia S, Ungi I, ElGuindy A, Goktekin O, Rafeh NA, and Brilakis E. TCT CONNECT-230 The Impact of Laser Use on the Outcomes of Balloon Uncrossable and Balloon Undilatable Chronic Total Occlusion Percutaneous Coronary Intervention. *Journal of the American College of Cardiology* 2020; 76(17): B101-B102.

Karacsonyi J, Stanberry L, **Alaswad K**, Krestyaninov O, Choi J, Rangan B, Nikolakopoulos I, Vemmou E, Ungi I, and Brilakis E. TCT CONNECT-229 Predicting Technical Success of Chronic Total Occlusion Percutaneous Coronary Intervention: Comparison of 3 Scores. *Journal of the American College of Cardiology* 2020; 76(17): B100-B101.

Lansky A, Grines C, Moses J, **O'Neill W**, Ekono M, and Gregory D. TCT CONNECT-181 A Propensity Matched Analysis of Impella Use from a Large-Scale Claims Data: Influence of Analytic Methodology on Clinical Outcomes. *Journal of the American College of Cardiology* 2020; 76(17): B77-B78.

Lemor A, Hernandez G, **Patel S**, **Basir M**, **Villablanca P**, **Alaswad K**, and **O'Neill W**. TCT CONNECT27 Impact of Prior Coronary Artery Bypass in Elderly Patients Presenting with Acute Myocardial Infarction. *Journal of the American College of Cardiology* 2020; 76(17): B12.

Michaels AT, **Peterson E**, **Luzum J**, **Gui H**, Pinto Y, **Sabbah HN**, **Williams LK**, Snider J, and **Lanfear DE**. Biomarker Guided Therapy for Heart Failure with Mid-Range EF. *Journal of Cardiac Failure* 2020; 26(10): S37.

Nayak A, Hu Y, Ko Y, Mehta A, Liu C, Xie R, **Cowger JA**, Kirklin JK, Kormos RL, Simon MA, and Morris AA. Gender Differences in Early Mortality after LVAD: An IMACS Analysis. *Journal of Heart and Lung Transplantation* 2020; 39(4): S108.

Nikolakopoulos I, **Alaswad K**, Choi J, Khatri J, Yeh R, Krestyaninov O, Khelimskii D, Jaffer FA, Rafeh NA, ElGuindy A, Goktekin O, Karmpaliotis D, Poomipanit P, Vemmou E, Karacsonyi J, Rangan B, Garcia S, Banerjee S, Burke MN, and Brilakis E. TCT CONNECT-236 Percutaneous Coronary Intervention of Chronic Total Occlusions Involving a Bifurcation: Insights From the PROGRESS-CTO Registry. *Journal of the American College of Cardiology* 2020; 76(17):B104.

Nikolakopoulos I, **Alaswad K**, Karmpaliotis D, Krestyaninov O, Khelimskii D, Khatri J, Doing A, Dattilo P, Sheikh AM, Toma C, Patel T, Jefferson B, Jaffer FA, Chandwaney RH, Samady H, Jaber W, Shah AR, Vemmou E, Xenogiannis I, Rangan BV, Garcia S, Abdullah S, Banerjee S, Burke MN, and Brilakis ES. Follow-up outcomes after chronic total occlusion percutaneous coronary intervention according to target vessel: Insights from the PROGRESS-CTO Registry. *Catheterization and Cardiovascular Interventions* 2020; 95: S53-S54.

Nikolakopoulos I, Krestyaninov O, Khelimskii D, Khatri J, **Alaswad K**, Doing A, Dattilo P, Sheikh AM, Yeh RW, Patel T, Jefferson B, Jaffer FA, Uretsky BF, Love M, Elbarouni B, Koutouzis M, Tsiafoutis I, Choi JW, Vemmou E, Xenogiannis I, Rangan BV, Garcia S, Abdullah S, Banerjee S, Burke MN, and Brilakis ES. Inhospital and follow-up outcomes after chronic total occlusion percutaneous coronary intervention according to left ventricular ejection fraction: Insights from the PROGRESS-CTO Registry. *Catheterization and Cardiovascular Interventions* 2020; 95: S52-S53.

Nona P, **Dhillon D**, **Mawri S**, **Cowger J**, **Alaswad K**, **Khandelwal AK**, **O'Neill WW**, and **Basir MB**. Inter-hospital transfers in acute myocardial infarction and cardiogenic shock. *Catheterization and Cardiovascular Interventions* 2020; 95: S180.

Nowak RM, **Christenson RH**, **Jacobsen G**, **Apple F**, **McCord J**, **Limkakeng A**, **Singer A**, **Peacock WF**, and **DeFilippi CR**. High sensitivity troponin values rapidly rule-out myocardial infarction and allow for ed discharge in a higher risk patient population compared to contemporary practice. *Journal of the American College of Cardiology* 2020; 75(11):66.

Nowak RM, Peacock F, Christenson R, Limkakeng A, **Jacobsen G**, **McCord J**, Apple FS, Singer AJ, and DeFilippi C. Patients with low high-sensitivity troponin i values have similar outcomes whether discharged or hospitalized. *Academic Emergency Medicine* 2020; 27: S89.

O'Neill WW, Moses JW, and Popma JJ. Outcomes of impella use as prophylactic versus bailout strategy in patients undergoing non-emergent percutaneous coronary intervention. *Catheterization and Cardiovascular Interventions* 2020; 95: S54-S55.

Patel A, **Grafton G**, **Tita C**, Hannawi B, **Selektor Y**, **Chamogeorgakis T**, **Apostolou D**, **Lanfear DE**, **Williams CT**, **Nemeh HW**, and **Cowger JA**. Survival and Predictors of Mortality in Patients Undergoing RVAD Explant in IMACS. *Journal of Heart and Lung Transplantation* 2020; 39(4): S25-S26.

Qi Z, **Wang D**, **Lee J**, **Song T**, **Pantelic M**, **Keimig T**, **Nadig J**, **Reeser N**, **Zemke D**, **Seger N**, and **Bevins N**. Prediction of Contrast Enhancement in Left Atrial Appendage (LAA) CT Through A Numerical Modeling Approach. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S36-S37.

Raad M, **Gorgis S**, **Dabbagh M**, **Parikh S**, and **Cowger J**. Characteristics and Outcomes of Patients with Heart Failure Admitted with Covid-19 in a Cohort Study from Southeast Michigan. *Journal of Cardiac Failure* 2020; 26(10): S74.

Rteil A, **Lin J**, **Weaver M**, **Ahsan S**, **Lee A**, and **Kabbani L**. Socioeconomic Status and Clinical Stage of Patients Presenting for Treatment of Varicose Veins. *Journal of Vascular Surgery: Venous and Lymphatic Disorders* 2020; 8(2):328.

Sabbah HN, **Gupta RC**, and **Singh-Gupta V**. Marked deterioration of mitochondrial function in failing cardiomyocytes exposed to hypoxic conditions. *Journal of the American College of Cardiology* 2020; 75(11):697.

Sabbah HN, **Gupta RC**, **Singh-Gupta V**, **Zhang K**, and **Xu J**. Beta-3 adrenergic receptors are upregulated in left ventricular myocardium of dogs with chronic heart failure. *Journal of the American College of Cardiology* 2020; 75(11):696.

Shah T, Chou J, Grines C, Chieffo A, Bellumkonda L, Sugeng L, Ghiu I, Moses J, **O'Neill W**, and Lansky A. TCT CONNECT-184 Impact of Sex and Timing of Impella Support in Patients with Acute Myocardial Infarction Complicated by Cardiogenic Shock. *Journal of the American College of Cardiology* 2020; 76(17): B78-B79.

Singh H, Mehta R, **O'Neill W**, Lalonde T, Ghiu I, Chen-Hsing Y, Dutcheshen K, Schreiber T, and Rosman H. TCT CONNECT-172 Clinical Features and Outcomes of Acute Myocardial Infarction and Cardiogenic Shock Patients Treated with Impella: Early Compared with Recent Experience. *Journal of the American College of Cardiology* 2020; 76(17): B74.

Sitammagari K, Desai R, Kondamareddy D, Ninan J, Dontaraju V, R. DB, and **Villablanca P**. Impact of Peripheral Vascular Disease After Transcatheter Mitral Valve Repair: Insights from the National Inpatient Sample. *JACC: Cardiovascular Interventions* 2020; 13(4): S59.

Sitammagari K, Dhanireddy BR, Kondamareddy D, Gangani K, Dontaraju V, Ninan J, and **Villablanca P**. Impact of Chronic Obstructive Pulmonary Disease on Outcomes After Transcatheter Mitral Valve Repair. *JACC: Cardiovascular Interventions* 2020; 13(4): S57-S58.

Sitammagari K, Kondamareddy D, Dhanireddy BR, Dontaraju V, Desai R, Ninan JK, and **Villablanca P**. Obstructive Sleep Apnea Impacts In-Hospital Outcomes After Transcatheter Mitral Valve Repair: Insights from the National Inpatient Sample. *JACC: Cardiovascular Interventions* 2020; 13(4): S58.

Smith R, Szerlip M, Lim S, Makkar R, Kar S, Kipperman R, Spargias K, **O'Neill W**, Ng M, Fam N, Rinaldi M, Raffel O, Walters D, Levisay J, Montorfano M, Latib A, Cohen G, Schäfer U, Marcoff L, and Webb J. TCT CONNECT-5 Six-Month and One-Year Outcomes for Transcatheter Repair in Patients With Mitral Regurgitation From the CLASP Study. *Journal of the American College of Cardiology* 2020; 76(17): B3.

So CY, **Kang G**, **Villablanca P**, **Lee J**, **Frisoli T**, **Wyman JF**, **Wang DD**, **O'Neill WW**, and **Eng MH**. Procedural and mid-term outcomes of coronary protection: Insight from a single-center retrospective analysis. *Catheterization and Cardiovascular Interventions* 2020; 95: S222-S223.

Suarez DFH, Kim G, **Villablanca P**, Wiley JM, and Roche-Lima A. Machine learning-based in-hospital mortality prediction for transcatheter mitral valve repair in The United States. *Catheterization and Cardiovascular Interventions* 2020; 95: S68.

Swanson B, **Brooks K**, **Bajwa F**, **Fadel R**, and **Parikh S**. Novel echocardiographic assessment of right ventricular function utilizing dynamic base to apex fractional shortening. *Journal of the American College of Cardiology* 2020; 75(11):1689.

Swanson B, **Salgia R**, **El-Bashir J**, and **Parikh S**. Accuracy of agitated saline contrast echocardiography for assessment of intracardiac shunting in preoperative liver transplant patients. *Journal of the American College of Cardiology* 2020; 75(11):1600.

Teuteberg J, Hiesinger W, **Cowger JA**, Rich J, Najjar SS, Jacoski M, Markham D, and Rogers J. More Frequent Hospitalizations and Worse Quality of Life with Late Right Heart Failure Compared to Early Right Heart Failure after Left Ventricular Assist as Destination Therapy. *Journal of Heart and Lung Transplantation* 2020; 39(4): S91-S92.

Vemmou E, **Alaswad K**, Karmpaliotis D, Khatri J, Doing A, Dattilo P, Uretsky BF, Elbarouni B, Love M, Sheikh AM, Jaber W, Samady H, Jefferson B, Patel TN, Patel MP, Mahmud E, Yeh RW, Tamez H, Jaffer FA, ElGuindy A, Choi JW, Rafeh NA, Maallouf A, Jaoudeh FA, Xenogiannis I, Nikolakopoulos I, Rangan BV, Omer MA, Megaly MS, Gkargkoulas F, Moses JW, Lembo NJ, Kirtane AJ, Parikh MA, Ali ZA, Toma C, Krestyaninov O, Khelimskii D, Banerjee S, Abdullah S, Garcia S, Burke MN, and Brilakis ES. Radiation dose during CTO-PCI: Insights from the PROGRESS-CTO registry. *Catheterization and Cardiovascular Interventions* 2020; 95: S57-S59.

Vemmou E, **Alaswad K**, Karmpaliotis D, Krestyaninov O, Khelimskii D, Choi JW, Khatri J, Jaffer FA, Patel MP, Mahmud E, Doing A, Dattilo P, Koutouzis M, Tsiafoutis I, Uretsky BF, Toma C, Elbarouni B, Love M, Jaber W, Samady H, Jefferson B, Patel TN, Sheikh AM, Yeh RW, Tamez H, ElGuindy A, Rafeh NA, Maallouf A, Jaoudeh FA, Xenogiannis I, Nikolakopoulos I, Rangan BV, Omer MA, Megaly MS, Gkargkoulas F, Moses JW, Lembo NJ, Kirtane AJ, Parikh MA, Ali ZA, Banerjee S, Abdullah S, Garcia S, Burke MN, and Brilakis ES. Contrast utilization patterns during CTO-PCI: Insights from the PROGRESSCTO registry. *Catheterization and Cardiovascular Interventions* 2020; 95: S56-S57.

Vemmou E, **Alaswad K**, Patel M, Mahmud E, Choi J, Jaffer FA, Doing A, Karmpaliotis D, Krestyaninov O, Khelimskii D, Nikolakopoulos I, Karacsonyi J, Xenogiannis I, Garcia S, Burke MN, Rafeh NA, ElGuindy A, Goktekin O, Abdo A, Rangan B, and Brilakis E. TCT CONNECT-228 In-hospital Outcomes of CTO PCI in Octogenarians and Nonagenarians: Insights From the PROGRESS-CTO Registry. *Journal of the American College of Cardiology* 2020; 76(17): B100.

Vemmou E, Quadros A, Dens J, Agostoni P, **Alaswad K**, Belli K, Carlino M, Karmpaliotis D, Khelimskii D, Knaapen P, Krestyaninov O, Ojeda S, Padilla L, Pan M, Piccaro de Oliveira P, Rinfret S, Spratt J, Walsh S, Karacsonyi J, Nikolakopoulos I, Rangan B, Brilakis E, and Azzalini L. TCT CONNECT-240 CTO PCI for In-Stent Restenosis: Insights From a Pooled Analysis of Four Multicenter Registries. *Journal of the American College of Cardiology* 2020; 76(17): B106.

Vishwanath R, Iordanou J, Singh V, **Gorgis S**, **Papukhyan H**, **Hana A**, and **Ananthasubramaniam K**. Defining the Incidence and Patient Profile of Incidental Coronary Artery Calcification On Non-cardiac Computed Tomography: An Opportunity To Identify Subclinical Coronary Atherosclerosis. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S54.

Whitehead EH, Thayer K, Burkhoff D, Uriel N, Ohman EM, **O'Neill W**, and Kapur NK. Elevated Central Venous Pressure as A Trigger for Right Heart Failure Evaluation in Patients Receiving Left-sided Mechanical Support for Cardiogenic Shock. *Journal of Cardiac Failure* 2020; 26(10): S55.

Zhou X, Richardson D, Dowlati A, Goel S, Sahebjam S, Strauss J, Chawla S, **Wang D**, Samnotra V, Faller DV, Venkatakrishnan K, and Gupta N. A randomized, crossover study to evaluate the effects of pevonedistat on the qtc interval in patients with advanced malignancies. *HemaSphere* 2020; 4:376.

Center for Health Policy and Health Services Research

Gordon SC, **Li J**, Moorman AC, Spradling PR, Teshale EH, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Rupp LB**, **Trudeau S**, and **Lu M**. PATIENT CHARACTERISTICS AND EFFICACY OF PANGENOTYPIC DIRECT-ACTING ANTIVIRAL REGIMENS AMONG A COHORT OF CHRONIC HEPATITIS C PATIENTS RECEIVING ROUTINE CLINICAL CARE IN THE US. *Hepatology* 2020; 72:540A-541A.

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A.

Naffouj S, **Selim R**, **Shamaa O**, **Ahmed A**, **Zhou YR**, **Rupp LB**, **Jafri SM**, **Gordon SC**, and **Gonzalez HC**. LIVER TRANSPLANT EVALUATION IN THE PETH ERA. *Hepatology* 2020; 72:176A-176A.

Aurora L, **Snider J**, **Peterson E**, **Bryson T**, **Gui H**, **McCord J**, and **Lanfear DE**. Suppression of tumorigenicity 2 (st2) turbidimetric immunoassay and enzyme-linked immunosorbent assay: Predicting risk in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):883.

Bryson T, **Debbs JC**, **She R**, **Gui H**, **Luzum JA**, **Zeld N**, **Brawner CA**, **Keteyian SJ**, **Ehrman JK**, **Williams LK**, and **Lanfear DE**. A single nucleotide polymorphism within the rxra gene predicts a favorable response to exercise in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):1012.

Debbs J, **Bryson TD**, **Zeld N**, **Aurora L**, **Gui H**, **Luzum JA**, **Peterson E**, **She R**, **Williams LK**, and **Lanfear DE**. Somalogic st2 and ntprobnp assays predict heart failure mortality as effectively as the elisa assay. *Journal of the American College of Cardiology* 2020; 75(11):1091.

Mak A, Sajuthi S, Saef B, Hu D, **Xiao S**, Sleiman P, Joo J, Lee EY, Huntsman S, Eng C, LeNoir MA, Brigino-Buenaventura E, Salazar S, Oh SS, Himes BE, Hakonarson H, **Williams L**, White MJ, Seibold MA, and Burchard EG. Whole genome sequencing association and gene-by-air-pollution interaction analyses identified kitlg as a novel baseline lung function gene candidate among African American children with asthma. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Michaels AT, **Peterson E**, **Luzum J**, **Gui H**, Pinto Y, **Sabbah HN**, **Williams LK**, Snider J, and **Lanfear DE**. Biomarker Guided Therapy for Heart Failure with Mid-Range EF. *Journal of Cardiac Failure* 2020; 26(10): S37.

Clinical Quality

Szafranski J, Slezak M, **Faraone H**, Kocher KE, Griffith B, **Bussa R**, Tang A, Mitchell G, Nypaver MM, White E, and **Krupp SS**. Implementing the canadian computed tomography head rule in an urban united states emergency department: A retrospective chart review. *Academic Emergency Medicine* 2020; 27: S143-S144.

Dermatology

Bissonnette R, **Gold LS**, Kircik L, Tyring SK, Tallman A, and Armstrong A. 16392 Efficacy of tapinarof cream by body region in subjects with plaque psoriasis in a phase 2b randomized controlled study. *Journal of the American Academy of Dermatology* 2020; 83(6): AB62.

Braunberger TL, Vakharia P, **Narla S**, Nicholson C, **Parks-Miller A**, and **Hamzavi IH**. 15821 Efficacy and safety of carbon dioxide laser excision in hidradenitis suppurativa: Experience from an urban academic medical center. *Journal of the American Academy of Dermatology* 2020; 83(6): AB47.

Del Rosso J, **Stein Gold LF**, Weiss J, Green L, Stakias V, and Stuart I. LB938 Efficacy of FMX101 4% topical minocycline foam for the treatment of moderate-to-severe acne vulgaris: Integrated summary from three phase 3 studies. *Journal of Investigative Dermatology* 2020; 140(7): B9.

Dermer SJ, Maeglin JM, and **Gold LS**. 16520 Continuing medical education on acne improves dermatologists' knowledge and competence on patient management. *Journal of the American Academy of Dermatology* 2020; 83(6): AB180.

Gold LFS, Lebwohl MG, Bhatia N, Lin T, and Pillai R. 605 Long-term management of moderate-to-severe plaque psoriasis: Maintenance of treatment success following cessation of halobetasol propionate 0.01%/tazarotene 0.045% lotion. *Journal of Investigative Dermatology* 2020; 140(7); S82.

Gold LS, Del Rosso JQ, Kircik L, Bhatia N, Hooper D, and Nahm WK. 13509 Integrated safety analysis of FMX103 1.5% topical minocycline foam for the treatment of moderate to severe papulopustular rosacea: Results from two phase 3 studies. *Journal of the American Academy of Dermatology* 2020; 83(6): AB119.

Gold LS, Del Rosso JQ, Kircik L, Bhatia N, Hooper D, Nahm WK, and Stuart I. 17800 Open-label extension study evaluating the long-term safety, efficacy, and tolerability of FMX103 1.5% topical minocycline foam in the treatment of moderate to severe facial papulopustular rosacea. *Journal of the American Academy of Dermatology* 2020; 83(6): AB199.

Gold LS, Weiss JS, Green LJ, Kircik L, PharMd TL, and Harris S. 15324 Long-term management of moderate to severe plaque psoriasis: Maintenance of treatment success following cessation of fixed combination halobetasol propionate 0.01% and tazarotene 0.045% lotion in patients with baseline body surface area of 6%-12%. *Journal of the American Academy of Dermatology* 2020; 83(6): AB36.

Hamzavi I, Harris JE, Rosmarin D, Grimes PE, Pandya A, Gottlieb AB, Butler KA, Kuo IFI, Sun K, and Lebwohl M. 17753 Analysis of 24-week response to ruxolitinib cream for the treatment of vitiligo based on patient demographics and clinical characteristics. *Journal of the American Academy of Dermatology* 2020; 83(6): AB86.

Kohli I, Nicholson C, Williams JD, Seo I, Tian X, Atillasoy E, **Lim HW**, and **Hamzavi IH**. 17955 Comparison of SPF50+ and SPF100+ sunscreens on the induction of cutaneous pigmentation over multiple days: A real-world, single-center, randomized, double-blinded evaluation. *Journal of the American Academy of Dermatology* 2020; 83(6): AB203.

Luther CA, **Griffith JL**, **Kurland E**, Al Shabeeb R, Eleryan M, Redbord K, and **Ozog DM**. The infection rate of intralesional triamcinolone and the safety of compounding in dermatology for intradermal and subcutaneous injection: A retrospective medical record review. *Journal of the American Academy of Dermatology* 2020; 83(4):1044-1048.

Lyons AB, Zubair R, **Miller AP**, **Kohli I**, and **Hamzavi IH**. 15485 Evaluating the safety and efficacy of intense pulsed light with radiofrequency in US patients with hidradenitis suppurativa: A split-body study. *Journal of the American Academy of Dermatology* 2020; 83(6): AB154.

Mohammad T, Hamel R, Chahine A, Vick GL, Boh E, Alora MBT, Mistur R, Baron ED, Cooper K, and Lim HW. 13303 Prevalence of photodermatoses in the general dermatology clinic of four academic medical centers: A multicenter retrospective analysis of 1080 patients over a 10-year period. *Journal of the American Academy of Dermatology* 2020; 83(6): AB117.

Narla S, and Silverberg JI. 15838 Autoimmune comorbidities of psoriasis in US adults and children. *Journal of the American Academy of Dermatology* 2020; 83(6): AB48.

Oska S, **Yeager DG**, **Zarbo A**, **Friedman BJ**, and **Shwayder T**. 18303 Ataxia telangiectasia and melanoma: The role of dermatology in ataxia telangiectasia. *Journal of the American Academy of Dermatology* 2020; 83(6): AB209.

Rosso JD, Tan J, Weiss JS, **Gold LS**, Cook-Bolden F, Eichenfield L, Tanghetti E, Graeber M, Saenz AA, and Ahmad F. 13882 Trifarotene 50 µg/g cream: An effective and safe treatment for moderate facial and truncal acne. *Journal of the American Academy of Dermatology* 2020; 83(6): AB14.

Schaff E, **Bergman D**, **Burmeister C**, **McHargue C**, **Lim H**, and **Siddiqui F**. Impact of Gender and Race on Outcomes of Patients Treated for Mycosis Fungoides with Total Skin Electron Beam Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E47.

Su JC, Spelman LJ, Eichenfield LF, **Stein Gold LF**, Cha A, Graham D, Takiya L, Werth JL, Zang C, and Vlahos B. 513 Crisaborole in patients ≥3 months of age with mild-to-moderate atopic dermatitis (AD). *Journal of Investigative Dermatology* 2020; 140(7): S70.

Veverka KA, Hansen JB, Yaloumis M, Kircik L, and **Gold LS**. 17754 Treatment success in mild psoriasis patients with fixed-combination calcipotriene and betamethasone dipropionate foam: Results from the PSO-FAST trial. *Journal of the American Academy of Dermatology* 2020; 83(6): AB198.

Vlachos C, and **Hutchings J**. Using patient education to achieve optimal results with their topical retinoid/benzoyl peroxide therapy. *Journal of the Dermatology Nurses' Association* 2020; 12(3):141.

Wang X, **Yao Y**, **Wang Y**, **Zhou L**, and **Mi Q**. 350 Histone demethylase LSD1 is required for LC embryonic development but dispensable for LC maintenance and repopulation. *Journal of Investigative Dermatology* 2020; 140(7): S44.

Weiss JS, Bhatia N, **Gold LS**, Martin G, Pillai R, and Guenin E. 15211 Treatment of moderate to severe acne with once-daily tazarotene 0.045% lotion in males: Pooled analysis of two phase 3 studies. *Journal of the American Academy of Dermatology* 2020; 83(6): AB144.

Yosipovitch G, Bieber T, **Gold LS**, Kwatra S, Tatulych S, Nduaka C, Cameron MC, Williams D, Biswas P, and Valdez H. 15517 Eczema Area and Severity Index 90 (EASI-90) responder rates with abrocitinib and relationship with quality of life (QoL) and itch in patients with moderate to severe atopic dermatitis: Results from a randomized phase 3 clinical trial. *Journal of the American Academy of Dermatology* 2020; 83(6): AB41.

Yu Q, **Zhou L**, and **Mi Q**. 360 CBFβ2 is required for LC hemostasis and repopulation but not required for its embryonic development. *Journal of Investigative Dermatology* 2020; 140(7): S45.

Zarbo A, **Luk KM**, **Friedman BJ**, and **Shwayder T**. 18618 A differential diagnosis for the congenital midline mass: Striated muscle hamartoma. *Journal of the American Academy of Dermatology* 2020; 83(6): AB216.

Diagnostic Radiology

Abdelrahim E, **Fuller B**, **Coriasso N**, **Alalwan Y**, **Hughes C**, **Aljamal A**, **Wang D**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli T**, **Villablanca P**, **Wyman J**, **O'Neill W**, and **Lee J**. Utility Of Standardized Pre-CTA Hydration Protocol On Patients Referred For Transcatheter Aortic Valve Replacement. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S37.

Alalwan Y, **Coriasso N**, **Aljamal A**, **Hughes CL**, **Abdelrahim E**, **Dee Wang D**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Lee J**. Targeted exclusion of proximal obstructive coronary disease on coronary computed tomography angiography for deferral of routine invasive coronary angiography prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S115.

Caines A, **Mishra K**, **Stanley S**, **Sturza S**, **Abouljoud MS**, and **Salgia RJ**. THE IMPACT OF HCC LOCOREGIONAL THERAPY ON PERI-OPERATIVE AND POST-TRANSPLANT COMPLICATIONS. *Hepatology* 2020; 72:850A-851A.

Feldman A, **Devpura S**, **Movsas B**, **Chetty I**, **Cook A**, **Rusu S**, **Brown S**, **Kim J**, **Sun Z**, **Ajlouni M**, mayyas E, Liu J, **Liu C**, and **Snell D**. A Prospective Analysis of Quality of Life Data and Clinical Toxicity as a Function of Radiation Dose and Volume in Stage I Lung Cancer Patients after SBRT. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E64.

Feldman AM, **Dai Z**, **Zong W**, **Pantelic M**, **Elshaikh MA**, and **Wen N**. Utilizing Semi-Supervised Learning and Image Matting in Combination with Mask R-CNN for Accurate Dominant Intraprostatic Lesion Identification and Segmentation on Multiparametric-MRI. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e257.

Hadied M, Kherallah R, and **Schwartz S**. Partial splenic artery embolization for idiopathic warm autoimmune hemolytic anemia refractory to medical therapy. *Journal of Vascular and Interventional Radiology* 2020; 31(3): S178.

Hines J, **Floyd M**, **Ismail R**, **Le P**, **Grafton G**, **Kelly B**, **Hegab S**, and **Awdish RL**. Clot distribution in pulmonary embolism does not influence right ventricular recovery. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Hughes CL, **Lee J**, **Coriasso N**, **Alalwan Y**, **Aljamal A**, **Wang DD**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Abdelrahim E**. Utility of ECG-gated computed tomography angiography for the improved diagnosis of bicuspid aortic valve disease prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S118-S119.

Jaffar S, Gelovani D, Jeakle W, Bacyinski A, Chagas C, and **Morris A**. Targeted case presentations introducing interventional radiology to medical students interested in primary care specialties. *Journal of Vascular and Interventional Radiology* 2020; 31(3): S206.

Qi Z, **Wang D**, **Lee J**, **Song T**, **Pantelic M**, **Keimig T**, **Nadig J**, **Reeser N**, **Zemke D**, **Seger N**, and **Bevins N**. Prediction of Contrast Enhancement in Left Atrial Appendage (LAA) CT Through A Numerical Modeling Approach. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S36-S37.

Wen N, **Dai Z**, **Carver E**, **Liang E**, **Snyder J**, **Griffith B**, and **Movsas B**. Glioblastoma MR Images Synthesis with Generative Adversarial Network. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E28.

Williams P, and **Schwartz S**. Clinical experience with transjugular intrahepatic portosystemic shunt downsizing in patients with severe hepatic encephalopathy. *Journal of Vascular and Interventional Radiology* 2020; 31(3): S279.

Zong W, Lee J, **Pantelic M**, and **Wen N**. Prediction of Gleason Grade Group of Prostate Cancer on Multiparametric MRI using Deep Machine Learning Models. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E9-E10.

Emergency Medicine

Akarakian R, **White N**, **Nayak M**, **Jaskulka B**, and **Guyer C**. Interrater reliability among primary care sports medicine fellowship application reviewers. *Clinical Journal of Sport Medicine* 2020; 30(2):162.

Allen B, Christenson R, Cohen SA, **Nowak RM**, Wilkerson RG, Mumma BE, Madsen T, **McCord J**, T'Veld MH, Massoomi M, Stopyra JP, Montero C, Weaver M, Yang K, and Mahler SA. European society of cardiology 0-hour/1-hour high-sensitivity troponin algorithm performance in a United States cohort. *Academic Emergency Medicine* 2020; 27: S48.

Allen B, Christenson R, Cohen SA, **Nowak RM**, Wilkerson RG, Mumma BE, Madsen T, **McCord J**, T'Veld MH, Massoomi M, Stopyra JP, Montero C, Weaver M, Yang K, and Mahler SA. One and Done? Performance of a single, low high-sensitivity troponin in a multisite United States cohort. *Academic Emergency Medicine* 2020; 27: S8.

Aurora L, **Snider J**, **Peterson E**, **Bryson T**, **Gui H**, **McCord J**, and **Lanfear DE**. Suppression of tumorigenicity 2 (st2) turbidimetric immunoassay and enzyme-linked immunosorbent assay: Predicting risk in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):883.

Bacharouch A, and **Goyal N**. Utility of amazon-inspired algorithm for resident procedure logging. *Academic Emergency Medicine* 2020; 27: S238.

Baltarowich L, **Dean D**, **Fontana J**, **Akram A**, **Shayya S**, and **Miller J**. Heroin overdose trends in a high volume urban emergency department over a 4-year period: 2014-2017. *Journal of Medical Toxicology* 2020; 16(2):142.

Barton CE, Mauck MC, Linnstaedt SD, Kurz MC, Hendry PL, Pearson C, O'Neil BJ, **Lewandowski C**, Datner E, Liberzon I, Domeier RM, and McLean SA. Immune Profile in the Immediate Aftermath of MVC and its Prediction of APNS. *Biological Psychiatry* 2020; 87(9): S296.

Binz S, **Konowitz N**, **Bennet S**, and **Miller J**. The highest risk for hypoglycemia after treatment for hyperkalemia is in the emergency department. *Academic Emergency Medicine* 2020; 27: S118.

Bussa R, **Sabagha N**, **Chaudhry K**, **Ross J**, **Sridasyam K**, **Theoharis T**, **Johnson LR**, **Klausner HA**, **Miller J**, and **Manteuffel J**. Evaluating electronic medical record based screening protocol on hepatitis c screening and linkage to care. *Academic Emergency Medicine* 2020; 27: S303.

Dagher C, **Modi S**, **Gandhi N**, **Binz S**, and **Rabbani B**. A rare case of spontaneous asymptomatic ventricular tachycardia due to arrhythmogenic right ventricular dysplasia (arvd). *Journal of the American College of Cardiology* 2020; 75(11):2578.

Dandashi J, **Wu Y**, **Farook N**, **Safa R**, **Ahluwalia G**, **Marusca G**, and **Miller J**. Derivation and validation of the ED-SAS score for early prediction of mortality in acute pancreatitis. *Academic Emergency Medicine* 2020; 27: S51.

Dean DJ, Jacobs E, King AM, **Malone E**, and Aaron CK. Characteristics of pediatric lead admissions seen by medical toxicology service. *Journal of Medical Toxicology* 2020; 16(2):124-125.

Dean DJ, **Sabagha N**, **Rose K**, **Weiss A**, **Asmar T**, **Rammal JA**, **Beyer M**, **Bussa R**, Smoot T, and **Miller J**. A pilot trial of topical capsaicin cream for treatment of cannabinoid hyperemesis. *Journal of Medical Toxicology* 2020; 16(2):145-146.

Dean DJ, and Schoenling A. Prolonged and severe CNS depression and truncal ataxia in an accidental pediatric perampanel ingestion. *Journal of Medical Toxicology* 2020; 16(2):124.

Dennis BJ, Kocher KE, Nypaver MM, Bolton M, White E, and **Krupp SS**. Adherence to Canadian computed tomography head rule is associated with improved hospital performance metrics. *Academic Emergency Medicine* 2020; 27: S29.

Do A, **Radjef R**, **Aurora L**, **Singh A**, **Tawney A**, **Kraus D**, **Jacobsen G**, and **McCord J**. Safety of evaluating for acute coronary syndrome in the emergency department using a modified heart score. *Journal of the American College of Cardiology* 2020; 75(11):127.

Farhan S, **Marusca G**, **Bazydlo M**, **Neme K**, **Mikulandric N**, **Stephen J**, **Kortam N**, **Mayur R**, **Pelland D**, **Zagar N**, **Trapp MA**, **Henne E**, **Rohrer S**, **Szymanski S**, **Emole J**, **Peres E**, and **Janakiraman N**. Prospective Randomized Study of Prophylactic Ciprofloxacin Versus Levofloxacin in Hematopoietic Stem Cell Transplant Patients: An Interim Report. *Biology of Blood and Marrow Transplantation* 2020; 26(3): S320.

Fontana J, **Coursen J**, **Hrabec D**, and **Krupp SS**. Three-dimensional printed model for cricothyroidotomy training. *Academic Emergency Medicine* 2020; 27: S334.

Fram G, **Hudson MP**, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. Utility of gender-specific HStroponin I cut-points for AMI diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):64.

Gibbs J, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. A machine learning algorithm to predict acute myocardial infarction over 30 minutes. *Journal of the American College of Cardiology* 2020; 75(11):175.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Hariri IM, Dardas T, Kanwar M, Cogswell R, Gosev I, Molina E, Myers SL, Kirklin JK, Shah P, Pagani FD, and **Cowger JA**. Longterm Survival on LVAD Support: Limitations Driven by Development of Device Complications and End-Organ Dysfunction. *Journal of Cardiac Failure* 2020; 26(10): S143-S144.

Humphries R, Giamarellos-Bourboulis E, Wright DW, **Rivers E**, Steingrub J, Weissman A, Wacker J, Liesenfeld O, Sweeney TE, and Michelson E. A 29 messenger RNA host response signature identifies bacterial and viral infections among emergency department patients. *Academic Emergency Medicine* 2020; 27: S195.

Jacobs ET, **Dean DJ**, Aaron CK, King AM, and **Malone ER**. The caterpillars are coming! *Journal of Medical Toxicology* 2020; 16(2):161.

Jacobs ET, **Dean DJ**, Aaron CK, Tilford BD, Schneider JS, Clark JA, and King AM. First double lung transplant secondary to suspected ecigarette vaping-associated lung injury. *Journal of Medical Toxicology* 2020; 16(2):147-148.

Jaehne AK, **Gill JK**, Foster DM, and **Rivers EP**. Revisiting the impact of endotoxin clearance on survival in the euphrates trial. *Shock* 2020; 53:46.

Kim R, Pan Y, Kurz M, Hendry P, Pearson C, O'Neil B, **Lewandowski C**, Datner E, Liu Y, McLean SA, and Linnstaedt S. Prediction of Co-Morbid Chronic Pain and Posttraumatic Stress: Results of a Pilot Analysis of Clinical and MicroRNA Data From a Longitudinal Cohort of African American Trauma Survivors. *Biological Psychiatry* 2020; 87(9): S212.

Krause A, **Manteuffel J**, and **Miller J**. Testing for sexually transmitted infections using vaginal swabs is noninferior to testing using endocervical swabs. *Academic Emergency Medicine* 2020; 27: S49.

McGrath M, Beaudoin FL, House S, **Lewandowski C**, Hendry PL, Musey PI, Sheikh S, Storrow AB, Jones CW, Swor RA, Kurz MC, Haran JP, Gentile N, Mohiuddin K, Chang AM, Pearson C, Domeier R, Merchant RC, O'Neil BJ, Datner E, and McLean S. Invisible wounds: Adverse posttraumatic neuropsychiatric sequelae among patients discharged from 29 emergency departments. *Academic Emergency Medicine* 2020; 27: S53.

Nowak RM, **Christenson RH**, **Jacobsen G**, **Apple F**, **McCord J**, **Limkakeng A**, **Singer A**, **Peacock WF**, and **DeFilippi CR**. High sensitivity troponin values rapidly rule-out myocardial infarction and allow for ed discharge in a higher risk patient population compared to contemporary practice. *Journal of the American College of Cardiology* 2020; 75(11):66.

Nowak RM, Peacock F, Christenson R, Limkakeng A, **Jacobsen G**, **McCord J**, Apple FS, Singer AJ, and DeFilippi C. Patients with low high-sensitivity troponin i values have similar outcomes whether discharged or hospitalized. *Academic Emergency Medicine* 2020; 27: S89.

Paxton JH, White E, Macy ML, Ehrman RR, O'Neil BJ, **Krupp SS**, Kocher KE, and Nypaver MM. The diagnostic yield of alternative findings on computed tomography for pulmonary embolism. *Academic Emergency Medicine* 2020; 27: S79.

Pearson C, Shawver L, Kazan V, Punches B, **Lewandowski C**, Lyons MS, Beaudoin FL, House S, Hendry PL, Sheikh S, Musey PI, Storrow A, Jones CW, Swor RA, Kurz MC, Haran J, Gentile N, McGrath M, Stevens J, Hudak L, and McLean S. Insights from patient experience: An analysis of free text comments from the advancing understanding of recovery after trauma (AURORA) study. *Academic Emergency Medicine* 2020; 27: S265.

Punches B, Stolz U, Freiermuth CE, Ancona RM, McLean S, Kessler RC, Ressler KJ, Koenen KC, House S, Beaudoin FL, **Lewandowski C**, Hendry PL, Sheikh S, Musey PI, Storrow AB, Jones CW, Swor RA, Kurz MC, Haran JP, and Lyons MS. At-risk opioid use following a trauma-related emergency department visit: The role of emergency department opioid analgesics. *Academic Emergency Medicine* 2020; 27: S14.

Son E, Tungate AS, Mauck MC, Pan Y, Witkemper K, Kurz MC, Hendry PL, Pearson C, **Lewandowski C**, Datner E, Cairns BA, McLean SA, and Linnstaedt SD. Peritraumatic Circulating 17β-Estradiol as a Resiliency Factor for Chronic Pain Outcomes in Women Following Trauma. *Biological Psychiatry* 2020; 87(9): S320.

Szafranski J, Slezak M, **Faraone H**, Kocher KE, Griffith B, **Bussa R**, Tang A, Mitchell G, Nypaver MM, White E, and **Krupp SS**. Implementing the canadian computed tomography head rule in an urban united states emergency department: A retrospective chart review. *Academic Emergency Medicine* 2020; 27: S143-S144.

Taheri C, Ziemba N, Jones C, Agala C, Soward A, House S, Beaudoin F, **Lewandowski C**, Hendry PL, Musey P, Kessler RC, Koenen KC, Ressler K, and McLean SA. Short-Term Mental Health Outcomes Among Individuals Enrolled at the Emergency Department After Physical Assault. *Biological Psychiatry* 2020; 87(9): S222-S223.

Valley TS, Miles L, **Kinni H**, Iwashyna TJ, and Cooke CR. Hospital factors that influence icu admission decision-making: An ethnographic study of six hospitals. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Endocrinology and Metabolism

Farlay D, Rizzo S, Ste-Marie LG, Michou L, Morin SN, **Qiu S**, Chapurlat R, **Rao SD**, and Brown J. Analysis of cortical bone quality in long-term bisphosphonate users with atypical femur fracture (AFF). *Bone Reports* 2020; 13.

Gal R, Cohen N, **Kruger D**, Beck R, Bergenstal R, Calhoun P, **Cushman T**, Hoffmann A, Hood K, Johnson M, McArthur T, Olson B, Weinstock R, and Aleppo G. A study to assess initiation of CGM outside of a clinic. *Diabetes Technology and Therapeutics* 2020; 22:A-40.

Gastroenterology

Ashraf T, **Mendiratta V**, **Gill S**, **Ahmed A**, and **Jafri SM**. LONG TERM USE OF URSODIOL IN POSTLIVER TRANSPLANT PATIENTS INCREASES BILIARY COMPLICATIONS. *Hepatology* 2020; 72:821A822A.

Ashraf T, **Mendiratta V**, **Musleh M**, **Parraga T**, **Alangaden G**, **Brown KA**, and **Jafri SM**. PRIMARY CARE VISITS ARE THE KEY FACTOR IN ENSURING HIGHER VACCINATION RATES IN POST-LIVER TRANSPLANT PATIENTS. A SINGLE CENTER STUDY. *Hepatology* 2020; 72:836A-836A.

Ashraf T, **Siddiqui MB**, **Khorfan K**, and **Moonka D**. LONG-TERM SAFETY OF SIROLIMUS IN LIVER TRANSPLANT RECIPIENTS. *Hepatology* 2020; 72:823A-824A.

Bhurwal A, Mutneja HR, **Haq KF**, Solanki S, Chandra Chakinala R, Bartel MJ, and Brahmbhatt B. Thirtyday incidence of post-ERCP complications: Incidence, risk factors and outcomes. *Gastrointestinal Endoscopy* 2020; 91(6): AB355.

Bhurwal A, Mutneja HR, Shah I, Solanki S, Chakinala RC, **Haq KF**, Bartel MJ, and Brahmbhatt B. De novo post-ERCP fever and de novo post-ERCP bacteremia in patients with history of bariatric surgery– incidence, risk factors and outcomes. *Gastrointestinal Endoscopy* 2020; 91(6): AB520.

Bowlus CL, Assis DN, Wu JL, Levy C, Goldberg DS, Forman L, Schlansky B, Lammert C, Prenner S, Reddy KR, **Gordon SC**, Ahn J, Zepeda JB, Silveira MG, Boyer JL, and Pollock BH. IMPACT OF RACE AND ETHNICITY ON PROGNOSTIC MODELS OF OUTCOMES IN PRIMARY SCLEROSING CHOLANGITIS. *Hepatology* 2020; 72:748A-749A.

Caines A, **Mishra K**, **Stanley S**, **Sturza S**, **Abouljoud MS**, and **Salgia RJ**. THE IMPACT OF HCC LOCOREGIONAL THERAPY ON PERI-OPERATIVE AND POST-TRANSPLANT COMPLICATIONS. *Hepatology* 2020; 72:850A-851A.

Columbus Morales IM, **Kaur R**, **Ashraf T**, **Nimri FM**, **Bhatti S**, and **Kutait A**. A time performance comparison between moderate and deep sedation for screening colonoscopies in obese patients with obstructive sleep apnea. *Gastrointestinal Endoscopy* 2020; 91(6):AB278.

Gordon SC, **Li J**, Moorman AC, Spradling PR, Teshale EH, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Rupp LB**, **Trudeau S**, and **Lu M**. PATIENT CHARACTERISTICS AND EFFICACY OF PANGENOTYPIC DIRECT-ACTING ANTIVIRAL REGIMENS AMONG A COHORT OF CHRONIC HEPATITIS C PATIENTS RECEIVING ROUTINE CLINICAL CARE IN THE US. *Hepatology* 2020; 72:540A-541A.

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A.

Iqbal U, **Haq KF**, Khara HS, Shah RN, Khan MA, **Siddiqui MA**, Hu Y, **Abu Ghanimeh MK**, **Sadiq O**, **Watson A**, **Salgia R**, and **Zuchelli T**. Safety and efficacy of endoscopic transpapillary gallbladder stenting for symptomatic gallbladder disease in cirrhosis: A systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6):AB380.

Iqbal U, Siddique O, Khara HS, Khan MA, **Haq KF**, Solanki S, **Siddiqui MA**, **Zuchelli T**, Shellenberger MJ, and Birk J. Post endoscopic retrograde cholangiopancreatography pancreatitis prevention using topical epinephrine: A systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6): AB387.

Kamal F, Khan MA, Bayoumi M, Marella HK, Khan S, Khan Z, **Haq KF**, Howden CW, Tombazzi C, and Ismail MK. Comparison of per-oral endoscopic myotomy and pneumatic dilation in the management of achalasia: Systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6): AB135-AB136.

Kamal F, Khan MA, Marella HK, Reddy YK, **Haq KF**, Bayoumi M, Akbar H, Heda RP, and Tombazzi C. Urgent vs. Elective colonoscopy for lower gastrointestinal bleeding: Meta-analysis of randomized controlled trials. *Gastrointestinal Endoscopy* 2020; 91(6): AB494.

Kamal F, Khan MA, Reddy YK, **Haq KF**, Heda RP, Tariq R, Ismail MK, Tombazzi C, and Howden CW. Risk factors for delayed post-polypectomy bleeding: Systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6): AB508-AB509.

Kamal F, Khan MA, Talat A, Gilman C, Arshad HMS, **Haq KF**, Khan S, Ahmad D, and Tombazzi C. Endoscopic vs. Surgical resection for gastric gastrointestinal stromal tumors <5cm in size: Systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6): AB594.

Kaur R, **morales IMC**, **Ashraf T**, **Bhatti S**, **Nimri FM**, and **Kutait A**. Assessing respiratory complications in patients with obesity and obstructive sleep apnea undergoing a screening colonoscopy with moderate and deep sedation. *Gastrointestinal Endoscopy* 2020; 91(6): AB530.

Khan MA, Saumoy M, Iqbal U, **Haq KF**, Khan A, Kamal F, **Zuchelli T**, Anwar H, Mohammed Abdul MK, and Sharaiha RZ. Efficacy and safety of self-expandable metal stents for management of bariatric surgery leaks. A systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2020; 91(6): AB231-AB232.

Kitajima T, **Kuno Y**, **Sukkarieh N**, **Suzuki Y**, **Shimada S**, **Flores A**, **Lisznyai E**, **Collins K**, **Yoshida A**, **Rizzari M**, **Moonka D**, **Abouljoud MS**, and **Nagai S**. EFFECTS OF AGING AND ACUTE-ON-CHRONIC LIVER FAILURE ON LIVER TRANSPLANT WAITLIST MORTALITY. *Hepatology* 2020; 72:800A-801A.

Konel J, **Kitajima T**, Arevalo L, Murray N, **Pietrowsky T**, **Venkat D**, **Gonzalez H**, **Samaniego M**, **Abouljoud M**, and **Nagai S**. Assessment of sarcopenia and obesity by bioelectrical impedance analysis in transplant and hepatobiliary populations. *American Journal of Transplantation* 2020; 20:56.

Kuno Y, **Kitajima T**, **Moonka D**, **Sukkarieh N**, **Flores A**, **Lisznyai E**, **Shimada S**, **Suzuki Y**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. LIVER TRANSPLANTATION IN OLDER PATIENTS WITH ACUTE-ON-CHRONIC LIVER FAILURE: AN ANALYSIS OF UNOS REGISTRY. *Hepatology* 2020; 72:819A-820A.

Long CW, Yi-Hsiang H, Young-Suk L, Edward JG, Hoon AS, Owen TTY, Jeong H, Josun HA, Magdy E, Chi-Yi C, Wei-Wen S, John F, Anuj G, Leland YJ, Shalini S, Belinda J, Shuyuan M, **Syed-Mohammed J**, and Harry LAJ. Efficacy and safety of switching to tenofovir alafenamide (TAF) in virally suppressed chronic hepatitis B patients (CHB) with renal impairment: Week 24 results. *Hepatology International* 2020; 14: S35.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A.

Naffouj S, **Selim R**, **Shamaa O**, **Ahmed A**, **Zhou YR**, **Rupp LB**, **Jafri SM**, **Gordon SC**, and **Gonzalez HC**. LIVER TRANSPLANT EVALUATION IN THE PETH ERA. *Hepatology* 2020; 72:176A-176A.

Naffouj S, **Siddiqui MB**, **Shaikh A**, Shabbir N, Shabbir A, and **Salgia RJ**. THE IMPLICATIONS OF CHRONIC OPIOID USE ON POST-TRANSPLANT CLINICAL OUTCOMES: A SYSTEMATIC REVIEW AND META-ANALYSIS. *Hepatology* 2020; 72:852A-852A.

Nagai S, **Nallabasannagari AR**, **Moonka D**, **Reddiboina M**, **Nanna M**, **Chau LC**, **Yeddula S**, **Kitajima T**, **Bajjoka-Francis I**, and **Abouljoud MS**. USE OF NEURAL NETWORK MODELS TO PREDICT MORTALITY/ SURVIVAL AMONG PATIENTS ON THE LIVER TRANSPLANT WAITLIST. *Hepatology* 2020; 72:2A-3A.

Shinn B, Boortalary T, Raijman I, Nieto J, Khara HS, Kumar SV, Confer B, Diehl DL, El Halabi MAAN, Ichkhanian Y, Runge TM, Kumbhari V, Khashab MA, Tyberg A, Shahid HM, Sarkar A, Gaidhane M, Bareket R, Kahaleh M, **Piraka C**, **Zuchelli T**, Law R, Sondhi AR, Kedia P, Robbins JS, Calogero C, Bakhit M, Chiang AL, Schlachterman A, Kowalski TE, and Loren DE. 960 Maximizing success in singlesession edge - predictive factors of stent migration. *Gastrointestinal Endoscopy* 2020; 91(6): AB80.

Siddiqui MB, **Suresh S**, **Abu Ghanimeh M**, **Karrick M**, **Nimri F**, **Musleh M**, **Mendiratta V**, **AlShammari M**, **Simmer S**, **Jou J**, **Russell SM**, **Dang DY**, **Salgia RJ**, and **Zuchelli T**. LIVER INJURY IS ASSOCIATED WITH INCREASED MORBIDITY AND MORTALITY IN COVID-19 PATIENTS. *Hepatology* 2020; 72:287A-287A.

Suresh S, **Siddiqui MB**, **Abu Ghanimeh M**, **Nimri F**, **Karrick M**, **Musleh M**, **Mendiratta V**, **Russell SM**, **Jou J**, **Simmer S**, **Al-Shammari M**, **Dang D**, and **Zuchelli T**. CLINICAL OUTCOMES IN HOSPITALIZED COVID-19 PATIENTS WITH CHRONIC LIVER DISEASE AND CIRRHOSIS. *Hepatology* 2020; 72:263A263A.

Swanson B, **Salgia R**, **El-Bashir J**, and **Parikh S**. Accuracy of agitated saline contrast echocardiography for assessment of intracardiac shunting in preoperative liver transplant patients. *Journal of the American College of Cardiology* 2020; 75(11):1600.

Zhang J, **Suresh S**, Ahmed A, **Piraka C**, **Abu Ghanimeh MK**, **Pompa R**, **Singla S**, **Dang D**, **Isseh M**, **Elbanna A**, **Kaur R**, and **Zuchelli T**. Recurrence rate and risk factors following cold snare endoscopic mucosal resection of polyps ≥20 mm in size. *Gastrointestinal Endoscopy* 2020; 91(6): AB483-AB484.

Graduate Medical Education

Bernardo M, **Jafri S**, and **Ananthasubramaniam K**. Challenges in imaging complex pericardial effusions: Incremental value of multimodality imaging. *Journal of the American College of Cardiology* 2020; 75(11):3395.

Hematology-Oncology

Ahsan B, **Thanikachalam K**, **Robison A**, **Li J**, **Datta I**, **Onwubiko I**, **Khan G**, and **Raoufi M**. Molecular characteristics of pancreatic neuroendocrine tumors, do they correlate with metastases? *Modern Pathology* 2020; 33(3):1687-1688.

Carducci MA, **Wang D**, Habermehl C, Bödding M, Rohdich F, Stinchi S, Karpenko O, Gimmi C, and LoRusso P. A multicenter, open-label, dose-escalation, first-in-man study of MetAP2 inhibitor M8891 in patients with advanced solid tumours. *Annals of Oncology* 2020; 31: S486.

Dinh TK, Mitin T, Hoffman K, **Hwang C**, Karnes RJ, Kishan A, Liauw S, Lloyd S, Potters L, Showalter T, Taira A, Vapiwala N, Zaorsky N, D'Amico A, Nguyen P, and Davis B. Towards Evidence Based Practice: The American Radium Society (ARS) and American College of Radiology (ACR) Appropriate Use Guidelines on Radiation Therapy for Muscle-Invasive Bladder Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E34-E35.

Dziadziuszko R, Zhang Q, Li X, Paul SM, Sugidono M, Mocci S, Kinkolykh A, Shames DS, Archer V, Mathisen MS, Jin DX, **Gadgeel SM**, Peters S, and Mok T. Blood-based genomic profiling of advanced non-small cell lung cancer (aNSCLC) patients (pts) from blood first assay screening trial (BFAST) and comparison with real-world data (RWD). *Annals of Oncology* 2020; 31: S845-S846.

Farhan S, **Marusca G**, **Bazydlo M**, **Neme K**, **Mikulandric N**, **Stephen J**, **Kortam N**, **Mayur R**, **Pelland D**, **Zagar N**, **Trapp MA**, **Henne E**, **Rohrer S**, **Szymanski S**, **Emole J**, **Peres E**, and **Janakiraman N**. Prospective Randomized Study of Prophylactic Ciprofloxacin Versus Levofloxacin in Hematopoietic Stem Cell Transplant Patients: An Interim Report. *Biology of Blood and Marrow Transplantation* 2020; 26(3): S320.

Gadgeel SM, Yan M, Paul SM, Mathisen M, Mocci S, Assaf ZJ, Patel R, Sokol ES, Mok T, Peters S, PazAres L, and Dziadziuszko R. Blood first assay screening trial (BFAST) in patients (pts) with 1L NSCLC: ALK+ cohort updated biomarker analyses. *Annals of Oncology* 2020; 31: S841.

Gartrelle KJ, **Schaff EM**, **Kirsch C**, **Kwon D**, **Ajlouni M**, **Khan G**, **Shah R**, **Dobrosotskaya I**, **Parikh PJ**, and **Siddiqui F**. Racial Disparities Among Pancreatic Adenocarcinoma Patients: A Retrospective Survival Analysis of Non-Metastatic Pancreatic Cancer Patients. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e431.

Ghanem AI, **Schymick MA**, **Bachiri S**, **Khalil R**, **Burmeister C**, **Sheqwara J**, **Chang S**, **Ghanem T**, and **Siddiqui F**. Does Age Impact Outcomes of Oropharyngeal squamous cell carcinoma? *International Journal of Radiation Oncology Biology Physics* 2020; 106(5):1141.

Graff JN, Antonarakis ES, Hoimes CJ, Tagawa ST, **Hwang C**, Kilari D, Ten Tije AJ, Omlin AG, McDermott RS, Vaishampayan UN, Elliott A, Wu H, Kim J, Schloss C, and De Bono JS. Pembrolizumab (pembro) plus enzalutamide (enza) for enza-resistant metastatic castration-resistant prostate cancer (mCRPC): KEYNOTE-199 cohorts 4-5. *Journal of Clinical Oncology* 2020; 38(6).

Hamilton EP, Barve MA, Tolcher AW, Buscema J, Papadopoulos KP, Zarwan C, Anderson CK, Doroshow D, **Wang D**, Huebner D, Jansen VM, Jarlenski D, Mosher R, Kaufman J, Moore KN, and Richardson DL. Safety and efficacy of XMT-1536 in ovarian cancer: A subgroup analysis from the phase I expansion study of XMT-1536, a NaPi2b antibody-drug conjugate. *Annals of Oncology* 2020; 31: S627-S628.

Jänne PA, **Rybkin II**, Spira AI, Riely GJ, Papadopoulos KP, Sabari JK, Johnson ML, Heist RS, Bazhenova L, Barve M, Pacheco JM, Leal TA, Velastegui K, Cornelius C, Olson P, Christensen JG, Kheoh T, Chao RC, and Ou SHI. KRYSTAL-1: Activity and Safety of Adagrasib (MRTX849) in Advanced/ Metastatic Non–Small-Cell Lung Cancer (NSCLC) Harboring KRAS G12C Mutation. *European Journal of Cancer* 2020; 138: S1-S2.

Johnson ML, Ou SHI, Barve M, **Rybkin II**, Papadopoulos KP, Leal TA, Velastegui K, Christensen JG, Kheoh T, Chao RC, and Weiss J. KRYSTAL-1: Activity and Safety of Adagrasib (MRTX849) in Patients with Colorectal Cancer (CRC) and Other Solid Tumors Harboring a KRAS G12C Mutation. *European Journal of Cancer* 2020; 138: S2.

Kumar R, Bhandari S, Ngo P, **Singh SRK**, Malapati SJ, and Rojan A. Clinical outcomes of patient migration in locally advanced rectal cancer from community cancer centers: An analysis of the National Cancer Database. *Journal of Clinical Oncology* 2020; 38(4).

Li Q, and **Guo Y**. Progressive hyperleukocytosis associates with differential syndrome in acute promyelocytic leukemia patients treated with all-trans retinoic acid and arsenic trioxide. *HemaSphere* 2020; 4:838.

Mazieres J, Rittmeyer A, **Gadgeel SM**, Hida T, Gandara D, Cortinovis D, Barlesi F, Yu W, Matheny C, Ballinger M, and Park K. 4-year survival in randomised phase II (POPLAR) and phase III (OAK) studies of atezolizumab (atezo) vs docetaxel (doc) in pre-treated NSCLC. *Annals of Oncology* 2020; 31: S821-S822.

McDermott R, Graff JN, Antonarakis ES, Hoimes CJ, Tagawa ST, **Hwang C**, Kilari D, Tije AJT, Omlin A, Vaishampayan UN, Elliott A, Wu H, Kim J, Schloss C, and De Bono JS. KEYNOTE-199 cohorts 4 and 5: Pembrolizumab (pembro) plus enzalutamide (enza) for enza-resistant metastatic castration-resistant prostate cancer (mCRPC). *European Urology Open Science* 2020; 19: e885-e886.

Oh DY, Arkenau T, Lee KW, Alsina M, Marti FM, Chung IJ, Saif W, **Wang D**, O'Dwyer P, Chau I, Lee MA, Chong E, Hilger-Rolfe J, Cole G, and Kim SY. Phase Ib/II study of ibrutinib (ibr) in combination with cetuximab (cetux) in patients (pts) with previously treated metastatic colorectal cancer (mCRC). *Annals of Oncology* 2020; 31: S428.

Omlin AG, Graff JN, Hoimes CJ, Tagawa ST, **Hwang C**, Kilari D, Ten Tije AJ, McDermott R, Vaishampayan UN, Elliott T, Gerritsen WR, Wu H, Kim J, Schloss C, de Bono JS, and Antonarakis ES. KEYNOTE-199 phase II study of pembrolizumab plus enzalutamide for enzalutamide-resistant metastatic castration-resistant prostate cancer (mCRPC): Cohorts (C) 4 and 5 update. *Annals of Oncology* 2020; 31: S514-S515.

Ou SI, Solomon B, Shaw A, **Gadgeel SM**, Besse B, Soo RA, Abbattista A, Thurm H, Toffalorio F, Wiltshire RJ, and Bearz A. Lorlatinib in patients with ALK+ NSCLC treated beyond initial disease progression. *Annals of Oncology* 2020; 31: S842.

Sak M, Duric N, Pfeiffer R, Sherman M, Littrup P, Simon M, Gorski D, Albrecht T, **Ali H**, Brem R, Fan S, and Gierach G. Tissue sound speed is more strongly associated with breast cancer risk than mammographic percent density: A comparative case-control study. *Cancer Research* 2020; 80(4).

Schaff EM, **Gartrelle KJ**, **Kirsch C**, **Siddiqui F**, **Ajlouni M**, **Dragovic J**, **Aref I**, **Shah MM**, **Kwon D**, e**Dobrosotskya I**, **Shah R**, **Khan G**, and **Parikh PJ**. Magnetic Resonance Guided Stereotactic Ablative Radiation Therapy Versus External Beam RT with Chemotherapy for Pancreatic Cancer: Single Institution Toxicity Analysis of Patients Treated in An Urban Academic Center. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e582-e583.

Schrezenmeier H, Hill A, Piatek CI, de la Tour RP, Lee LWL, Wells R, Brodsky R, Kim JS, Nishimura J, **Kuriakose P**, Pavani R, Liu P, Ortiz S, Lee JW, and Kulasekararaj A. Breakthrough hemolysis in adult patients with paroxysmal nocturnal hemoglobinuria treated with Ravulizumab: Results of a 52-week extension from two phase 3 studies. *Oncology Research and Treatment* 2020; 43(SUPPL 4):177-178.

Simone CB, **Movsas B**, Gore EM, Mohindra P, Vujaskovic Z, **Wang D**, **Ajlouni M**, Menon S, Thompson J, **Brown SL**, Kurman M, Dykstra JC, Rillo L, Ingram M, Serebrenik A, and Kaytor MD. A Phase 1b/2a Study Evaluating the Pharmacokinetics, Safety, and Efficacy of Nanogenistein in Combination with Chemoradiotherapy for Non-small Cell Lung Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S103.

Siu LL, **Wang D**, Hilton J, Geva R, Rasco D, Abraham AK, Markensohn JF, Suttner L, Siddiqi S, Altura RA, and Maurice-Dror C. Initial results of a phase I study of MK-4830, a first-in-class anti– immunoglobulin-like transcript 4 (ILT4) myeloid-specific antibody in patients (pts) with advanced solid tumours. *Annals of Oncology* 2020; 31: S462.

Vaishampayan UN, Elliott T, Omlin AG, Graff JN, Hoimes CJ, Tagawa ST, **Hwang C**, Kilari D, Tije AJT, McDermott RS, Gerritsen WR, Wu H, Kim J, Schloss C, de Bono JS, and Antonarakis ES. Phase II study of pembrolizumab (pembro) plus enzalutamide for enzalutamide (enza)-resistant metastatic castrationresistant prostate cancer (mCRPC): Cohorts (C) 4 and 5 update from KEYNOTE-199. *Annals of Oncology* 2020; 31: S1330.

Infectious Diseases

Ashraf T, **Mendiratta V**, **Musleh M**, **Parraga T**, **Alangaden G**, **Brown KA**, and **Jafri SM**. PRIMARY CARE VISITS ARE THE KEY FACTOR IN ENSURING HIGHER VACCINATION RATES IN POST-LIVER TRANSPLANT PATIENTS. A SINGLE CENTER STUDY. *Hepatology* 2020; 72:836A-836A.

Farhan S, **Marusca G**, **Bazydlo M**, **Neme K**, **Mikulandric N**, **Stephen J**, **Kortam N**, **Mayur R**, **Pelland D**, **Zagar N**, **Trapp MA**, **Henne E**, **Rohrer S**, **Szymanski S**, **Emole J**, **Peres E**, and **Janakiraman N**. Prospective Randomized Study of Prophylactic Ciprofloxacin Versus Levofloxacin in Hematopoietic Stem Cell Transplant Patients: An Interim Report. *Biology of Blood and Marrow Transplantation* 2020; 26(3): S320.

Tsang O, **Brar I**, Spinner C, Robinson P, Roestenberg M, Calmy A, Malvy D, Elboudwarej E, Tian Y, McDonald C, Tan S, Suri V, Hyland R, SenGupta D, Chokkalingam AP, Gaggar A, Osinusi AO, Brainard DM, Kim SW, Cooke G, Shan-Chwen SC, Nicastri E, Castano M, and Chai LYA. IMPACT OF BASELINE ALANINE AMINOTRANSFERASE LEVELS ON THE SAFETY AND EFFICACY OF REMDESIVIR IN MODERATE COVID-19 PATIENTS. *Hepatology* 2020; 72:88A-89A.

Internal Medicine

Abdelrahim E, **Fuller B**, **Coriasso N**, **Alalwan Y**, **Hughes C**, **Aljamal A**, **Wang D**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli T**, **Villablanca P**, **Wyman J**, **O'Neill W**, and **Lee J**. Utility Of Standardized Pre-CTA Hydration Protocol On Patients Referred For Transcatheter Aortic Valve Replacement. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S37.

Al-Abcha A, **Elkhatib L**, Boumegouas M, Kemnic T, and Herzallah K. TCT CONNECT-245 A MetaAnalysis of Drug-Coated Balloon Versus Drug-Eluting Stent in De Novo Small Vessel Coronary Artery Disease. *Journal of the American College of Cardiology* 2020; 76(17): B108-B109.

Alalwan Y, **Coriasso N**, **Aljamal A**, **Hughes CL**, **Abdelrahim E**, **Dee Wang D**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Lee J**. Targeted exclusion of proximal obstructive coronary disease on coronary computed tomography angiography for deferral of routine invasive coronary angiography prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S115.

Aljabban N, Aljabban J, Gurakar M, **Khorfan K**, Syed SA, Gayar A, Khan H, Hadley D, and Saberi B. Novel therapeutic avenues for cholangiocarcinoma treatment: A meta-analysis. *Journal of Clinical Oncology* 2020; 38(4).

Alrayes H, **Radjef R**, and **Tita C**. Cardiogenic shock: A bittersweet diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):2476.

Altibi A, **Al Jebbawi L**, **Patel BD**, **Vuong HG**, and **Masri AM**. Clinicopathological implications of prkar1a mutation in patients with cardiac myxoma: Pooled data analysis from 101 myxoma cases. *Journal of the American College of Cardiology* 2020; 75(11):1195.

Altibi A, **Asghar S**, **Al Jebbawi LN**, **Battisha A**, and **Kak V**. Cryptococcus neoformans automated implantable cardioverter-defibrillator (aicd) endocarditis: A challenging case of a rare fungal endocarditis.
Journal of the American College of Cardiology 2020; 75(11):2973.

Altibi A, **Jebbawi LA**, and **Patel BD**. LVOT obstruction and severe aortic regurgitation caused by anterolateral muscle bundle of the left ventricle: The embryologic remnant of the bulbo-atrioventricular flange. *Journal of the American College of Cardiology* 2020; 75(11):2972.

Ashraf T, **Mendiratta V**, **Gill S**, **Ahmed A**, and **Jafri SM**. LONG TERM USE OF URSODIOL IN POSTLIVER TRANSPLANT PATIENTS INCREASES BILIARY COMPLICATIONS. *Hepatology* 2020; 72:821A822A.

Ashraf T, **Mendiratta V**, **Musleh M**, **Parraga T**, **Alangaden G**, **Brown KA**, and **Jafri SM**. PRIMARY CARE VISITS ARE THE KEY FACTOR IN ENSURING HIGHER VACCINATION RATES IN POST-LIVER TRANSPLANT PATIENTS. A SINGLE CENTER STUDY. *Hepatology* 2020; 72:836A-836A.

Ashraf T, **Siddiqui MB**, **Khorfan K**, and **Moonka D**. LONG-TERM SAFETY OF SIROLIMUS IN LIVER TRANSPLANT RECIPIENTS. *Hepatology* 2020; 72:823A-824A.

Butera B, **Modi K**, **Cowger JA**, and **Russell C**. Eosinophilic myocarditis in a patient with biopsy proven systemic sarcoidosis who was referred for bradycardia. *Journal of the American College of Cardiology* 2020; 75(11):3098.

Butera B, **Modi K**, **Klingler D**, **McCord J**, and **Ananthasubramaniam K**. All that glitters is not gold; due diligence when interpreting pyrophosphate cardiac scans to avoid misdiagnosis of transthyretin cardiac amyloidosis. *Journal of the American College of Cardiology* 2020; 75(11):3132.

Caines A, **Mishra K**, **Stanley S**, **Sturza S**, **Abouljoud MS**, and **Salgia RJ**. THE IMPACT OF HCC LOCOREGIONAL THERAPY ON PERI-OPERATIVE AND POST-TRANSPLANT COMPLICATIONS. *Hepatology* 2020; 72:850A-851A.

Columbus Morales IM, **Kaur R**, **Ashraf T**, **Nimri FM**, **Bhatti S**, and **Kutait A**. A time performance comparison between moderate and deep sedation for screening colonoscopies in obese patients with obstructive sleep apnea. *Gastrointestinal Endoscopy* 2020; 91(6): AB278.

Coriasso N, **Alalwan Y**, **Aljamal A**, **Hughes C**, **Abdelrahim E**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli T**, **Villablanca P**, **Wyman J**, **O'Neill W**, **Wang D**, and **Lee J**. “Transcaval First” Alternative Access Strategy For Transcatheter Aortic Valve Replacement Guided By Computed Tomography Angiography. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S94.

Dagher C, **Modi S**, **Gandhi N**, **Binz S**, and **Rabbani B**. A rare case of spontaneous asymptomatic ventricular tachycardia due to arrhythmogenic right ventricular dysplasia (arvd). *Journal of the American College of Cardiology* 2020; 75(11):2578.

Dandashi J, **Wu Y**, **Farook N**, **Safa R**, **Ahluwalia G**, **Marusca G**, and **Miller J**. Derivation and validation of the ED-SAS score for early prediction of mortality in acute pancreatitis. *Academic Emergency Medicine* 2020; 27: S51.

Do A, **Curran K**, **Hughes C**, **Solomon R**, and **Williams CT**. Predictors of poor outcomes in non-ischemic cardiogenic shock and the use of hospice in this population. *Journal of the American College of Cardiology* 2020; 75(11):822.

Do A, **Radjef R**, **Aurora L**, **Singh A**, **Tawney A**, **Kraus D**, **Jacobsen G**, and **McCord J**. Safety of evaluating for acute coronary syndrome in the emergency department using a modified heart score. *Journal of the American College of Cardiology* 2020; 75(11):127.

Fram G, **Hudson MP**, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. Utility of gender-specific HStroponin I cut-points for AMI diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):64.

Gorgis S, **Ahluwalia G**, **Hana A**, **Fram G**, **Dabbagh M**, **Dhillon D**, **Murad A**, **Khan A**, **O'Neill WW**, **Kaatz S**, and **Wang DD**. To bleed or to clot: Stroke prevention strategies in patients with atrial fibrillation or flutter after bleeding. *Journal of the American College of Cardiology* 2020; 75(11):472.

Gorgis S, **Demertzis Z**, **Malette K**, **Fram G**, **Dobesh K**, **Keteyian S**, **Alaswad K**, **Basir M**, and **Brawner C**. Percutaneous coronary revascularization is associated with higher exercise capacity after myocardial infarction. *Journal of the American College of Cardiology* 2020; 75(11):220.

Gorgis S, **Dhillon D**, **Mishra K**, **Saleh A**, **Basir M**, and **Fuller B**. Aggressive acute coronary thrombosis in ulcerative colitis flare. *Journal of the American College of Cardiology* 2020; 75(11):3302.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Hughes CL, **Lee J**, **Coriasso N**, **Alalwan Y**, **Aljamal A**, **Wang DD**, **Pantelic M**, **Song T**, **Eng MH**, **Frisoli T**, **Villablanca P**, **Wyman JF**, **O'Neill WW**, and **Abdelrahim E**. Utility of ECG-gated computed tomography angiography for the improved diagnosis of bicuspid aortic valve disease prior to transcatheter aortic valve replacement. *Catheterization and Cardiovascular Interventions* 2020; 95: S118-S119.

Ijaz N, Taleb I, Kyriakopoulos CP, **Demetrzis Z**, **Peruri A**, Richins TJ, Dranow L, Tang D, **Nemeh H**, Stehlik J, Koliopoulou AG, Selzman CH, Alharethi R, **Cowger J**, Shah P, and Drakos SG. A Novel Risk Score Predicts Early Right Ventricular Failure after Lvad: A Derivation-validation Multicenter Study. *Journal of Cardiac Failure* 2020; 26(10): S149.

Isseh IN, **Dagher C**, **Sharma S**, **Basir MB**, and **Parikh S**. Escalation of temporary mechanical circulatory support in the setting of deteriorating cardiogenic shock. *Catheterization and Cardiovascular Interventions* 2020; 95: S178.

Isseh IN, **Gorgis S**, **Dagher C**, **Sharma S**, **Basir MB**, and **Parikh S**. Escalating Temporary Mechanical Circulatory Support in Worsening Cardiogenic Shock: Feasibility In Advanced Heart Failure Therapy Candidates. *Journal of Cardiac Failure* 2020; 26(10): S55.

Kaur R, **morales IMC**, **Ashraf T**, **Bhatti S**, **Nimri FM**, and **Kutait A**. Assessing respiratory complications in patients with obesity and obstructive sleep apnea undergoing a screening colonoscopy with moderate and deep sedation. *Gastrointestinal Endoscopy* 2020; 91(6): AB530.

Khan BSA, **Reddy S**, **Zakhour S**, **Sallam O**, and **Shaban H**. Clostridium difficile peritonitis in PD: Transmural migration or intestinal perforation? *American Journal of Kidney Diseases* 2020; 75(4):595596.

Michaels AT, **Peterson E**, **Luzum J**, **Gui H**, Pinto Y, **Sabbah HN**, **Williams LK**, Snider J, and **Lanfear DE**. Biomarker Guided Therapy for Heart Failure with Mid-Range EF. *Journal of Cardiac Failure* 2020; 26(10): S37.

Naffouj S, **Selim R**, **Shamaa O**, **Ahmed A**, **Zhou YR**, **Rupp LB**, **Jafri SM**, **Gordon SC**, and **Gonzalez HC**. LIVER TRANSPLANT EVALUATION IN THE PETH ERA. *Hepatology* 2020; 72:176A-176A.

Naffouj S, **Siddiqui MB**, **Shaikh A**, Shabbir N, Shabbir A, and **Salgia RJ**. THE IMPLICATIONS OF CHRONIC OPIOID USE ON POST-TRANSPLANT CLINICAL OUTCOMES: A SYSTEMATIC REVIEW AND META-ANALYSIS. *Hepatology* 2020; 72:852A-852A.

Nona P, **Dhillon D**, **Mawri S**, **Cowger J**, **Alaswad K**, **Khandelwal AK**, **O'Neill WW**, and **Basir MB**. Inter-hospital transfers in acute myocardial infarction and cardiogenic shock. *Catheterization and Cardiovascular Interventions* 2020; 95: S180.

Shah V, **Lamerato L**, Abraham L, Cappelleri J, DeLor B, **Ellsworth S**, Hegeman-Dingle R, and Park PW. PNS19 Design of study to assess impact of electronic chronic pain questions on patient-reported outcomes and healthcare utilization in a United States general practice setting. *Value in Health* 2020; 23: S287.

Siddiqui MB, **Suresh S**, **Abu Ghanimeh M**, **Karrick M**, **Nimri F**, **Musleh M**, **Mendiratta V**, **AlShammari M**, **Simmer S**, **Jou J**, **Russell SM**, **Dang DY**, **Salgia RJ**, and **Zuchelli T**. LIVER INJURY IS ASSOCIATED WITH INCREASED MORBIDITY AND MORTALITY IN COVID-19 PATIENTS. *Hepatology* 2020; 72:287A-287A.

Suresh S, **Siddiqui MB**, **Abu Ghanimeh M**, **Nimri F**, **Karrick M**, **Musleh M**, **Mendiratta V**, **Russell SM**, **Jou J**, **Simmer S**, **Al-Shammari M**, **Dang D**, and **Zuchelli T**. CLINICAL OUTCOMES IN HOSPITALIZED COVID-19 PATIENTS WITH CHRONIC LIVER DISEASE AND CIRRHOSIS. *Hepatology* 2020; 72:263A263A.

Vishwanath R, Iordanou J, Singh V, **Gorgis S**, **Papukhyan H**, **Hana A**, and **Ananthasubramaniam K**. Defining the Incidence and Patient Profile of Incidental Coronary Artery Calcification On Non-cardiac Computed Tomography: An Opportunity To Identify Subclinical Coronary Atherosclerosis. *Journal of Cardiovascular Computed Tomography* 2020; 14(3): S54.

Zhang J, **Suresh S**, Ahmed A, **Piraka C**, **Abu Ghanimeh MK**, **Pompa R**, **Singla S**, **Dang D**, **Isseh M**, **Elbanna A**, **Kaur R**, and **Zuchelli T**. Recurrence rate and risk factors following cold snare endoscopic mucosal resection of polyps ≥20 mm in size. *Gastrointestinal Endoscopy* 2020; 91(6): AB483-AB484.

Nephrology

Khan BSA, **Reddy S**, **Zakhour S**, **Sallam O**, and **Shaban H**. Clostridium difficile peritonitis in PD: Transmural migration or intestinal perforation? *American Journal of Kidney Diseases* 2020; 75(4):595596.

Srour K, **Khan BSA**, and **Novak J**. Starvation ketoacidosis in patient with muscular dystrophy. *Am J Kidney Dis* 2020; 75(4):640.

Srour K, Lakshmikanth J, **Chitturi C**, and **Faber M**. C3 glomerulonephritis; a rare complication of CLL. *American Journal of Kidney Diseases* 2020; 75(4):640.

Zasuwa G, **Frinak S**, **Uduman J**, and **Yee J**. Automated alert of sustained low-efficiency dialysis (sled) machines. *American Journal of Kidney Diseases* 2020; 75(4):661.

Zasuwa G, **Frinak S**, and **Yee J**. Improving detection of symptomatic, asymptomatic intradialytic hypotension (AIDH), during hemodialysis (HD) with guided automated blood pressure (BP). *American Journal of Kidney Diseases* 2020; 75(4):661.

Neurology

LeWitt PA, Stocchi F, Ferreira JJ, Klepitskaya O, Magalhaes D, Rocha JF, and Soares-da-Silva P. Efficacy of Opicapone at Different Levodopa Regimens up to a Threshold of 600mg/Day Levodopa in Parkinson's Disease Patients with Motor Fluctuations. *Annals of Neurology* 2020; 88: S187-S188.

Raja V, **Giri S**, Hamid S, **Buekers T**, **Munkarah A**, and **Rattan R**. Role of mitochondrial-STAT3 in promoting chemoresistance by modulating the energy metabolism in ovarian cancer. *Clinical Cancer Research* 2020; 26(13 SUPPL).

Rattan R, **Dimitrova I**, **Udumula MP**, **Buekers TE**, and **Giri S**. Calorie restriction for ovarian cancer reduction. *Gynecologic Oncology* 2020; 159:118-119.

Singh J, and **Ali A**. Reversible cerebral vasoconstriction syndrome presenting with symptoms of intracranial hypotension. *Headache* 2020; 60:134.

Udumula MP, **Dimitrova I**, Sakr S, **Buekers TE**, **Giri S**, and **Rattan R**. Omega-3 lipid metabolites as mediators of metformin's anti-proliferative effect in ovarian cancer. *Gynecologic Oncology* 2020; 159:124.

Neurosurgery

Asmaro K, **Rock J**, and **Craig J**. Vertical vector surgical knot in endoscopic endonasal surgery and repair: An exonasal knot for endonasal application. *Journal of Neurological Surgery, Part B Skull Base* 2020; 81.

Park P, **Chang V**, Schwalb JM, **Nerenz D**, **Schultz LR**, Easton RW, Kashlan O, Oppenlander ME, and Aleem I. 145. The impact of Michigan's new opioid prescribing laws on spine surgery patients: analysis of the Michigan Spine Surgery Improvement Collaborative (MSSIC). *Spine Journal* 2020; 20(9): S71-S72.

Pham T, **Kole M**, **Tang X**, **Elshaikh M**, and **Dimitrova I**. Serum CA-125 as a Predictor of Radiologic Evidence of Metastatic Disease in Type 2 Endometrial Cancer. *Gynecologic Oncology* 2020; 158(1): e14e15.

Raffee S, **Griffin M**, **Massie L**, **Basheer A**, **Tundo K**, **Brown A**, **Air E**, and **Atiemo H**. Lower urinary tract symptoms in women with spinal pathologies: a prospective prevalence study. *Neurourology and Urodynamics* 2020; 39: S198-S199.

Wen N, **Dai Z**, **Carver E**, **Liang E**, **Snyder J**, **Griffith B**, and **Movsas B**. Glioblastoma MR Images Synthesis with Generative Adversarial Network. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E28.

Nursing

Alanee SR, Roumayah Z, Deebajah M, **Peabody JO**, Mora R, **Guevara J**, Francisco B, and Patterson BK. Adaptive genetic algorithms combined with high sensitivity single cell-based technology derived urine-based score to differentiate between high-grade and low-grade transitional cell carcinoma of the bladder. *Journal of Clinical Oncology* 2020; 38(6).

Brazelton T. A Program Evaluation of the Hospital Elder Life Program in a Community Teaching Hospital. *Journal of the American Geriatrics Society* 2020; 68: S205-S205.

Fram G, **Hudson MP**, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. Utility of gender-specific HStroponin I cut-points for AMI diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):64.

Gartrelle KJ, **Schaff EM**, **Kirsch C**, **Kwon D**, **Ajlouni M**, **Khan G**, **Shah R**, **Dobrosotskaya I**, **Parikh PJ**, and **Siddiqui F**. Racial Disparities Among Pancreatic Adenocarcinoma Patients: A Retrospective Survival Analysis of Non-Metastatic Pancreatic Cancer Patients. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e431.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Obstetrics, Gynecology, and Women's Health Services

Chan CW, **Eisenstein DI**, **Abood J**, **Chavali N**, **Arun J**, and Gonte M. Effectiveness of Hysteroscopic Morcellation of Endometrial Polyps Compared to Traditional Technique: A Comparison of Disease Recurrence. *Journal of Minimally Invasive Gynecology* 2020; 27(7): S142.

Cook AE, **Khalil R**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Impact of Different Adjuvant Management Strategies on Survival Endpoints in Women with Early Stage Uterine Serous Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e481.

Elshaikh MA, **Aref I**, **Ghanem AI**, **Khalil R**, **Burmeister C**, and **Hanna RK**. Quantification of Recurrence Risk Based on Number of Adverse Prognostic Factors in Women with Early Stage Uterine Endometrioid Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e499-e500.

Ghanem AI, **Aref I**, **Khalil R**, **Burmeister C**, **Hanna RK**, and **Elshaikh MA**. Does the Time to Adjuvant Radiotherapy Impact Outcomes in Women with Stage III Uterine Cancer? *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e478.

Hathout L, Wang Y, **Elshaikh MA**, **Dimitrova I**, Damast S, Li JY, Fields EC, Beriwal S, Keller A, Kidd EA, Usoz M, Jolly S, Jaworski E, Leung EW, Donovan E, Taunk NK, Russo AL, Lea JS, Albuquerque KV, and Lee LJ. Does Sequencing of Adjuvant Therapy Influence Outcome for Stage IIIC Endometrial Carcinoma? A Multi-institutional Analysis. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S50-S51.

Pham T, **Kole M**, **Tang X**, **Elshaikh M**, and **Dimitrova I**. Serum CA-125 as a Predictor of Radiologic Evidence of Metastatic Disease in Type 2 Endometrial Cancer. *Gynecologic Oncology* 2020; 158(1): e14e15.

Raffee S, **Griffin M**, **Massie L**, **Basheer A**, **Tundo K**, **Brown A**, **Air E**, and **Atiemo H**. Lower urinary tract symptoms in women with spinal pathologies: a prospective prevalence study. *Neurourology and Urodynamics* 2020; 39: S198-S199.

Raja V, **Giri S**, Hamid S, **Buekers T**, **Munkarah A**, and **Rattan R**. Role of mitochondrial-STAT3 in promoting chemoresistance by modulating the energy metabolism in ovarian cancer. *Clinical Cancer Research* 2020; 26(13 SUPPL).

Rattan R, **Dimitrova I**, **Udumula MP**, **Buekers TE**, and **Giri S**. Calorie restriction for ovarian cancer reduction. *Gynecologic Oncology* 2020; 159:118-119.

Shah AA, and **Fisher JE**. Ultrasound Guided Laparoscopic Radiofrequency Ablation for Very Large MultiFibroid Uterus. *Journal of Minimally Invasive Gynecology* 2020; 27(7): S59-S60.

Shah AA, and **Fisher JE**. Concomitant Use of Laparoscopic Radiofrequency Ablation with Hysteroscopic Myomectomy for Large, Multi-Fibroid Uterus. *Journal of Minimally Invasive Gynecology* 2020; 27(7): S99.

Udumula MP, **Dimitrova I**, Sakr S, **Buekers TE**, **Giri S**, and **Rattan R**. Omega-3 lipid metabolites as mediators of metformin's anti-proliferative effect in ovarian cancer. *Gynecologic Oncology* 2020; 159:124.

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Prognostic Impact of Time Interval Between Hysterectomy and Initiation of Adjuvant Radiation Treatment in Women with Early-Stage Endometrial Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3):
e472.

Ophthalmology and Eye Care Services

Dulchavsky M, **Skarf B**, Frame D, Marsh RA, and Walkovich K. Non-arteritic anterior ischemic optic neuropathy in a patient with xiap deficiency: Expanding the inflammatory ocular findings in x-linked lymphoproliferative disorders. *Journal of Clinical Immunology* 2020; 39: S119-S120.

Orthopaedics/Bone and Joint Center

Akarakian R, **White N**, **Nayak M**, **Jaskulka B**, and **Guyer C**. Interrater reliability among primary care sports medicine fellowship application reviewers. *Clinical Journal of Sport Medicine* 2020; 30(2):162.

Kuhlmann NA, **Taylor KA**, **Franovic S**, Zuckerman JD, Roche CP, Schoch BS, Wright TW, Flurin PH, Carofino BC, and **Muh SJ**. Acute Reverse Total Shoulder Arthroplasty Treatment for Proximal Humerus Fracture Displays Equal or Superior Outcomes to Delayed Treatment. *Journal of Shoulder and Elbow Surgery* 2020; 29(4): e161.

Singleton IM, **Garfinkel R**, Temkit H, and Belthur MV. Determinants of caregiver satisfaction in pediatric orthopedics. *Journal of Investigative Medicine* 2020; 68(1): A124.

Otolaryngology – Head and Neck Surgery

Asmaro K, **Rock J**, and **Craig J**. Vertical vector surgical knot in endoscopic endonasal surgery and repair: An exonasal knot for endonasal application. *Journal of Neurological Surgery, Part B Skull Base* 2020; 81.

Ghanem A, **Schymick M**, **Khalil R**, **Williams A**, and **Siddiqui F**. Does the use of Marijuana Impact Outcomes in Patients with Squamous Cell Carcinoma of the Oropharynx? *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E42.

Ghanem AI, **Schymick MA**, **Bachiri S**, **Khalil R**, **Burmeister C**, **Sheqwara J**, **Chang S**, **Ghanem T**, and **Siddiqui F**. Does Age Impact Outcomes of Oropharyngeal squamous cell carcinoma? *International Journal of Radiation Oncology Biology Physics* 2020; 106(5):1141.

Leonard-Murali S, **Ivanics T**, **Nasser H**, **Tang A**, and **Singer M**. Intraoperative nerve monitoring in thyroidectomies for malignancy: Does it matter? *Annals of Surgical Oncology* 2020; 27: S58.

Margalit D, Sacco A, Bakst R, Beadle B, Beitler J, **Chang S**, Chen A, Cooper J, Galloway T, Koyfman S, Ridge J, Robbins J, Truong MT, Tsai CJ, Yom S, and **Siddiqui F**. Postoperative Therapy for Resected Squamous Cell Carcinoma of the Head and Neck (SCCHN): Initial Findings of an American Radium Society (TM) (ARS) Appropriate Use Criteria Systematic Review (SR). *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E44.

Tsai CJ, Galloway T, Beitler J, Cooper J, Bakst R, Ridge J, Beadle B, Robbins J, Chen A, Sacco A, **Chang S**, Truong M, Koyfman S, Yom S, and **Siddiqui F**. Ipsilateral Radiation for Squamous Cell Carcinoma of the Tonsil: Summary of Findings and Controversies from the ARS Appropriate Use Criteria Expert Panel on Tonsil Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E41-E42.

Williams A, Miller MK, and **Olex M**. The missing link: Health literacy and cognitive function in treatment adherence in head and neck cancer. *Psycho-Oncology* 2020; 29:69.

Pathology and Laboratory Medicine

Ahsan B, **Thanikachalam K**, **Robison A**, **Li J**, **Datta I**, **Onwubiko I**, **Khan G**, and **Raoufi M**. Molecular characteristics of pancreatic neuroendocrine tumors, do they correlate with metastases? *Modern Pathology* 2020; 33(3):1687-1688.

Al-Obaidy K, Eble J, Cheng L, Nassiri M, **Williamson S**, Idrees M, and Grignon D. Recurrent kras mutation is an early event in the development of papillary renal neoplasm with reverse polarity. *Modern Pathology* 2020; 33(3):846.

Al-Obaidy K, **Williamson S**, Alruwaii F, Idrees M, and Ulbright T. Hepatoid yolk sac tumor (HYST), hepatocellular carcinoma (HCC) and hepatocytic teratoma (HT): A morphologic and immunohistochemical (IHC) study of 31 cases. *Modern Pathology* 2020; 33(3):847-848.

Alhamar M, **Alkamachi B**, **Mehrotra H**, **Sanchez J**, **Schultz D**, and **Chitale D**. Prognosis and categorization of HER2 fluorescent in-situ hybridization (FISH) results in patients with invasive breast cancer who received HER2 targeted agents: Analysis of 226 patients. *Modern Pathology* 2020; 33(3):100-101.

Alhamar M, **Gupta N**, **Oyedeji O**, **Hogan K**, **Sood A**, **Arora S**, **Schultz D**, **Jeong W**, **Williamson S**, **Menon M**, and **Hassan O**. Precision prostatectomy: Analysis of surgical pathology findings of a promising and novel surgical approach for patients with low to intermediate-risk prostate cancer. *Modern Pathology* 2020; 33(3):850-852.

Alhamar M, **Hassan O**, **Sood A**, **Arora S**, **Jeong W**, **Williamson S**, **Menon M**, and **Gupta N**. Histopathologic features of prostate cancer in patients who underwent seminal vesicle-sparing radical prostatectomy: A novel surgical approach. *Modern Pathology* 2020; 33(3):849-850.

Alkamachi B, **Alhamar M**, **Mehrotra H**, **Sanchez J**, **Schultz D**, and **Chitale D**. Evaluation of HER2 fluorescent in-situ hybridization (FISH) status in 274 patients with invasive breast cancer: Comparison of the last 3 ASCO/CAP guidelines for fish interpretation and its effect on HER2 status classification. *Modern Pathology* 2020; 33(3):102.

Alkamachi B, **Zhu S**, **Elshaikh M**, and **Allo G**. Prognostic significance of depth and pattern of cervical stromal invasion in type 1 endometrial carcinoma. *Modern Pathology* 2020; 33(3):1005-1006.

Dhillon J, **Williamson S**, Desai S, Menon S, Shah R, Sirohi D, Balzer B, Varma M, Luthringer D, Nigam L, Roy P, Kaushal S, Midha D, Aron M, Jain K, Naik S, Baisakh M, Kini L, Sharma S, Sable M, Jain E, Samra S, Ro J, Osunkoya AO, Vankalakunti M, Parwani A, Gopalan A, Magi-Galluzzi C, and Mohanty S. Reporting trends, practices, and resource utilization in neuroendocrine tumors of the prostate gland: A survey of genitourinary (GU) pathologists. *Modern Pathology* 2020; 33(3):880.

Fang H, Yabe M, Zhang X, Kim Y, **Shen Y**, Shao L, Ji Y, Wu X, Zheng G, Shen Q, Yuan Y, He R, Chen D, Medeiros LJ, and Hu S. Myelodysplastic syndrome with t(6;9)(p22;q34.1) categorized as acute myeloid leukemia: A large multicenter study of 105 cases. *Modern Pathology* 2020; 33(3):1281.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Mehrotra H, Favazza L, Kezlarian B, Fowler R, Hanson N, and **Tibbetts R**. Resolution of a modified CDC definition for carbapenem resistant enterobacteriaceae (CRE) using a rapid multiplex, cartridge-based molecular assay for the confirmation of carbapenemase genes. *Modern Pathology* 2020; 33(3):18801881.

Onwubiko I, **Rodgers S**, **Oyedeji O**, **Taneja K**, **Hassan O**, **Gupta N**, and **Williamson S**. Metastatic carcinoma suggestive of urothelial carcinoma in the absence of known high-stage urothelial carcinoma: Analysis of clinical and pathologic parameters. *Modern Pathology* 2020; 33(3):950.

Smith S, McKenney J, Paner G, Al-Ahmadie H, Aron M, Berney D, Cheville J, Colecchia M, Compérat E, da Cunha I, Hansel D, Hes O, Hirsch M, Jimenez R, Kaushal S, Kuroda N, Kench J, Kryvenko O, LopezBeltran A, Luthringer D, Magi-Galluzzi C, Mehra R, Menon S, Rao P, Sangoi A, Schultz L, Simko J, Stohr B, Hoon Tan P, Tsuzuki T, Varma M, **Williamson S**, Zhou M, Zynger D, Moch H, Netto GJ, True L, Ro J, Trpkov K, Montironi R, Srigley J, Humphrey P, Epstein J, Reuter V, and Amin M. Urothelial dysplasia:
Diagnostic value in clinical practice 20 years since the 1998 who/isup consensus. *Modern Pathology* 2020; 33(3):977-978.

Taneja K, and **Williamson S**. Persistent challenges in nuclear grading of clear cell renal cell carcinoma. *Modern Pathology* 2020; 33(3):980-981.

Vijayanarayanan A, **Shaw B**, **Hogan K**, **Inamdar K**, and **Menon M**. The need for rapid cytogenetics in the era of vyxeos therapy for acute myeloid leukemia with myelodysplasia related changes (aml-mrc). *Modern Pathology* 2020; 33(3):1402.

Wang Y, **Stone C**, and **Mukherjee A**. Extracranial metastasis of malignant meningioma: A case report and review of literature. *Journal of Neuropathology and Experimental Neurology* 2020; 79(6):706.

Williamson S, Al-Obaidy K, Smith S, Phillips C, Przybycin C, and Grignon D. Distal tubular hyperplasia: A novel form of renal tubular proliferation distinct from papillary adenoma. *Modern Pathology* 2020; 33(3):991-992.

Wu J, **Deebajah M**, Lai Z, Micale M, and Yu L. Utilization of deep neural network in recognition of bcr/abl gene rearrangements in fluorescence in situ hybridization images. *Modern Pathology* 2020; 33(3):14931494.

Zarbo R, **Schmidt M**, **Althaver N**, **Whiteley L**, **Gupta N**, **Chitale D**, and **Goerke D**. Histomorphologic, immunohistochemical and molecular validation of 2.5-hour processed large specimens/tumor resections with tissue-tek xpress x120. *Modern Pathology* 2020; 33(3):1685.

Pediatrics

Zoratti E, Panzer A, **Sitarik A**, **Jones K**, **Wegienka G**, **Havstad S**, Lukacs N, Boushey H, **Johnson CC**, Ownby D, and Lynch S. Prenatal Indoor Dog Exposure and Early Life Gut Microbiota in the Microbes, Asthma, Allergy and Pets Birth Cohort. *Journal of Allergy and Clinical Immunology* 2020; 145(2): AB185.

Pharmacy

Attar D, **Lekura J**, **Kalus JS**, **Al-Darzi W**, **Williams CT**, and **Grafton GF**. Impact of A Pharmacist-Led Heart Failure Clinic on Guideline-Directed Medical Therapy. *Journal of Cardiac Failure* 2020; 26(10): S129.

Bouwma A, **Mlynarek M**, **Peters M**, **Procopio V**, and **Martz C**. Surgical intensive care unit pain management in the era of intravenous opioid shortages. *Critical Care Medicine* 2020; 48:23.

Dean DJ, **Sabagha N**, **Rose K**, **Weiss A**, **Asmar T**, **Rammal JA**, **Beyer M**, **Bussa R**, Smoot T, and **Miller J**. A pilot trial of topical capsaicin cream for treatment of cannabinoid hyperemesis. *Journal of Medical Toxicology* 2020; 16(2):145-146.

Farhan S, **Marusca G**, **Bazydlo M**, **Neme K**, **Mikulandric N**, **Stephen J**, **Kortam N**, **Mayur R**, **Pelland D**, **Zagar N**, **Trapp MA**, **Henne E**, **Rohrer S**, **Szymanski S**, **Emole J**, **Peres E**, and **Janakiraman N**. Prospective Randomized Study of Prophylactic Ciprofloxacin Versus Levofloxacin in Hematopoietic Stem Cell Transplant Patients: An Interim Report. *Biology of Blood and Marrow Transplantation* 2020; 26(3): S320.

Plastic Surgery

Rama S, **Atisha D**, Evangelista M, **Cannella C**, **Barry R**, Ghosh S, **Luker J**, **Chen Y**, Zhu S, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. The Effect of Oncoplastic Reduction on The Incidence of Post-Operative Lymphedema in Breast Cancer Patients Undergoing Lumpectomy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e45.

Zhu S, **Atisha D**, **Evangelistia M**, **Barry R**, **Rama S**, Ghosh S, **Cannella C**, **Chen Y**, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. Factors Associated with Chronic Breast Lymphedema After Adjuvant Radiation in Women Undergoing Breast Conservation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e32.

Public Health Sciences

Ahsan B, **Thanikachalam K**, **Robison A**, **Li J**, **Datta I**, **Onwubiko I**, **Khan G**, and **Raoufi M**. Molecular characteristics of pancreatic neuroendocrine tumors, do they correlate with metastases? *Modern Pathology* 2020; 33(3):1687-1688.

Aurora L, **Snider J**, **Peterson E**, **Bryson T**, **Gui H**, **McCord J**, and **Lanfear DE**. Suppression of tumorigenicity 2 (st2) turbidimetric immunoassay and enzyme-linked immunosorbent assay: Predicting risk in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):883.

Bryson T, **Debbs JC**, **She R**, **Gui H**, **Luzum JA**, **Zeld N**, **Brawner CA**, **Keteyian SJ**, **Ehrman JK**, **Williams LK**, and **Lanfear DE**. A single nucleotide polymorphism within the rxra gene predicts a favorable response to exercise in heart failure. *Journal of the American College of Cardiology* 2020; 75(11):1012.

Cook A, **Khalil R**, **Burmeister C**, and **Elshaikh M**. The Impact of Different Adjuvant Managements on Survival Endpoints in Women with Adequate Surgical Staging Early Stage Uterine Serous Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E36.

Cook AE, **Khalil R**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Impact of Different Adjuvant Management Strategies on Survival Endpoints in Women with Early Stage Uterine Serous Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e481.

Debbs J, **Bryson TD**, **Zeld N**, **Aurora L**, **Gui H**, **Luzum JA**, **Peterson E**, **She R**, **Williams LK**, and **Lanfear DE**. Somalogic st2 and ntprobnp assays predict heart failure mortality as effectively as the elisa assay. *Journal of the American College of Cardiology* 2020; 75(11):1091.

Do A, **Radjef R**, **Aurora L**, **Singh A**, **Tawney A**, **Kraus D**, **Jacobsen G**, and **McCord J**. Safety of evaluating for acute coronary syndrome in the emergency department using a modified heart score. *Journal of the American College of Cardiology* 2020; 75(11):127.

Elshaikh MA, **Aref I**, **Ghanem AI**, **Khalil R**, **Burmeister C**, and **Hanna RK**. Quantification of Recurrence Risk Based on Number of Adverse Prognostic Factors in Women with Early Stage Uterine Endometrioid Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e499-e500.

Farhan S, **Marusca G**, **Bazydlo M**, **Neme K**, **Mikulandric N**, **Stephen J**, **Kortam N**, **Mayur R**, **Pelland D**, **Zagar N**, **Trapp MA**, **Henne E**, **Rohrer S**, **Szymanski S**, **Emole J**, **Peres E**, and **Janakiraman N**. Prospective Randomized Study of Prophylactic Ciprofloxacin Versus Levofloxacin in Hematopoietic Stem Cell Transplant Patients: An Interim Report. *Biology of Blood and Marrow Transplantation* 2020; 26(3): S320.

Fram G, **Hudson MP**, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. Utility of gender-specific HStroponin I cut-points for AMI diagnosis. *Journal of the American College of Cardiology* 2020; 75(11):64.

Ghanem AI, **Aref I**, **Khalil R**, **Burmeister C**, **Hanna RK**, and **Elshaikh MA**. Does the Time to Adjuvant Radiotherapy Impact Outcomes in Women with Stage III Uterine Cancer? *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e478.

Ghanem AI, **Schymick MA**, **Bachiri S**, **Khalil R**, **Burmeister C**, **Sheqwara J**, **Chang S**, **Ghanem T**, and **Siddiqui F**. Does Age Impact Outcomes of Oropharyngeal squamous cell carcinoma? *International Journal of Radiation Oncology Biology Physics* 2020; 106(5):1141.

Gibbs J, **McCord J**, **Moyer M**, **Jacobsen G**, and **Nowak RM**. A machine learning algorithm to predict acute myocardial infarction over 30 minutes. *Journal of the American College of Cardiology* 2020; 75(11):175.

Gordon SC, **Li J**, Moorman AC, Spradling PR, Teshale EH, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Rupp LB**, **Trudeau S**, and **Lu M**. PATIENT CHARACTERISTICS AND EFFICACY OF PANGENOTYPIC DIRECT-ACTING ANTIVIRAL REGIMENS AMONG A COHORT OF CHRONIC HEPATITIS C PATIENTS RECEIVING ROUTINE CLINICAL CARE IN THE US. *Hepatology* 2020; 72:540A-541A.

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A.

Hana A, **McCord J**, **Hudson MP**, **Cook B**, **Mueller C**, **Miller J**, **Moyer M**, **Akoegbe G**, **Jacobsen G**, and **Nowak RM**. Evaluation of acute myocardial infarction using a change in high-sensitivity cardiac troponin i over 1 hour. *Journal of the American College of Cardiology* 2020; 75(11):19.

Janic B, **Brown S**, Neff R, Liu F, **Bobbitt K**, Mao G, **Chetty I**, **Movsas B**, and **Wen N**. Radiation and Gold Nanoparticle Increase the Expression of Immunogenic Cell Death Markers in MDA MB 231 Breast Cancer Model. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2):E26-E27.

Kalu R, **Tang A**, and **Stefanou A**. Pre-Hospital Admission Adversely Affects Outcomes after Colorectal Cancer Surgery: An Analysis of the American College of Surgeons National Surgical

Quality Improvement Program (ACS NSQIP) Database. *Journal of the American College of Surgeons* 2020; 231(4): e107.

Leonard-Murali S, **Burmeister C**, **Susick L**, **Baker P**, and **Nathanson S**. Where is It? Breast Cancer Location and Associations with Metastasis and Survival. *Journal of the American College of Surgeons* 2020; 231(4): e88-e89.

Leonard-Murali S, **Ivanics T**, **Nasser H**, **Tang A**, and **Singer M**. Intraoperative nerve monitoring in thyroidectomies for malignancy: Does it matter? *Annals of Surgical Oncology* 2020; 27: S58.

Levan S, Lin DL, Stamnes KA, Panzer AR, Fujimura KE, Ownby DR, Lukacs NW, **Zoratti EM**, Boushey HA, **Johnson CC**, and Lynch SV. Gut microbiome derived 12,13 dihome promotes antigen presenting cell dysfunction in vitro and airway allergic inflammation in vivo. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Liang E, **Morris ED**, **Vono J**, **Bazan L**, **Lu M**, Modh A, and **Glide-Hurst C**. Coupling Continuous Positive Airway Pressure (CPAP) and MR-guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S169.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A.

McAllister P, Casciano J, Cohen J, Thompson S, Krasenbaum L, Dotiwala Z, Tangirala K, and **Lamerato L**. PND98 Real World IMPACT of Fremanezumab Treatment on Headache Frequency and Healthcare Resource Use Among US Patients with Episodic or Chronic Migraine. *Value in Health* 2020; 23: S640.

McAllister P, **Lamerato L**, Casciano J, Cohen JM, Thompson S, Krasenbaum L, Dotiwala Z, Tangirala K, and Mauskop A. PND109 Improvements in Patient-Reported Migraine PAIN Intensity and Composite Migraine Symptoms with Fremanezumab in the Real World. *Value in Health* 2020; 23: S642.

Michaels AT, **Peterson E**, **Luzum J**, **Gui H**, Pinto Y, **Sabbah HN**, **Williams LK**, Snider J, and **Lanfear DE**. Biomarker Guided Therapy for Heart Failure with Mid-Range EF. *Journal of Cardiac Failure* 2020; 26(10): S37.

Naffouj S, **Selim R**, **Shamaa O**, **Ahmed A**, **Zhou YR**, **Rupp LB**, **Jafri SM**, **Gordon SC**, and **Gonzalez HC**. LIVER TRANSPLANT EVALUATION IN THE PETH ERA. *Hepatology* 2020; 72:176A-176A.

Nasser H, **Bensenhaver J**, Antonelli L, **Susick LL**, **Divine G**, and **Petersen L**. Breast cancer patients are interested in telemedicine. *Annals of Surgical Oncology* 2020; 27: S162-S163.

Nowak RM, **Christenson RH**, **Jacobsen G**, **Apple F**, **McCord J**, **Limkakeng A**, **Singer A**, **Peacock WF**, and **DeFilippi CR**. High sensitivity troponin values rapidly rule-out myocardial infarction and allow for ed discharge in a higher risk patient population compared to contemporary practice. *Journal of the American College of Cardiology* 2020; 75(11):66.

Nowak RM, Peacock F, Christenson R, Limkakeng A, **Jacobsen G**, **McCord J**, Apple FS,

Singer AJ, and DeFilippi C. Patients with low high-sensitivity troponin i values have similar outcomes whether discharged or hospitalized. *Academic Emergency Medicine* 2020; 27: S89.

Park P, **Chang V**, Schwalb JM, **Nerenz D**, **Schultz LR**, Easton RW, Kashlan O, Oppenlander ME, and Aleem I. 145. The impact of Michigan's new opioid prescribing laws on spine surgery patients: analysis of the Michigan Spine Surgery Improvement Collaborative (MSSIC). *Spine Journal* 2020; 20(9): S71-S72.

Rama S, **Atisha D**, Evangelista M, **Cannella C**, **Barry R**, Ghosh S, **Luker J**, **Chen Y**, Zhu S, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. The Effect of Oncoplastic Reduction on The Incidence of Post-Operative Lymphedema in Breast Cancer Patients Undergoing Lumpectomy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e45.

Schaff E, **Bergman D**, **Burmeister C**, **McHargue C**, **Lim H**, and **Siddiqui F**. Impact of Gender and Race on Outcomes of Patients Treated for Mycosis Fungoides with Total Skin Electron Beam Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E47.

Schaff E, **Khalil R**, **Burmeister C**, and **Elshaikh M**. External Beam Versus Brachytherapy as Adjuvant Radiation Therapy Modality in Patients with Stage II Endometrial Cancer: A Single Institution Experience. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E37.

Shah V, **Lamerato L**, Abraham L, Cappelleri J, DeLor B, **Ellsworth S**, Hegeman-Dingle R, and Park PW. PNS19 Design of study to assess impact of electronic chronic pain questions on patient-reported outcomes and healthcare utilization in a United States general practice setting. *Value in Health* 2020; 23: S287.

Turi KN, McKennan CG, Gebretsadik T, Snyder BM, Seroogy CM, Jackson DJ, **Zoratti EM**, **Havstad S**, Ober C, Lynch S, McCauley K, Yu C, Lemanske RF, Gern JE, and Hartert TV. Untargeted metabolomics reveals unconjugated bilirubin and linked pathways in arachidonic acid metabolism and oxidative stress associated with early life recurrent wheeze. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Zanobetti A, Ryan P, Blossom JC, Coull BA, Brokamp C, Heike G, **Johnson CC**, **Havstad S**, **Joseph CL**, Song Y, Mendonca E, Miller RL, Requia W, Hoepner L, Andrews H, Jackson DJ, Wright A, Beamer P, Lothrop N, Hartert TV, **Zoratti EM**, Bacharier L, Seroogy C, Gern JE, Visness C, Martinez F, and Gold DR. Neighborhood socioeconomic exposures and early-life wheeze and incident asthma. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Zhu S, **Atisha D**, **Evangelistia M**, **Barry R**, **Rama S**, Ghosh S, **Cannella C**, **Chen Y**, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. Factors Associated with Chronic Breast Lymphedema After Adjuvant Radiation in Women Undergoing Breast Conservation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e32.

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Prognostic Impact of Time Interval Between Hysterectomy and Initiation of Adjuvant Radiation Treatment in Women with Early-Stage Endometrial Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e472.

Zoratti E, Panzer A, **Sitarik A**, **Jones K**, **Wegienka G**, **Havstad S**, Lukacs N, Boushey H, **Johnson CC**, Ownby D, and Lynch S. Prenatal Indoor Dog Exposure and Early Life Gut Microbiota in the Microbes, Asthma, Allergy and Pets Birth Cohort. *Journal of Allergy and Clinical Immunology* 2020; 145(2): AB185.

Pulmonary and Critical Care Medicine

Bagher-Ebadian H, **Wu Q**, **Ghanem A**, **Brown S**, **Ajlouni M**, **Simoff M**, **Movsas B**, and **Chetty I**. Radiomics Analysis and Unsupervised Self-Organizing-Map Technique to Predict Radiation-Induced Pneumonitis in Patients with Lung Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E49-E50.

Chiu YW, Kao YH, **Simoff MJ**, Ost D, Wagner O, Lavin J, Culbertson R, and Smith DG. PCN137 Costs of biopsy and complications in patients with lung cancer. *Value in Health* 2020; 23: S47.

Folch EE, Pritchett M, Reisenauer J, Ost DE, Majid A, Fernandez-Bussy S, Keyes C, Parikh MS, **DiazMendoza J**, Casal RF, and Simoff MJ. A prospective, multi-center evaluation of the clinical utility of the ion endoluminal system-experience using a robotic-assisted bronchoscope system with shape-sensing technology. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Hines J, **Floyd M**, **Ismail R**, **Le P**, **Grafton G**, **Kelly B**, **Hegab S**, and **Awdish RL**. Clot distribution in pulmonary embolism does not influence right ventricular recovery. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Liang E, **Morris ED**, **Vono J**, **Bazan L**, **Lu M**, Modh A, and **Glide-Hurst C**. Coupling Continuous Positive Airway Pressure (CPAP) and MR-guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S169.

Zhang Y, **Simoff M**, Ost D, Wagner O, Lavin J, Nauman B, Hsieh MC, Wu XC, and Shi L. PCN237 Follow-up of patients with a SPN and no evidence of lung cancer: A data linkage study. *Value in Health* 2020; 23: S64.

Zhang Y, **Simoff M**, Ost D, Wagner O, Lavin J, Nauman E, Hsieh MC, Wu XC, and Shi L. PCN226 Lung cancer patient characteristics from a data linkage study. *Value in Health* 2020; 23: S62.

Zhang Y, **Simoff M**, Ost D, Wagner O, Lavin J, Nauman E, Hsieh MC, Wu XC, and Shi L. PCN349 Data linkage between tumor registry and electronic medical records for patient journey study in lung cancer. *Value in Health* 2020; 23: S86.

Radiation Oncology

Alkamachi B, **Zhu S**, **Elshaikh M**, and **Allo G**. Prognostic significance of depth and pattern of cervical stromal invasion in type 1 endometrial carcinoma. *Modern Pathology* 2020; 33(3):1005-1006.

Amini A, Verma V, Simone C, **Chetty I**, Choi JI, Chun S, Donington J, Edelman M, Higgins K, Kestin L, Mohindra P, **Movsas B**, Rodrigues G, Rosenzweig K, **Rybkin I**, Shepherd A, Slotman B, Wolf A, and Chang J. American Radium Society® (ARS) Appropriate Use Criteria on Radiation Therapy in Oligometastatic or Oligoprogressive Non-Small Cell Lung Cancer (NSCLC). *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E48.

Anker C, **Dragovic J**, Abdel-Wahab M, Bianchi N, Goodman K, Herman J, Jones W, Kennedy T, Konski A, Kumar R, Lee P, Russo S, Sharma N, Small W, Suh W, Tchelebi L, and Jabbour S. American Radium Society (ARS) and American College of Radiology (ACR) Appropriate Use Criteria (AUC) Systematic Review and Guidelines for Operable Esophageal Adenocarcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E31.

Bagher-Ebadian H, **Wu Q**, **Ghanem A**, **Brown S**, **Ajlouni M**, **Simoff M**, **Movsas B**, and **Chetty I**. Radiomics Analysis and Unsupervised Self-Organizing-Map Technique to Predict Radiation-Induced Pneumonitis in Patients with Lung Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E49-E50.

Boike TP, Hochstedler K, **Movsas B**, Stevens CW, Kestin LL, Devisetty K, Dominello MM, Grills IS, Laucis AM, Matuszak MM, Hayman JA, Paximadis P, Schipper M, and Jolly S. Predictors of Early Death or Hospice in Curative Inoperable Lung Cancer Patients. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e120.

Cook A, **Khalil R**, **Burmeister C**, and **Elshaikh M**. The Impact of Different Adjuvant Managements on Survival Endpoints in Women with Adequate Surgical Staging Early Stage Uterine Serous Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E36.

Cook AE, **Khalil R**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Impact of Different Adjuvant Management Strategies on Survival Endpoints in Women with Early Stage Uterine Serous Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e481.

Dalela D, **Sood A**, **Jamil M**, **Arora S**, **Keeley J**, **Palma-Zamora I**, **Rakic N**, **Bronkema C**, **Peabody J**, **Rogers C**, **Menon M**, **Elshaikh M**, and **Abdollah F**. External validity of the Stephenson nomogram predicting the outcomes of prostate cancer patients treated salvage radiotherapy after radical prostatectomy: The importance of genomic data. *European Urology Open Science* 2020; 19: e1058e1059.

Devisetty K, Griffith K, Boike TP, Moran JM, Radawski J, Nettleton JL, Dilworth JT, **Walker EM**, Hayman JA, Jagsi R, Pierce LJ, and Vicini FA. Trends in Close Margin Status and Radiation Therapy Boost in Early Stage Breast Cancer Treated with Breast Conserving Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e37-e38.

Elshaikh MA, **Aref I**, **Ghanem AI**, **Khalil R**, **Burmeister C**, and **Hanna RK**. Quantification of Recurrence Risk Based on Number of Adverse Prognostic Factors in Women with Early Stage Uterine Endometrioid Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e499-e500.

Feldman A, **Devpura S**, **Movsas B**, **Chetty I**, **Cook A**, **Rusu S**, **Brown S**, **Kim J**, **Sun Z**, **Ajlouni M**, mayyas E, Liu J, **Liu C**, and **Snell D**. A Prospective Analysis of Quality of Life Data and Clinical Toxicity as a Function of Radiation Dose and Volume in Stage I Lung Cancer Patients after SBRT. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E64.

Feldman AM, **Dai Z**, **Zong W**, **Pantelic M**, **Elshaikh MA**, and **Wen N**. Utilizing Semi-Supervised Learning and Image Matting in Combination with Mask R-CNN for Accurate Dominant Intraprostatic Lesion Identification and Segmentation on Multiparametric-MRI. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e257.

Gartrelle KJ, **Schaff EM**, **Kirsch C**, **Kwon D**, **Ajlouni M**, **Khan G**, **Shah R**, **Dobrosotskaya I**, **Parikh PJ**, and **Siddiqui F**. Racial Disparities Among Pancreatic Adenocarcinoma Patients: A Retrospective Survival Analysis of Non-Metastatic Pancreatic Cancer Patients. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e431.

Ghanem A, **Schymick M**, **Khalil R**, **Williams A**, and **Siddiqui F**. Does the use of Marijuana Impact Outcomes in Patients with Squamous Cell Carcinoma of the Oropharynx? *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E42.

Ghanem A, Woody N, **Shymick M**, Geiger J, Tsai CJ, Dunlap N, Liu H, Burkey B, Lamarre E, Caudell J, Porceddu S, Lee N, Adelstein D, Koyfman S, and **Siddiqui F**. Does the Incorporation of Chemotherapy to Adjuvant Radiation Skew the Influence of Treatment Package Time in High-risk Oral Cavity Carcinoma? A Multi-institutional Collaborative Study. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E5.

Ghanem A, **Zhu S**, **Morris E**, **Movsas B**, **Chetty I**, and **Glide-Hurst C**. Quantification of Cardiac Substructure Inter fraction Displacement for MR-guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E17-E18.

Ghanem AI, **Aref I**, **Khalil R**, **Burmeister C**, **Hanna RK**, and **Elshaikh MA**. Does the Time to Adjuvant Radiotherapy Impact Outcomes in Women with Stage III Uterine Cancer? *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e478.

Ghanem AI, **Schymick MA**, **Bachiri S**, **Khalil R**, **Burmeister C**, **Sheqwara J**, **Chang S**, **Ghanem T**, and **Siddiqui F**. Does Age Impact Outcomes of Oropharyngeal squamous cell carcinoma? *International Journal of Radiation Oncology Biology Physics* 2020; 106(5):1141.

Harris E, **Walker E**, and Chadha M. Management of Regional Nodes in the Treatment of Breast Cancer: An American Radium Society Appropriate Us Criteria Panel for Breast Cancer Systematic Review and Guideline. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E15-E16.

Hathout L, Wang Y, **Elshaikh MA**, **Dimitrova I**, Damast S, Li JY, Fields EC, Beriwal S, Keller A, Kidd EA, Usoz M, Jolly S, Jaworski E, Leung EW, Donovan E, Taunk NK, Russo AL, Lea JS, Albuquerque KV, and Lee LJ. Does Sequencing of Adjuvant Therapy Influence Outcome for Stage IIIC Endometrial Carcinoma? A Multi-institutional Analysis. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S50-S51.

Janic B, **Brown S**, Neff R, Liu F, **Bobbitt K**, Mao G, **Chetty I**, **Movsas B**, and **Wen N**. Radiation and Gold Nanoparticle Increase the Expression of Immunogenic Cell Death Markers in MDA MB 231 Breast Cancer Model. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E26-E27.

Janic B, Neff R, **Brown SL**, Liu F, Mao G, **Chetty IJ**, **Movsas B**, and **Wen N**. Radiation and Gold Nanoparticle Immunomodulation in MDA MB 231 Mouse Breast Cancer Model. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e545-e546.

Kennedy WR, Srivastava A, Chundury A, Cosper P, Contreras J, Gay HA, **Parikh PJ**, Wang X, Gondim D, Chernock R, and Thorstad WL. HPV-Positive EBV-Negative Nasopharyngeal Cancer: Prevalence and Impact on Outcomes in a Non-Endemic Population. *International Journal of Radiation Oncology Biology Physics* 2020; 106(5):1170.

Kim J, Bassetti MF, Raldow A, Low D, Lee P, Green OL, Chuong MD, and **Parikh PJ**. Focus on Adaptive Treatments for The First Multi-Institutional Online Adaptive Radiation Therapy Trial (SMART) in Pancreas Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e575-e576.

Kumarasiri AD, **Brown SL**, **Elshaikh MA**, **Movsas B**, and **Chetty IJ**. A Prospective Study of the Dosimetric Impact and Quality of Life from Margin Reduction for Patients with Localized Prostate Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e925.

Liang E, **Morris ED**, **Vono J**, **Bazan L**, **Lu M**, Modh A, and **Glide-Hurst C**. Coupling Continuous Positive Airway Pressure (CPAP) and MR-guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S169.

Liu Y, **Venkatesulu BP**, Sharma A, Pollard-Larkin JM, Sadagopan R, Symons J, Neri S, Singh P, Tailor R, Lin S, and Krishnan S. High Dose Rate Radiation does not Protect Normal Tissue in Mice Cardiac and Splenic Models of Lymphopenia and Gastrointestinal Mucosal Injury. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E24.

Margalit D, Sacco A, Bakst R, Beadle B, Beitler J, **Chang S**, Chen A, Cooper J, Galloway T, Koyfman S, Ridge J, Robbins J, Truong MT, Tsai CJ, Yom S, and **Siddiqui F**. Postoperative Therapy for Resected Squamous Cell Carcinoma of the Head and Neck (SCCHN): Initial Findings of an American Radium Society (TM) (ARS) Appropriate Use Criteria Systematic Review (SR). *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E44.

McFarlane M, Hochstedler K, Laucis AM, Sun Y, Chowdhury A, Matuszak MM, Hayman JA, Bergsma DP, Boike TP, Kestin LL, **Movsas B**, Grills IS, Dominello MM, Dess RT, Schonewolf CA, Spratt DE, Pierce LJ, Paximadis P, Jolly S, and Schipper M. Predictors of Pneumonitis after Lung Cancer Radiotherapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S139.

Novick K, Chadha M, Harris E, Daroui P, Freedman G, Gao W, Hunt K, Park C, Rewari A, Suh W, **Walker E**, and Wong J. Utility of Bolus in Post Mastectomy Radiation. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E25-E26.

Novick K, Chadha M, Harris E, Daroui P, Freedman G, Gao W, Hunt K, Park C, Rewari A, Suh W, **Walker E**, and Wong J. Hypofractionation of Post Mastectomy Radiation. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E25.

Pham T, **Kole M**, **Tang X**, **Elshaikh M**, and **Dimitrova I**. Serum CA-125 as a Predictor of Radiologic Evidence of Metastatic Disease in Type 2 Endometrial Cancer. *Gynecologic Oncology* 2020; 158(1): e14e15.

Rama S, **Atisha D**, Evangelista M, **Cannella C**, **Barry R**, Ghosh S, **Luker J**, **Chen Y**, Zhu S, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. The Effect of Oncoplastic Reduction on The Incidence of Post-Operative Lymphedema in Breast Cancer Patients Undergoing Lumpectomy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e45.

Schaff E, **Bergman D**, **Burmeister C**, **McHargue C**, **Lim H**, and **Siddiqui F**. Impact of Gender and Race on Outcomes of Patients Treated for Mycosis Fungoides with Total Skin Electron Beam Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E47.

Schaff E, **Khalil R**, **Burmeister C**, and **Elshaikh M**. External Beam Versus Brachytherapy as Adjuvant Radiation Therapy Modality in Patients with Stage II Endometrial Cancer: A Single Institution Experience. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E37.

Schaff EM, **Gartrelle KJ**, **Kirsch C**, **Siddiqui F**, **Ajlouni M**, **Dragovic J**, **Aref I**, **Shah MM**, **Kwon D**, **Dobrosotskaya I**, **Shah R**, **Khan G**, and **Parikh PJ**. Magnetic Resonance Guided Stereotactic Ablative Radiation Therapy Versus External Beam RT with Chemotherapy for Pancreatic Cancer: Single Institution Toxicity Analysis of Patients Treated In An Urban Academic Center. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e582-e583.

Simone C, Amini A, **Chetty I**, Choi JI, Chun S, Donington J, Edelman M, Higgins K, Kestin L, Mohindra P, **Movsas B**, Rodrigues G, Rosenzweig K, Rybkin I, Shepherd A, Slotman B, Wolf A, and Chang J. American Radium Society (ARS) and American College of Radiology (ACR) Appropriate Use Criteria Systematic Review and Guidelines on Reirradiation for Non-small Cell Lung Cancer (NSCLC). *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E48-E49.

Simone CB, **Movsas B**, Gore EM, Mohindra P, Vujaskovic Z, **Wang D**, **Ajlouni M**, Menon S, Thompson J, **Brown SL**, Kurman M, Dykstra JC, Rillo L, Ingram M, Serebrenik A, and Kaytor MD. A Phase 1b/2a Study Evaluating the Pharmacokinetics, Safety, and Efficacy of Nanogenistein in Combination with Chemoradiotherapy for Non-small Cell Lung Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): S103.

Tsai CJ, Galloway T, Beitler J, Cooper J, Bakst R, Ridge J, Beadle B, Robbins J, Chen A, Sacco A, **Chang S**, Truong M, Koyfman S, Yom S, and **Siddiqui F**. Ipsilateral Radiation for Squamous Cell Carcinoma of the Tonsil: Summary of Findings and Controversies from the ARS Appropriate Use Criteria Expert Panel on Tonsil Cancer. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E41-E42.

Wen N, **Dai Z**, **Carver E**, **Liang E**, **Snyder J**, **Griffith B**, and **Movsas B**. Glioblastoma MR Images Synthesis with Generative Adversarial Network. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E28.

Wen N, **Sun Z**, **Zong W**, **Gardner S**, **Miller B**, **Movsas B**, and **Chetty I**. An AI-based Issue Analyzing Framework for Clinical QA Workflow. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2): E60.

Zhu S, **Atisha D**, **Evangelistia M**, **Barry R**, **Rama S**, Ghosh S, **Cannella C**, **Chen Y**, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. Factors Associated with Chronic Breast Lymphedema After Adjuvant Radiation in Women Undergoing Breast Conservation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3): e32.

Zhu S, **Ghanem AI**, **Morris ED**, and **Glide-Hurst C**. Inter-Fraction Cardiac Substructure Displacement Quantified by Magnetic Resonance (MR)-Guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e324.

Zhu S, **Khalil R**, **Altairy O**, **Burmeister C**, **Dimitrova I**, and **Elshaikh MA**. The Prognostic Impact of Time Interval Between Hysterectomy and Initiation of Adjuvant Radiation Treatment in Women with Early-Stage Endometrial Carcinoma. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e472.

Zong W, Lee J, **Pantelic M**, and **Wen N**. Prediction of Gleason Grade Group of Prostate Cancer on Multiparametric MRI using Deep Machine Learning Models. *International Journal of Radiation Oncology Biology Physics* 2020; 108(2)E9-E10.

Sleep Medicine

Drake C, Yardley J, Pinner K, Perdomo C, and Moline M. Subject-reported perception of long-term effectiveness of lemborexant versus placebo in nonelderly and elderly subgroups. *American Journal of Geriatric Psychiatry* 2020; 28(4)S133-S134.

Hines J, **Floyd M**, **Ismail R**, **Le P**, **Grafton G**, **Kelly B**, **Hegab S**, and **Awdish RL**. Clot distribution in pulmonary embolism does not influence right ventricular recovery. *American Journal of Respiratory and Critical Care Medicine* 2020; 201(1).

Liang E, **Morris ED**, **Vono J**, **Bazan L**, **Lu M**, Modh A, and **Glide-Hurst C**. Coupling Continuous Positive Airway Pressure (CPAP) and MR-guided Radiation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)S169.

Surgery

Abdollah F, Shahait M, **Dalela D**, **Kelly J**, Vapiwala N, and Lee D. External validation of genomic classifier based risk-stratification tool to identify candidates for adjuvant radiation therapy in patients with prostate cancer. *European Urology Open Science* 2020; 19e1048-e1049.

Aljamal AO, **Alalwan Y**, **Coriasso N**, **Hughes C**, **Abdelrahim E**, **Lee JC**, **Wang DD**, **Pantelic M**, **Song T**, **Eng M**, **Frisoli TM**, **Villablanca P**, and **Wyman JF**. Dynamic conformational changes of the left ventricular outflow tract compared to the aortic annulus and implications on transcatheter aortic valve selection and sizing. *Journal of the American College of Cardiology* 2020; 75(11):1491.

Aurora L, **Grafton G**, **Nemeh H**, **Chamogeorgakis T**, **Apostolou D**, **Tanaka D**, and **Cowger J**. Indications for LVAD Explant and Predictors of Mortality after Explant in IMACS. *Journal of Heart and Lung Transplantation* 2020; 39(4)S137-S138.

Bendix S, **Rteil A**, **Potti C**, **Chamogeorgakis T**, **Lace B**, **Woodward A**, and **Kabbani L**. Mycotic Aneurysm After Metallic Foreign Body Ingestion. *Journal of Vascular Surgery* 2020; 72(3)e304-e305.

Bryce K, **Hariri IM**, **Nemeh A**, **St. John G**, and **Cowger JA**. Poor Social Support Confers Worse Survival after MCS. *Journal of Heart and Lung Transplantation* 2020; 39(4)S91.

Gartrelle KJ, **Schaff EM**, **Kirsch C**, **Kwon D**, **Ajlouni M**, **Khan G**, **Shah R**, **Dobrosotskaya I**, **Parikh PJ**, and **Siddiqui F**. Racial Disparities Among Pancreatic Adenocarcinoma Patients: A Retrospective Survival Analysis of Non-Metastatic Pancreatic Cancer Patients. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e431.

Gorgis S, **Demertzis Z**, **Malette K**, **Fram G**, **Dobesh K**, **Keteyian S**, **Alaswad K**, **Basir M**, and **Brawner C**. Percutaneous coronary revascularization is associated with higher exercise capacity after myocardial infarction. *Journal of the American College of Cardiology* 2020; 75(11):220.

Hariri IM, **Hannawi B**, **Grafton G**, **Nemeh HW**, **Chamogeorgakis T**, **Lanfear DE**, **Apostolou D**, **Selektor Y**, **Williams CT**, **Tita C**, **Tanaka D**, Myers SL, Kirklin JK, Pagani FD, and **Cowger JA**. Ventricular Assist Device Patient Phenotypes: What Attributes Describe Long Term Survival? *Journal of Heart and Lung Transplantation* 2020; 39(4)S181-S182.

Ijaz N, Taleb I, Kyriakopoulos CP, **Demetrzis Z**, **Peruri A**, Richins TJ, Dranow L, Tang D, **Nemeh H**, Stehlik J, Koliopoulou AG, Selzman CH, Alharethi R, **Cowger J**, Shah P, and Drakos SG. A Novel Risk Score Predicts Early Right Ventricular Failure after Lvad: A Derivation-validation Multicenter Study. *Journal of Cardiac Failure* 2020; 26(10)S149.

Ivanics T, **Williams P**, **Nasser H**, **Leonard-Murali S**, **Schwartz S**, and **Lin J**. Contemporary Management of Chronic Indwelling Inferior Vena Cava Filters: A Single-Institution Experience. *Journal of Vascular Surgery: Venous and Lymphatic Disorders* 2020; 8(2):325-327.

Kalu R, **Tang A**, and **Stefanou A**. Pre-Hospital Admission Adversely Affects Outcomes after Colorectal Cancer Surgery: An Analysis of the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) Database. *Journal of the American College of Surgeons* 2020; 231(4)e107.

Kitajima T, **Kuno Y**, **Sukkarieh N**, **Suzuki Y**, **Shimada S**, **Flores A**, **Lisznyai E**, **Collins K**, **Yoshida A**, **Rizzari M**, **Moonka D**, **Abouljoud MS**, and **Nagai S**. EFFECTS OF AGING AND ACUTE-ON-CHRONIC LIVER FAILURE ON LIVER TRANSPLANT WAITLIST MORTALITY. *Hepatology* 2020; 72:800A-801A.

Konel J, **Kitajima T**, Arevalo L, Murray N, **Pietrowsky T**, **Venkat D**, **Gonzalez H**, **Samaniego M**, **Abouljoud M**, and **Nagai S**. Assessment of sarcopenia and obesity by bioelectrical impedance analysis in transplant and hepatobiliary populations. *American Journal of Transplantation* 2020; 20:56.

Kuno Y, **Kitajima T**, **Moonka D**, **Sukkarieh N**, **Flores A**, **Lisznyai E**, **Shimada S**, **Suzuki Y**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. LIVER TRANSPLANTATION IN OLDER PATIENTS WITH ACUTE-ON-CHRONIC LIVER FAILURE: AN ANALYSIS OF UNOS REGISTRY. *Hepatology* 2020; 72:819A-820A.

Le QP, **Lozano AM**, and **Hans SS**. Crossover Left Common Femoral to Right Superficial Femoral Artery Bypass Graft Using a Lateral Approach. *Journal of Vascular Surgery* 2020; 72(1)e271.

Leonard-Murali S, **Burmeister C**, **Susick L**, **Baker P**, and **Nathanson S**. Where is It? Breast Cancer Location and Associations with Metastasis and Survival. *Journal of the American College of Surgeons* 2020; 231(4)e88-e89.

Leonard-Murali S, **Ivanics T**, **Nasser H**, **Tang A**, and **Singer M**. Intraoperative nerve monitoring in thyroidectomies for malignancy: Does it matter? *Annals of Surgical Oncology* 2020; 27S58.

Lin JC, **Ranasinghe B**, **Patel A**, and **Rogers CG**. Robot-assisted laparoscopic placement of extravascular stent for nutcracker syndrome. *Journal of Vascular Surgery Cases and Innovative Techniques* 2020; 6(3):346-347.

Nagai S, **Nallabasannagari AR**, **Moonka D**, **Reddiboina M**, **Nanna M**, **Chau LC**, **Yeddula S**, **Kitajima T**, **Bajjoka-Francis I**, and **Abouljoud MS**. USE OF NEURAL NETWORK MODELS TO PREDICT MORTALITY/ SURVIVAL AMONG PATIENTS ON THE LIVER TRANSPLANT WAITLIST. *Hepatology* 2020; 72:2A-3A.

Nahirniak P, **Morton K**, and **Hans SS**. Clinical Patterns, Predictors, and Results of Endograft Limb Occlusion After Endovascular Aneurysm Repair. *Journal of Vascular Surgery* 2020; 72(1)e82.

Nasser H, **Bensenhaver J**, Antonelli L, **Susick LL**, **Divine G**, and **Petersen L**. Breast cancer patients are interested in telemedicine. *Annals of Surgical Oncology* 2020; 27S162-S163.

Patel A, **Grafton G**, **Tita C**, Hannawi B, **Selektor Y**, **Chamogeorgakis T**, **Apostolou D**, **Lanfear DE**, **Williams CT**, **Nemeh HW**, and **Cowger JA**. Survival and Predictors of Mortality in Patients Undergoing RVAD Explant in IMACS. *Journal of Heart and Lung Transplantation* 2020; 39(4)S25-S26.

Pernin V, Legendre C, Büchler M, Oberbauer R, Vincenti F, Viklicky O, Huynh-Do U, **Kim D**, Narvekar P, Hernandez-Gutierrez MP, Bernhardt P, Gharbi H, and Kuypers D. Effect of induction therapy on outcomes of de novo renal transplant recipients receiving everolimus with reduced-dose calcineurin inhibitor: 24-month results from transform study. *Transplant International* 2020; 33:12.

Rama S, **Atisha D**, Evangelista M, **Cannella C**, **Barry R**, Ghosh S, **Luker J**, **Chen Y**, Zhu S, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. The Effect of Oncoplastic Reduction on The Incidence of Post-Operative Lymphedema in Breast Cancer Patients Undergoing Lumpectomy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e45.

Rteil A, **Bendix S**, **Nypaver TJ**, **Weaver MR**, and **Kabbani LS**. Laser Fenestration of Renal Artery in Fenestrated Endograft Repair of Abdominal Aortic Aneurysm. *Journal of the American College of Surgeons* 2020; 231(4)S346-S347.

Rteil A, **Lin J**, **Weaver M**, **Ahsan S**, **Lee A**, and **Kabbani L**. Socioeconomic Status and Clinical Stage of Patients Presenting for Treatment of Varicose Veins. *Journal of Vascular Surgery: Venous and Lymphatic Disorders* 2020; 8(2):328.

Rteil A, Palmer J, **Nypaver T**, **Shepard A**, **Weaver M**, and **Kabbani L**. Treatment of Acute Compartment Syndrome Is an Essential Part of Acute Limb Ischemia Management. *Journal of Vascular Surgery* 2020; 72(1)e155.

Rteil A, **Weaver MR**, **Shepard AD**, **Nypaver TJ**, **Lee A**, and **Kabbani LS**. Long-Term Postoperative Outcomes after Abdominal Aortic Aneurysm Repair. *Journal of the American College of Surgeons* 2020; 231(4)e264-e265.

Sanchez PG, Cantu E, Hartwig M, D'Ovidio F, Machuca T, Whitson B, Daneshmand M, Bermudez C, Mulligan M, D'Cunha J, Weyant M, Lynch W, Garcia J, Caldeira C, **Nemeh H**, Song T, Kreisel D, Jessen M, Camp P, Ramzy D, Griffith B, and Davis D. The NOVEL Study. A Multi-Center Clinical Trial Studying the Safety of Ex Vivo Lung Perfusion. *Journal of Heart and Lung Transplantation* 2020; 39(4)S110.

Schaff EM, **Gartrelle KJ**, **Kirsch C**, **Siddiqui F**, **Ajlouni M**, **Dragovic J**, **Aref I**, **Shah MM**, **Kwon D**, **Dobrosotskaya I**, **Shah R**, **Khan G**, and **Parikh PJ**. Magnetic Resonance Guided Stereotactic Ablative Radiation Therapy Versus External Beam RT with Chemotherapy for Pancreatic Cancer: Single Institution Toxicity Analysis of Patients Treated in An Urban Academic Center. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e582-e583.

Shimada S, **Kitajima T**, **Lisznyai E**, **Suzuki Y**, **Kuno Y**, **Flores A**, **Sukkarieh N**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. FATE OF LIVER AND KIDNEY TRANSPLANT CANDIDATES BEFORE AND AFTER SIMULTANEOUS LIVER-KIDNEY TRANSPLANT ALLOCATION POLICY CHANGE. *Hepatology* 2020; 72:40A-40A.

Suzuki Y, **Kitajima T**, **Flores A**, **Shimada S**, **Kuno Y**, **Lisznyai E**, **Sukkarieh N**, **Collins K**, **Rizzari M**, **Yoshida A**, **Abouljoud MS**, and **Nagai S**. PARADIGM CHANGE IN LIVER TRANSPLANT PRACTICE FOR PATIENTS WITH KIDNEY DYSFUNCTION AFTER THE IMPLEMENTATION OF THE NEW LIVERKIDNEY ALLOCATION POLICY. *Hepatology* 2020; 72:1A-1A.

Varban OA, Bonham AJ, Stricklen A, Ross R, **Carlin AM**, Finks JF, and Ghaferi AA. Am I on Track? Evaluating Patient-Specific Weight Loss after Bariatric Surgery Using an Outcomes Calculator. *Journal of the American College of Surgeons* 2020; 231(4)e1.

Zhu S, **Atisha D**, **Evangelistia M**, **Barry R**, **Rama S**, Ghosh S, **Cannella C**, **Chen Y**, **Bensenhaver J**, **Levin KJ**, and **Walker EM**. Factors Associated with Chronic Breast Lymphedema After Adjuvant Radiation in Women Undergoing Breast Conservation Therapy. *International Journal of Radiation Oncology Biology Physics* 2020; 108(3)e32.

Urology

Alanee SR, Deebajah M, Roumayah Z, **Dabaja A**, **Peabody JO**, and **Menon M**. Detection of significant prostate cancer through magnetic resonance imaging targeted biopsy of PI-RADS3 lesions in African American patients based on prostate specific antigen density threshold of 0.15 ng/ml2: Analysis of patient population from the Vattikuti Urology Institute. *Journal of Clinical Oncology* 2020; 38(6).

Alanee SR, Roumayah Z, Deebajah M, **Peabody JO**, Mora R, **Guevara J**, Francisco B, and Patterson BK. Adaptive genetic algorithms combined with high sensitivity single cell-based technology derived urine-based score to differentiate between high-grade and low-grade transitional cell carcinoma of the bladder. *Journal of Clinical Oncology* 2020; 38(6).

Alhamar M, **Hassan O**, **Sood A**, **Arora S**, **Jeong W**, **Williamson S**, **Menon M**, and **Gupta N**. Histopathologic features of prostate cancer in patients who underwent seminal vesicle-sparing radical prostatectomy: A novel surgical approach. *Modern Pathology* 2020; 33(3):849-850.

Baumgarten L, **Irish V**, **Raffee S**, and **Atiemo H**. Utilization of third line therapy in the urologic management of patients with multiple sclerosis. *Neurourology and Urodynamics* 2020; 39S197-S198.

Bhandari M, Nallabasannagari AR, Reddiboina M, Porter J, **Jeong W**, Mottrie A, Dasgupta P, Challacombe B, Abaza R, Rha KH, Parekh D, Ahlawat R, Capitanio U, Yuvaraja T, Rawal S, Moon D, Buffi's N, Sivaraman A, Maes K, Porpiglia F, Gautam G, Turkeri L, Preethi P, **Menon M**, and **Rogers C**. Predicting intraoperative complications and 30-days morbidity using machine learning techniques for patients undergoing robotic partial nephrectomy (RPN). *European Urology Open Science* 2020; 19e1969-e1970.

Bronkema C, **Arora S**, **Rakic N**, **Sood A**, **Dalela D**, **Keeley J**, **Jamil M**, **Peabody JO**, **Rogers CG**, **Menon M**, and **Abdollah F**. Impact of treatment modality on overall survival (OS) in localized ductal prostate adenocarcinoma (PCa): A national cancer database (NCDB) analysis. *European Urology Open Science* 2020; 19e1659-e1660.

Cone EB, Haeuser L, Reese S, Marchese M, Nabi J, **Abdollah F**, Kilbridge K, and Trinh Q. Checkpoint inhibitor monotherapy is associated with less cardiac toxicity than combination therapy. *European Urology Open Science* 2020; 19e1101.

Cone EB, Modonutti D, Reese S, Marchese M, Nabi J, **Abdollah F**, Kilbridge K, and Trinh QD. Abiraterone is associated with higher odds of cardiac complications compared to enzalutamide. *European Urology Open Science* 2020; 19e880.

Cone EB, Modonutti D, Reese S, Marchese M, Nabi J, **Abdollah F**, Kilbridge K, and Trinh QD. Lower odds of cardiac events for gonadotropic releasing hormone antagonists versus agonists. *European Urology Open Science* 2020; 19e896.

Dalela D, **Sood A**, **Jamil M**, **Arora S**, **Keeley J**, **Palma-Zamora I**, **Rakic N**, **Bronkema C**, **Peabody J**, **Rogers C**, **Menon M**, **Elshaikh M**, and **Abdollah F**. External validity of the Stephenson nomogram predicting the outcomes of prostate cancer patients treated salvage radiotherapy after radical prostatectomy: The importance of genomic data. *European Urology Open Science* 2020; 19e1058e1059.

Kovacevic N, **Sood A**, **Keeley J**, **Dalela D**, **Arora S**, **Palma-Zamora I**, **Jamil M**, **Jeong W**, Trinh QD, **Rogers CG**, **Peabody JO**, **Menon M**, and **Abdollah F**. Identifying patients that may benefit from addition of bicalutamide to salvage radiation therapy in the setting of biochemical failure after radical prostatectomy. *European Urology Open Science* 2020; 19e1063.

Lin JC, **Ranasinghe B**, **Patel A**, and **Rogers CG**. Robot-assisted laparoscopic placement of extravascular stent for nutcracker syndrome. *Journal of Vascular Surgery Cases and Innovative Techniques* 2020; 6(3):346-347.

Raffee S, **Griffin M**, **Massie L**, **Basheer A**, **Tundo K**, **Brown A**, **Air E**, and **Atiemo H**. Lower urinary tract symptoms in women with spinal pathologies: a prospective prevalence study. *Neurourology and Urodynamics* 2020; 39S198-S199.

Sood A, **Keeley J**, **Dalela D**, **Arora S**, **Palma-Zamora I**, **Jamil M**, **Kovacevic N**, **Jeong W**, Trinh QD, **Rogers CG**, **Peabody JO**, **Menon M**, and **Abdollah F**. Does concomitant anti-androgen therapy improve outcomes in patients with recurrent prostate cancer undergoing early salvage radiation therapy. *European Urology Open Science* 2020; 19e1062.

Books and Book Chapters

Endocrinology and Metabolism

Shill JE. "Diabetic Ketoacidosis". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier. 2020**:** 444-446.e441. PMID: Not assigned.

Shill JE. "Hyperglycemic Hyperosmolar Syndrome". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier. 2020**:** 716-717.e711. PMID: Not assigned.

Family Medicine

Casadei K**, and Kiel J. "Triangular Fibrocartilage Complex (TFCC) Injuries". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 30725740. Full Text**

Casadei K, and Kiel J. "Proximal Humeral Epiphysiolysis (Little League Shoulder)". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 30485006. Full Text

Casadei K, and Kiel J. "Anthropometric Measurement". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 30726000. Full Text

Gastroenterology

Ahmed A, and **Zuchelli T**. "Anatomy, Abdomen and Pelvis, Sphincter of Oddi (Hepatopancreatic Sphincter)". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 31855359. Full Text

Internal Medicine

Mrad A, and **Huda N**. "Acute Interstitial Pneumonia (Hamman Rich Syndrome)". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020; Epub ahead of print. PMID: 32119316. Full Text

Nephrology

Andrievskaya M, and **Novak J**. "Hepatorenal Syndrome". Ferri's Clinical Advisor 2020. United States, Elsevier. 2020**:** 667. PMID: Not assigned.

Faber MD, and **Yee J**. "Hyponatremia". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier. 2020**:** 758-761.e751. PMID: Not assigned.

Yee J. "Syndrome of Inappropriate Antidiuresis". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 1332-1334.e1331. PMID: Not assigned.

Karthikeyan V, and **Prashar R**. "Graft-Versus-Host Disease". Ferri's Clinical Advisor 2020.

Ferri FF. United States, Elsevier.2020**:** 598-600.e591. PMID: Not assigned.

Kopyt N, and **Yee J**. "Hyperkalemia". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 7168-7722.e7161. PMID: Not assigned.

Kumbar L. "Hypernatremia". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 726728.e721. PMID: Not assigned.

Reddy ST. "Chronic Kidney Disease". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 338-341.e334. PMID: Not assigned.

Reddy ST. "Hypomagnesemia". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 755757.e751. PMID: Not assigned.

Shaban H. "Rhabdomyolysis". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 12091211.e1201. PMID: Not assigned.

Soman S, and **Chitturi C**. "Cardiorenal Syndrome". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 302.e303-302.e307. PMID: Not assigned.

Uduman J. "Acute Kidney Injury". Ferri's Clinical Advisor 2020. United States, Elsevier.2020**:** 39-44. PMID: Not assigned.

Uduman J. "Acute Tubular Necrosis". Ferri's Clinical Advisor 2020. United States, Elsevier.2020**:** 72.e7472.e75. PMID: Not assigned.

Umanath K. "Ferri's Clinical Advsior 2020". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 595.e593-595.e594. PMID: Not assigned.

Yee J. "Bartter Syndrome". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier.2020**:** 211.e216-211.e217. PMID: Not assigned.

Fadhilah A, **Gabbar A**, and Bokhari AA. "Microsporidium". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 30725851. Full Text

Puckett Y, **Gabbar A**, and Bokhari AA. "Prednisone". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 30521230. Full Text

Orthopaedics/Bone and Joint

Sassack B, and **Carrier JD**. "Anatomy, Back, Lumbar Spine". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020; Epub ahead of print. PMID: 32491548. Full Text

Sattar MH, and **Guthrie ST**. "Anatomy, Back, Sacral Vertebrae". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 31869117. Full Text

Pathology and Laboratory Medicine

Kostiuk M and Burns B. "Trauma Assessment". StatPearls. Treasure Island (FL), StatPearls Publishing Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 32310373. Full Text

Pharmacy

Azzouz A**, and Preuss CV. "Linezolid". StatPearls. Treasure Island (FL), StatPearls Publishing Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 30969615. Full Text**

Pulmonary and Critical Care Medicine

Agarwal AK, and **Huda N**. "Interstitial (Nonidiopathic) Pulmonary Fibrosis". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC.2020; Epub ahead of print.
PMID: 32491697. Full Text

Mrad A, and **Huda N**. "Acute Interstitial Pneumonia (Hamman Rich Syndrome)". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020; Epub ahead of print. PMID: 32119316. Full Text

Surgery

Ahmed S, and Sharman T. "Intestinal Pseudo-Obstruction". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 32809504. Full Text

Altshuler P, **Nahirniak P**, and Welle NJ. "Saphenous Vein Grafts". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 30725720. Full Text

Bennett B, and Akhondi H. "Epiphrenic Diverticula". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 32644536. Full Text

Bennett B, and Rentea RM. "Thymectomy". StatPearls. Treasure Island (FL), StatPearls Publishing Copyright © 2020, StatPearls Publishing LLC.2020. PMID: 33231972.

Czajka ML, and **Pfeifer C**. "Breast Cancer Surgery". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 31971717. Full Text

Hope WW, and **Pfeifer C**. "Laparoscopic Inguinal Hernia Repair". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC.2020. PMID: 28613576. Full Text

Le CK, **Nahirniak P**, Anand S, and Cooper W. "Volvulus". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 28722866. Full Text

Le CK, **Nahirniak P**, and Qaja E. "Cecal Volvulus". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 29262030. Full Text

Manna B, **Nahirniak P**, and Morrison CA. "Wound Debridement". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 29939659. Full Text

Mathew G, and **Pfeifer C**. "Gallbladder, Cholecystitis, Clostridial (Gangrenous, Emphysematous)". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 28846291. Full Text

Nahirniak P, and Tuma F. "Adhesiolysis". StatPearls. Treasure Island (FL), StatPearls Publishing Copyright © 2020, StatPearls Publishing LLC.2020. PMID: 33085366. Full Text

Regelsberger-Alvarez CM, and **Pfeifer C**. "Richter Hernia". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 30725912. Full Text

Rountree KM, Barazi H, and Aulick NF. "Mondor Disease". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 30855866. Full Text

Rountree KM, and Lopez PP. "Partial Thromboplastin Time". StatPearls. Treasure Island (FL), StatPearls Publishing. StatPearls Publishing LLC. 2020. PMID: 29939549. Full Text

Stauffer CM, Meshida K, Bernor RL, Granite GE, and Boaz NT. "Anatomy, Thorax, Pericardiacophrenic Vessels". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 32644668. Full Text

Valdes PJ, **Nahirniak P**, and Diaz MA. "Vein Graft Stenosis". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 29763122. Full Text

Wernick B, **Nahirniak P**, and Stawicki SP. "Impaired Wound Healing". StatPearls. Treasure Island (FL), StatPearls Publishing. Copyright © 2020, StatPearls Publishing LLC. 2020. PMID: 29489281. Full Text

Urology

Baumgarten L, and **Leavitt DA**. "Hydronephrosis". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier. 2020**:** 704-705.e703. PMID: Not assigned.

Borchert A, and **Leavitt DA**. "Acute Urinary Retention". Ferri's Clinical Advisor 2020. United States, Elsevier. 2020**:** 73-74. e71. PMID: Not assigned.

Sood A, and **Leavitt DA**. "Urolithiasis (Nephrolithiasis)". Ferri's Clinical Advisor 2020. Ferri FF. United States, Elsevier. 2020**:** 1425-1430.e1422. PMID: Not assigned.

HFHS Publications on COVID-19

Administration

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**,

Nauriyal V, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Anesthesiology

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12):e0291. PMID: 33251520. Full Text

Ramadan AR, **Alsrouji OK**, **Cerghet M**, **Chopp M**, **Danoun O**, **Grover KM**, **Ismail M**, **Katramados AM**, **Mohamed GA**, **Mehta CB**, **Newman DS**, **Osman G**, **Reuther J**, **Sallowm Y**, **Zaman IF**, and **Barkley GL**. Tales of a department: How the COVID-19 pandemic transformed Detroit's Henry Ford Hospital, Department of Neurology - Part I: The surge. *BMJ Neurology Open* 2020; 2(1). PMID: Not assigned. Full Text

Behavioral Health Services/Psychiatry

Imtiaz Memon R, Imran N, Aamer I, Imran Sharif M, Hassan Bodla Z, and Naveed S. 1.16 THE EFFECT OF QUARANTINE ON THE EMOTIONAL WELL-BEING OF KIDS: A SYSTEMATIC REVIEW. *Journal of the American Academy of Child and Adolescent Psychiatry* 2020; 59(10): S144. Conference Abstract.

Gautam M, Kaur M, and **Mahr G**. COVID-19-Associated Psychiatric Symptoms in Health Care Workers: Viewpoint from Internal Medicine and Psychiatry Residents. *Psychosomatics* 2020; 61(5):579-581. PMID: 32439184. Full Text

Gautam M, **Thakrar A**, **Akinyemi E**, and **Mahr G**. Current and Future Challenges in the Delivery of Mental Healthcare during COVID-19. *SN Compr Clin Med* 2020; Epub ahead of print. PMID: 32838140. Full Text

Patel S, **Gautam M**, and **Mahr G**. COVID-19 and Infection Control: A Perspective from the Psychiatric Ward. *Prim Care Companion CNS Disord* 2020; 22(3). PMID: 32441495. Request Article

Xiang X, **Ning Y**, and Kayser J. The Implications of COVID-19 for the Mental Health Care of Older Adults: Insights from Emergency Department Social Workers. *J Gerontol Soc Work* 2020; 63(6-7):662-664. PMID: 32543294. Request Article

Cardiology/Cardiovascular Research

Al-Darzi W, **Aurora L**, **Michaels A**, **Cowger J**, **Grafton G**, **Selektor Y**, **Tita C**, **Hannawi B**, **Lanfear D**, **Nemeh HW**, and **Williams CT**. Heart Transplant Recipients with Confirmed 2019 Novel Coronavirus Infection: The Detroit Experience. *Clin Transplant* 2020; 34(12)e14091. PMID: 32940925. Full Text

Ananthasubramaniam K, and **Karthikeyan V**. Lurking in the shadows: Asymptomatic bilateral

lung involvement with novel corona virus 2019 identified on myocardial perfusion SPECT CT: Implications for interpreting physicians. *J Nucl Cardiol* 2020; 27(4):1387-1390. PMID: 32529532. Full Text

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Dabbagh MF, **Aurora L**, **D'Souza P**, **Weinmann AJ**, **Bhargava P**, and **Basir MB**. Cardiac Tamponade Secondary to COVID-19. *JACC Case Rep* 2020; 2(9):1326-1330. PMID: 32328588. Full Text

Drake DH, De Bonis M, Covella M, Agricola E, Zangrillo A, **Zimmerman KG**, and Cobey FC. Echocardiography in Pandemic: Front-Line Perspective, Expanding Role of Ultrasound, and Ethics of Resource Allocation. *J Am Soc Echocardiogr* 2020; 33(6):683-689. PMID: 32503707. Full Text

Fram G, **Wang DD**, **Malette K**, **Villablanca P**, **Kang G**, **So K**, **Basir MB**, **Khan A**, **McKinnon JE**, **Zervos M**, and **O'Neill WW**. Cardiac Complications Attributed to Hydroxychloroquine: A systematic review of the Literature Pre-COVID-19. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID: 33059567. Full Text

Jain V, **Gupta K**, Bhatia K, Bansal A, Arora S, **Khandelwal AK**, Rosenberg JR, Levisay JP, Tommaso CL, Ricciardi MJ, and Qamar A. Management of STEMI during the COVID-19 pandemic: Lessons learned in 2020 to prepare for 2021. *Trends Cardiovasc Med* 2020; Epub ahead of print. PMID: 33338636. Full Text

Kadavath S, Mohan J, Ashraf S, Kassier A, Hawwass D, Madan N, Salehi N, Bernardo M, **Mawri S**, Rehman KA, Ya'qoub L, Strobel A, Dixon SR, Siraj A, Messenger J, Spears JR, Lopez-Candales A, Madder R, Bailey SR, **Alaswad K**, Kim MC, Safian RD, and Alraies MC. Cardiac Catheterization Laboratory Volume Changes During COVID-19-Findings from a Cardiovascular Fellows Consortium. *Am J Cardiol* 2020; 130(168-169). PMID: 32665133. Full Text

Ketcham SW, Adie SK, **Malliett A**, **Abdul-Aziz AA**, **Bitar A**, **Grafton G**, and **Konerman MC**. Coronavirus Disease-2019 in Heart Transplant Recipients in Southeastern Michigan: A Case Series. *J Card Fail* 2020; 26(6):457-461. PMID: 32417380. Full Text

McCullough PA, Kelly RJ, Ruocco G, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, Carter H, Singh B, McCullough SP, Bhambi BK, Palazzuoli A, De Ferrari GM, Milligan G, Safder T, Tecson KM, **Wang DD**, **McKinnon JE**, **O'Neill WW**, **Zervos M**, and Risch HA. Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection. *Am J Med* 2020; 134(1):16-22. PMID: 32771461. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook**

B, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Raad M, **Gorgis S**, **Dabbagh M**, **Parikh S**, and **Cowger J**. Characteristics and Outcomes of Patients with Heart Failure Admitted with Covid-19 in a Cohort Study from Southeast Michigan. *Journal of Cardiac Failure* 2020; 26(10): S74. Conference Abstract.

Samsky MD, DeVore AD, McIlvennan CK, Granger CB, Granger BB, Hernandez AF, Felker GM, Fonarow GC, Albert NM, Piña IL, **Lanfear D**, and Allen LA. Heart Failure Clinical Trial Operations During the COVID-19 Pandemic: Results from a Multicenter Survey. *Circ Heart Fail* 2020; 13(9): e007456. PMID: 32700547. Full Text

Shah PB, Welt FGP, Mahmud E, Phillips A, Kleiman NS, Young MN, Sherwood M, Batchelor W, **Wang DD**, Davidson L, Wyman J, Kadavath S, Szerlip M, Hermiller J, Fullerton D, and Anwaruddin S. Triage Considerations for Patients Referred for Structural Heart Disease Intervention During the Coronavirus Disease 2019 (COVID-19) Pandemic: An ACC /SCAI Consensus Statement. *Catheter Cardiovasc Interv* 2020; 96(3):659-663. PMID: 32251546. Full Text

Shah PB, Welt FGP, Mahmud E, Phillips A, Kleiman NS, Young MN, Sherwood M, Batchelor W, **Wang DD**, Davidson L, **Wyman J**, Kadavath S, Szerlip M, Hermiller J, Fullerton D, and Anwaruddin S. Triage Considerations for Patients Referred for Structural Heart Disease Intervention During the COVID-19 Pandemic: An ACC/SCAI Position Statement. *JACC Cardiovasc Interv* 2020; 13(12):1484-1488. PMID: 32250751. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Center for Health Policy and Health Services Research

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A. Conference Abstract.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A.

Clinical Quality and Safety

Drake DH, De Bonis M, Covella M, Agricola E, Zangrillo A, **Zimmerman KG**, and Cobey FC. Echocardiography in Pandemic: Front-Line Perspective, Expanding Role of Ultrasound, and Ethics of Resource Allocation. *J Am Soc Echocardiogr* 2020; 33(6):683-689. PMID: 32503707. Full Text

Dermatology

Freeman EE, McMahon DE, Hruza GJ, Irvine AD, Spuls PI, Smith CH, Mahil SK, Castelo-Soccio L,
Cordoro KM, Lara-Corrales I, Naik HB, Alhusayen R, Ingram JR, Feldman SR, Balogh EA, Kappelman MD, Wall D, Meah N, Sinclair R, Beylot-Barry M, Fitzgerald M, French LE, **Lim HW**, Griffiths CEM, and Flohr C. International Collaboration and Rapid Harmonization across Dermatologic COVID-19 Registries. *J Am Acad Dermatol* 2020; 83(3):e261-e266. PMID: 32562840. Full Text

Freeman EE, McMahon DE, Lipoff JB, Rosenbach M, Kovarik C, Desai SR, Harp J, Takeshita J, French LE, **Lim HW**, Thiers BH, Hruza GJ, and Fox LP. The spectrum of COVID-19-associated dermatologic manifestations: an international registry of 716 patients from 31 countries. *J Am Acad Dermatol* 2020; 83(4):1118-1129. PMID: 32622888. Full Text

Hamzavi IH, **Lyons AB**, **Kohli I**, **Narla S**, **Parks-Miller A**, Gelfand JM, **Lim HW**, and **Ozog D**. Ultraviolet germicidal irradiation: possible method for respirator disinfection to facilitate reuse during COVID-19 pandemic. *J Am Acad Dermatol* 2020; 82(6):1511-1512. PMID: 32246972. Full Text

Horton L, **Torres AE**, **Narla S**, **Lyons AB**, **Kohli I**, Gelfand JM, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. Spectrum of virucidal activity from ultraviolet to infrared radiation. *Photochem Photobiol Sci* 2020; 19(10):1262-1270. PMID: 32812619. Request Article

Kashlan R, **Lyons AB**, Hivnor C, and **Ozog DM**. N95 Respirators for Dermatologic Surgery and Laser Procedures During COVID-19 and Beyond. *Dermatol Surg* 2020; 46(11):1441-1442. PMID: 33105244. Full Text

Kohli I, **Lyons AB**, Golding B, **Narla S**, **Torres AE**, **Parks-Miller A**, **Ozog D**, **Lim HW**, and **Hamzavi IH**. UVC Germicidal Units: Determination of Dose Received and Parameters to be Considered for N95 Respirator Decontamination and Reuse. *Photochem Photobiol* 2020; 96(5):1083-1087. PMID: 32767758. Full Text

Lim HW, Feldman SR, Van Voorhees AS, and Gelfand JM. Recommendations for phototherapy during the COVID-19 pandemic. *J Am Acad Dermatol* 2020; 83(1):287-288. PMID: 32339700. Full Text

Lyons AB, and **Hamzavi IH**. Ultraviolet C Induced Skin Reaction from Ultraviolet Germicidal Irradiation of N95 Respirators During the COVID-19 Pandemic. *Photodermatol Photoimmunol Photomed* 2020; Epub ahead of print. PMID: 32974955. Full Text

Lyons AB, **Narla S**, **Torres AE**, **Parks-Miller A**, **Kohli I**, **Ozog DM**, **Lim HW**, and **Hamzavi IH**. Skin and eye protection against ultraviolet C from ultraviolet germicidal irradiation devices during the COVID-19 pandemic. *Int J Dermatol* 2020; Epub ahead of print. PMID: 33259055. Full Text

Narla S, **Lyons AB**, **Kohli I**, **Torres AE**, **Parks-Miller A**, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. The Importance of the Minimum Dosage Necessary for UVC Decontamination of N95 Respirators during the COVID-19 Pandemic. *Photodermatol Photoimmunol Photomed* 2020; 36(4):324-325. PMID: 32291807. Full Text

Ozog D, **Parks-Miller A**, **Kohli I**, **Lyons AB**, **Narla S**, **Torres AE**, **Levesque M**, **Lim HW**, and

Hamzavi IH. The Importance of Fit-Testing in Decontamination of N95 Respirators: A Cautionary Note. *J Am Acad Dermatol* 2020; 83(2):672-674. PMID: 32389714. Full Text

Ozog DM, Sexton JZ, **Narla S**, Pretto-Kernahan CD, Mirabelli C, **Lim HW**, **Hamzavi IH**, **Tibbetts RJ**, and **Mi QS**. The Effect of Ultraviolet C Radiation Against Different N95 Respirators Inoculated with SARSCoV-2. *Int J Infect Dis* 2020; 100:224-229. PMID: 32891736. Full Text

Torres AE, **Lyons AB**, **Narla S**, **Kohli I**, **Parks-Miller A**, **Ozog D**, **Hamzavi IH**, and **Lim HW**. UltravioletC and other methods of decontamination of filtering facepiece N-95 respirators during the COVID-19 pandemic. *Photochem Photobiol Sci* 2020; Epub ahead of print. PMID: 32412033. Full Text

Torres AE, **Ozog DM**, **Hamzavi IH**, and **Lim HW**. Notes and Comments on "Proposed Approach for Reusing Surgical Masks in COVID-19 Pandemic". *J Am Acad Dermatol* 2020; 83(3): e227. PMID: 32446829. Full Text

Veenstra J, Buechler CR, **Robinson G**, **Chapman S**, Adelman M, Tisack A, Dimitrion P, **Todter E**, **Kohen L**, and **Lim HW**. Antecedent Immunosuppressive Therapy for Immune-Mediated Inflammatory Diseases in the Setting of a COVID-19 Outbreak. *J Am Acad Dermatol* 2020; 83(6):1696-1703. PMID: 32735965. Full Text

Diagnostic Radiology

Boregowda U, Gandhi D, Jain N, **Khanna K**, and Gupta N. Comprehensive Literature Review and Evidence evaluation of Experimental Treatment in COVID 19 Contagion. *Clinical Medicine Insights: Circulatory, Respiratory and Pulmonary Medicine* 2020; 14. PMID: Not assigned. Full Text

Hadied MO, **Patel PY**, **Cormier P**, **Poyiadji N**, **Salman M**, **Klochko C**, **Nadig J**, **Song T**, **Peterson E**, and **Reeser N**. Interobserver and Intraobserver Variability in the CT Assessment of COVID-19 Based on RSNA Consensus Classification Categories. *Acad Radiol* 2020; 27(11):1499-1506. PMID: 32948442. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Norbash AM, Moore AV, Jr., Recht MP, Brink JA, Hess CP, **Won JJ**, Jain S, Sun X, **Brown M**, and Enzmann D. Early-Stage Radiology Volume Effects and Considerations with the Coronavirus Disease 2019 (COVID-19) Pandemic: Adaptations, Risks, and Lessons Learned. *J Am Coll Radiol* 2020; 17(9):1086-1095. PMID: 32717183. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3)E397-E399. PMID: 32496518. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**,

Spizarny D, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Poyiadji N, **Klochko C**, **LaForce J**, **Brown ML**, and **Griffith B**. COVID-19 and Radiology Resident Imaging Volumes-Differential Impact by Resident Training Year and Imaging Modality. *Acad Radiol* 2020; 28(1):106-111. PMID: 33046369. Full Text

Poyiadji N, **Klochko C**, **Palazzolo J**, **Brown ML**, and **Griffith B**. Impact of the COVID-19 pandemic on radiology physician work RVUs at a large subspecialized radiology practice. *Clin Imaging* 2020; 73:38-42. PMID: 33302235. Full Text

Poyiadji N, **Shahin G**, **Noujaim D**, **Stone M**, **Patel S**, and **Griffith B**. COVID-19-associated Acute Hemorrhagic Necrotizing Encephalopathy: Imaging Features. *Radiology* 2020; 296(2):E119-e120. PMID: 32228363. Full Text

Siegal DS, **Wessman B**, **Zadorozny J**, **Palazzolo J**, **Montana A**, Rawson JV, Norbash A, and **Brown ML**. Operational Radiology Recovery in Academic Radiology Departments After the COVID-19 Pandemic: Moving Toward Normalcy. *J Am Coll Radiol* 2020; 17(9):1101-1107. PMID: 32682744. Full Text

Zhang R, Tie X, **Qi Z**, **Bevins NB**, Zhang C, Griner D, **Song TK**, **Nadig JD**, Schiebler ML, Garrett JW, Li K, Reeder SB, and Chen GH. Diagnosis of COVID-19 Pneumonia Using Chest Radiography: Value of Artificial Intelligence. *Radiology* 2020; Epub ahead of print.:202944. PMID: 32969761. Full Text

Endocrinology and Metabolism

Dhaliwal R, Bhadada SK, and **Rao SD**. Letter to the Editor: "Our Response to COVID-19 as Endocrinologists and Diabetologists". *J Clin Endocrinol Metab* 2020; 105(7). PMID: 32382734. Full Text

Emergency Medicine

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

Miller J, Bruen C, Schnaus M, Zhang J, Ali S, Lind A, Stoecker Z, Stauderman K, and Hebbar S. Auxora versus standard of care for the treatment of severe or critical COVID-19 pneumonia: results from a randomized controlled trial. *Crit Care* 2020; 24(1):502. PMID: 32795330. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated with Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6)e2012270. PMID: 32543702. Full Text

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Venkatesulu BP, Thoguluva Chandrasekar V, Girdhar P, Pragathee V, Patel HK, and **Manteuffel J**. The mechanistic rationale of drugs, Primary endpoints, Geographical distribution of clinical trials against Severe acute respiratory syndrome-related coronavirus-2: A Systematic Review. *J Med Virol* 2020; 93(2):843-853. PMID: 32706390. Full Text

Gastroenterology

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A. Conference Abstract.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A. Conference Abstract.

Siddiqui MB, **Suresh S**, **Abu Ghanimeh M**, **Karrick M**, **Nimri F**, **Musleh M**, **Mendiratta V**, **AlShammari M**, **Simmer S**, **Jou J**, **Russell SM**, **Dang DY**, **Salgia RJ**, and **Zuchelli T**. LIVER INJURY IS ASSOCIATED WITH INCREASED MORBIDITY AND MORTALITY IN COVID-19 PATIENTS. *Hepatology* 2020; 72:287A-287A. Conference Abstract.

Suresh S, **Siddiqui MB**, **Abu Ghanimeh M**, **Nimri F**, **Karrick M**, **Musleh M**, **Mendiratta V**, **Russell SM**, **Jou J**, **Simmer S**, **Al-Shammari M**, **Dang D**, and **Zuchelli T**. CLINICAL OUTCOMES IN HOSPITALIZED COVID-19 PATIENTS WITH CHRONIC LIVER DISEASE AND CIRRHOSIS. *Hepatology* 2020; 72:263A263A. Conference Abstract.

Global Health Initiative

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**, **Nauriyal V**, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Hematology-Oncology

Balanchivadze N, and **Donthireddy V**. Hematology/Oncology Fellowship Emergency Restructuring in Response to the COVID-19 Pandemic-Henry Ford Hospital, Michigan. *JCO Oncol Pract* 2020; 16(9)e943-e947. PMID: 32407178. Request Article

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**.

Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Hospital Medicine

Barnes GD, Burnett A, Allen A, Blumenstein M, Clark NP, Cuker A, Dager WE, Deitelzweig SB, **Ellsworth S**, Garcia D, **Kaatz S**, and Minichiello T. Thromboembolism and anticoagulant therapy during the COVID19 pandemic: interim clinical guidance from the anticoagulation forum. *J Thromb Thrombolysis* 2020; 50(1):72-81. PMID: 32440883. Full Text

Warkentin TE, and **Kaatz S**. COVID-19 versus HIT hypercoagulability. *Thromb Res* 2020; 196:38-51. PMID: 32841919. Full Text

Infectious Diseases

Alangaden GJ, and **Mayur RS**. Response to "Is the outcome of SARS-CoV-2 infection in solid organ transplant recipients really similar to that of the general population?". *Am J Transplant* 2020; Epub ahead of print. PMID: 33249750. Full Text

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Dabbagh MF, **Aurora L**, **D'Souza P**, **Weinmann AJ**, **Bhargava P**, and **Basir MB**. Cardiac Tamponade Secondary to COVID-19. *JACC Case Rep* 2020; 2(9):1326-1330. PMID: 32328588. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Fram G, **Wang DD**, **Malette K**, **Villablanca P**, **Kang G**, **So K**, **Basir MB**, **Khan A**, **McKinnon JE**, **Zervos M**, and **O'Neill WW**. Cardiac Complications Attributed to Hydroxychloroquine: A systematic review of the Literature Pre-COVID-19. *Curr Cardiol Rev* 2020; Epub ahead of print. PMID: 33059567. Request Article

Gudipati S, **Brar I**, **Murray S**, **McKinnon JE**, **Yared N**, and **Markowitz N**. Descriptive Analysis of Patients Living with HIV Affected By COVID-19. *J Acquir Immune Defic Syndr* 2020; 85(2):123-126. PMID: 32675771. Full Text

Gudipati S, **Zervos M**, and **Herc E**. Can the One Health Approach Save Us from the

Emergence and Reemergence of Infectious Pathogens in the Era of Climate Change: Implications for Antimicrobial Resistance? *Antibiotics (Basel)* 2020; 9(9). PMID: 32937739. Full Text

Heldman MR, Kates OS, Haydel BM, Florman SS, Rana MM, **Chaudhry ZS**, **Ramesh MS**, Safa K, Kotton CN, Blumberg EA, Besharatian BD, Tanna SD, Ison MG, Malinis M, Azar MM, Rakita RM, Morillas JA, Majeed A, Sait AS, Spaggiari M, Hemmige V, Mehta SA, Neumann H, Badami A, Jeng A, Goldman
JD, Lala A, Hemmersbach-Miller M, McCort ME, Bajrovic V, Ortiz-Bautista C, Friedman-Moraco R, Sehgal S, Lease ED, Limaye AP, and Fisher CE. Healthcare resource use among solid organ transplant recipients hospitalized with COVID-19. *Clin Transplant* 2020; Epub ahead of print. PMID: 33349940. Full Text

Kates OS, Haydel BM, Florman SS, Rana MM, **Chaudhry ZS**, **Ramesh MS**, Safa K, Kotton CN, Blumberg EA, Besharatian BD, Tanna SD, Ison MG, Malinis M, Azar MM, Rakita RM, Morillas JA, Majeed A, Sait AS, Spaggiari M, Hemmige V, Mehta SA, Neumann H, Badami A, Goldman JD, Lala A, Hemmersbach-Miller M, McCort ME, Bajrovic V, Ortiz-Bautista C, Friedman-Moraco R, Sehgal S, Lease ED, Fisher CE, and Limaye AP. COVID-19 in solid organ transplant: A multi-center cohort study. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32766815. Full Text

Lundgren JD, Grund B, Barkauskas CE, Holland TL, Gottlieb RL, Sandkovsky U, Brown SM, Knowlton KU, Self WH, Files DC, Jain MK, Benfield T, Bowdish ME, Leshnower BG, Baker JV, Jensen JU, Gardner EM, Ginde AA, Harris ES, Johansen IS, **Markowitz N**, Matthay MA, Østergaard L, Chang CC, Davey VJ, Goodman A, Higgs ES, Murray DD, Murray TA, Paredes R, Parmar MKB, Phillips AN, Reilly C, Sharma S, Dewar RL, Teitelbaum M, Wentworth D, Cao H, Klekotka P, Babiker AG, Gelijns AC, Kan VL, Polizzotto MN, Thompson BT, Lane HC, and Neaton JD. A Neutralizing Monoclonal Antibody for Hospitalized Patients with Covid-19. *N Engl J Med* 2020; Epub ahead of print. PMID: 33356051. Full Text

McCullough PA, Alexander PE, Armstrong R, Arvinte C, Bain AF, Bartlett RP, Berkowitz RL, Berry AC, Borody TJ, Brewer JH, Brufsky AM, Clarke T, Derwand R, Eck A, Eck J, Eisner RA, Fareed GC, Farella A, Fonseca SNS, Geyer CE, Jr., Gonnering RS, Graves KE, Gross KBV, Hazan S, Held KS, Hight HT, Immanuel S, Jacobs MM, Ladapo JA, Lee LH, Littell J, Lozano I, Mangat HS, Marble B, **McKinnon JE**, Merritt LD, Orient JM, Oskoui R, Pompan DC, Procter BC, Prodromos C, Rajter JC, Rajter JJ, Ram CVS, Rios SS, Risch HA, Robb MJA, Rutherford M, Scholz M, Singleton MM, Tumlin JA, Tyson BM, Urso RG, Victory K, Vliet EL, Wax CM, Wolkoff AG, Wooll V, and Zelenko V. Multifaceted highly targeted sequential multidrug treatment of early ambulatory high-risk SARS-CoV-2 infection (COVID-19). *Rev Cardiovasc Med* 2020; 21(4):517-530. PMID: 33387997. Full Text

McCullough PA, Kelly RJ, Ruocco G, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, Carter H, Singh B, McCullough SP, Bhambi BK, Palazzuoli A, De Ferrari GM, Milligan G, Safder T, Tecson KM, **Wang DD**, **McKinnon JE**, **O'Neill WW**, **Zervos M**, and Risch HA. Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection. *Am J Med* 2020; 134(1):16-22. PMID: 32771461. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini

ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol* 2020; 92(10):1791-1792. PMID: 32314799. Full Text

Patil NR, **Herc ES**, and **Girgis M**. Cold agglutinin disease and autoimmune hemolytic anemia with pulmonary embolism as a presentation of COVID-19 infection. *Hematol Oncol Stem Cell Ther* 2020; Epub ahead of print. PMID: 32645300. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**, **Spizarny D**, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Shallal A, **Kenney R**, and **Weinmann A**. Missed Vaccine Opportunities to S. pneumoniae and Influenza in Patients Admitted During the COVID-19 Pandemic. *Infect Control Hosp Epidemiol* 2020; Epub ahead of print. PMID: 33100230. Full Text

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated With Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6)e2012270. PMID: 32543702. Full Text

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Tsang O, **Brar I**, Spinner C, Robinson P, Roestenberg M, Calmy A, Malvy D, Elboudwarej E, Tian Y, McDonald C, Tan S, Suri V, Hyland R, SenGupta D, Chokkalingam AP, Gaggar A, Osinusi AO, Brainard DM, Kim SW, Cooke G, Shan-Chwen SC, Nicastri E, Castano M, and Chai LYA. IMPACT OF BASELINE ALANINE AMINOTRANSFERASE LEVELS ON THE SAFETY AND EFFICACY OF REMDESIVIR IN MODERATE COVID-19 PATIENTS. *Hepatology* 2020; 72:88A-89A. Conference Abstracts.

Vahia A, **Chaudhry ZS**, **Kaljee L**, **Parraga-Acosta T**, **Gudipati S**, **Maki G**, **Tariq Z**, **Shallal A**, **Nauriyal V**, **Williams JD**, **Suleyman G**, **Abreu-Lanfranco O**, **Chen A**, **Yared N**, **Herc E**, **McKinnon JE**, **Brar I**, **Bhargava P**, **Zervos M**, **Ramesh M**, and **Alangaden G**. Rapid Reorganization of an Academic Infectious Diseases Program During the COVID-19 Pandemic in Detroit: A Novel Unit-Based Group Rounding Model. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32604415. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Balanchivadze N, **Kudirka AA**, **Askar S**, **Almadhoun K**, **Kuriakose P**, **Fadel R**, and **Dabak V**. Impact of COVID-19 Infection on 24 Patients with Sickle Cell Disease. One Center Urban Experience, Detroit, MI, USA. *Hemoglobin* 2020; 44(4):284-289. PMID: 32722950. Full Text

Barnes GD, Burnett A, Allen A, Blumenstein M, Clark NP, Cuker A, Dager WE, Deitelzweig SB, **Ellsworth S**, Garcia D, **Kaatz S**, and Minichiello T. Thromboembolism and anticoagulant therapy during the COVID19 pandemic: interim clinical guidance from the anticoagulation forum. *J Thromb Thrombolysis* 2020;50(1):72-81. PMID: 32440883. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Elghazawy H, Bakkach J, Zaghloul MS, Abusanad A, Hussein MM, Alorabi M, Eldin NB, Helal T, Zaghloul TM, **Venkatesulu BP**, Elghazaly H, and Al-Sukhun S. Implementation of breast cancer continuum of care in low- and middle-income countries during the COVID-19 pandemic. *Future Oncol* 2020; 16(31):25512567. PMID: 32715776. Full Text

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Jain V, **Gupta K**, Bhatia K, Bansal A, Arora S, **Khandelwal AK**, Rosenberg JR, Levisay JP, Tommaso CL, Ricciardi MJ, and Qamar A. Management of STEMI during the COVID-19 pandemic: Lessons learned in 2020 to prepare for 2021. *Trends Cardiovasc Med* 2020; Epub ahead of print. PMID: 33338636. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Piscoya A, **Ng-Sueng LF**, Parra Del Riego A, Cerna-Viacava R, Pasupuleti V, Roman YM, Thota P, White CM, and Hernandez AV. Efficacy and harms of remdesivir for the treatment of COVID-19: A systematic review and meta-analysis. *PLoS One* 2020; 15(12):e0243705. PMID: 33301514. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Siddiqui MB, **Suresh S**, **Abu Ghanimeh M**, **Karrick M**, **Nimri F**, **Musleh M**, **Mendiratta V**,

AlShammari M, **Simmer S**, **Jou J**, **Russell SM**, **Dang DY**, **Salgia RJ**, and **Zuchelli T**. LIVER INJURY IS ASSOCIATED WITH INCREASED MORBIDITY AND MORTALITY IN COVID-19 PATIENTS. *Hepatology* 2020; 72:287A-287A. Conference Abstract.

Suleyman G, **Fadel RA**, **Malette KM**, **Hammond C**, **Abdulla H**, **Entz A**, **Demertzis Z**, **Hanna Z**, **Failla A**, **Dagher C**, **Chaudhry Z**, **Vahia A**, **Abreu Lanfranco O**, **Ramesh M**, **Zervos MJ**, **Alangaden G**, **Miller J**, and **Brar I**. Clinical Characteristics and Morbidity Associated with Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA Netw Open* 2020; 3(6)e2012270. PMID: 32543702. Full Text

Suresh S, **Siddiqui MB**, **Abu Ghanimeh M**, **Nimri F**, **Karrick M**, **Musleh M**, **Mendiratta V**, **Russell SM**, **Jou J**, **Simmer S**, **Al-Shammari M**, **Dang D**, and **Zuchelli T**. CLINICAL OUTCOMES IN HOSPITALIZED COVID-19 PATIENTS WITH CHRONIC LIVER DISEASE AND CIRRHOSIS. *Hepatology* 2020; 72:263A263A. Conference Abstract.

Thoguluva Chandrasekar V, **Venkatesalu B**, Patel HK, Spadaccini M, **Manteuffel J**, and **Ramesh M**. Systematic review and meta-analysis of effectiveness of treatment options against SARS-CoV-2 infection. *J Med Virol* 2020; 93(2):775-785. PMID: 32667699. Full Text

Venkatesulu BP, Thoguluva Chandrasekar V, Girdhar P, Pragathee V, Patel HK, and **Manteuffel J**. The mechanistic rationale of drugs, Primary endpoints, Geographical distribution of clinical trials against Severe acute respiratory syndrome-related coronavirus-2: A Systematic Review. *J Med Virol* 2020; 93(2):843-853. PMID: 32706390. Full Text

Nephrology

Ananthasubramaniam K, and **Karthikeyan V**. Lurking in the shadows: Asymptomatic bilateral lung involvement with novel corona virus 2019 identified on myocardial perfusion SPECT CT: Implications for interpreting physicians. *J Nucl Cardiol* 2020; 27(4):1387-1390. PMID: 32529532. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

McCullough PA, Eidt J, Rangaswami J, Lerma E, Tumlin J, Wheelan K, Katz N, Lepor NE, Vijay K, **Soman S**, Singh B, McCullough SP, McCullough HB, Palazzuoli A, Ruocco GM, and Ronco C. Urgent need for individual mobile phone and institutional reporting of at home, hospitalized, and intensive care unit cases of SARS-CoV-2 (COVID-19) infection. *Rev Cardiovasc Med* 2020; 21(1):1-7. PMID: 32259899. Full Text

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Sharma Y, Nasr SH, Larsen CP, **Kemper A**, **Ormsby AH**, and **Williamson SR**. COVID-19-Associated Collapsing Focal Segmental Glomerulosclerosis: A Report of 2 Cases. *Kidney Med* 2020; 2(4):493-497. PMID: 32775990. Full Text

Singh N, Tandukar S, Zibari G, Naseer MS, Amiri HS, and **Samaniego M**. Successful Simultaneous Pancreas and Kidney Transplant in a Patient Post-COVID-19 Infection. *Kidney Int* 2020; 98(6):16151616. PMID: 32946881. Full Text

Neurology

Ali A. Delay in OnabotulinumtoxinA Treatment During the COVID-19 Pandemic-Perspectives from a Virus Hotspot. *Headache* 2020; 60(6):1183-1186. PMID: 32359098. Full Text

Anand SK, **Macki M**, Culver LG, **Wasade VS**, Hendren S, and **Schwalb JM**. Patient navigation in epilepsy care. *Epilepsy Behav* 2020; 113:107530. PMID: 33232897. Full Text

Carneiro T, Dashkoff J, Leung LY, Nobleza COS, Marulanda-Londono E, Hathidara M, Koch S, Sur N, Boske A, Voetsch B, **Aboul Nour H**, **Miller DJ**, Daneshmand A, Shulman J, Curiale G, Greer DM, Romero JR, Anand P, and Cervantes-Arslanian AM. Intravenous tPA for Acute Ischemic Stroke in Patients with COVID-19. *J Stroke Cerebrovasc Dis* 2020; 29(11):105201. PMID: 33066885. Full Text

Chaudhry F, **Bulka H**, **Rathnam AS**, Said OM, Lin J, **Lorigan H**, Bernitsas E, Rube J, Korzeniewski SJ, **Memon AB**, Levy PD, **Schultz L**, Javed A, Lisak R, and **Cerghet M**. COVID-19 in multiple sclerosis patients and risk factors for severe infection. *J Neurol Sci* 2020; 418:117147. PMID: 32980780. Full Text

Dakay K, Kaur G, Gulko E, Santarelli J, Bowers C, **Mayer SA**, Gandhi CD, and Al-Mufti F. Reversible cerebral vasoconstriction syndrome and dissection in the setting of COVID-19 infection. *J Stroke Cerebrovasc Dis* 2020; 29(9):105011. PMID: 32807426. Full Text

Delly F, Syed MJ, Lisak RP, and Zutshi D. Myasthenic crisis in COVID-19. *J Neurol Sci* 2020; 414:116888. PMID: 32413767. Full Text

Lima M, Siokas V, Aloizou AM, Liampas I, Mentis AA, Tsouris Z, Papadimitriou A, **Mitsias PD**, Tsatsakis A, Bogdanos DP, Baloyannis SJ, and Dardiotis E. Unraveling the Possible Routes of SARS-COV-2 Invasion into the Central Nervous System. *Curr Treat Options Neurol* 2020; 22(11):37. PMID: 32994698. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Maideniuc C, and **Memon AB**. Acute necrotizing myelitis and acute motor axonal neuropathy in a COVID19 patient. *J Neurol* 2020; Epub ahead of print. PMID: 32772172. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3):E397-E399. PMID: 32496518. Full Text

Ramadan AR, **Alsrouji OK**, **Cerghet M**, **Chopp M**, **Danoun O**, **Grover KM**, **Ismail M**, **Katramados AM**, **Mohamed GA**, **Mehta CB**, **Newman DS**, **Osman G**, **Reuther J**, **Sallowm Y**, **Zaman IF**, and **Barkley GL**. Tales of a department: How the COVID-19 pandemic transformed

Detroit's Henry Ford Hospital, Department of Neurology - Part I: The surge. *BMJ Neurology Open* 2020; 2(1). PMID: Not assigned. Full Text

Singh J, and **Ali A**. Headache as the Presenting Symptom in 2 Patients with COVID-19 and a History of Migraine: 2 Case Reports. *Headache* 2020; 60(8):1773-1776. PMID: 32521062. Full Text

Syed MJ, Lisak RP, **Delly F**, and Zutshi D. Reply from the authors: Myasthenic crises in COVID-19. *J Neurol Sci* 2020; 417:117061. PMID: 32741591. Full Text

Neurosurgery

Anand SK, **Macki M**, Culver LG, **Wasade VS**, Hendren S, and **Schwalb JM**. Patient navigation in epilepsy care. *Epilepsy Behav* 2020; 113:107530. PMID: 33232897. Full Text

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12):e0291. PMID: 33251520. Full Text

Mohamud AY, **Griffith B**, **Rehman M**, **Miller D**, **Chebl A**, **Patel SC**, **Howell B**, **Kole M**, and **Marin H**. Intraluminal Carotid Artery Thrombus in COVID-19: Another Danger of Cytokine Storm? *AJNR Am J Neuroradiol* 2020; 41(9):1677-1682. PMID: 32616585. Full Text

Pandey AS, Daou BJ, Tsai JP, Zaidi SF, Salahuddin H, Gemmete JJ, Oliver MJ, Singer J, Elder TA, Mbabuike N, Adel JG, Gujrati Y, Saleemi MA, Siddiqui FM, Elias AE, **Rehman MF**, **Marin H**, **Chebl AB**, **Kole M**, Wilseck JM, Kazmierczak CD, Mick JM, Majjhoo AQ, Naravetla BR, Rayes M, Luqman AW, Richards BF, Kelkar P, Burgess R, Thompson BG, Chaudhary N, Mazaris PA, Qahwash O, Razak MA, and Jumaa MA. Letter: COVID-19 Pandemic-The Bystander Effect on Stroke Care in Michigan. *Neurosurgery* 2020; 87(3):E397-E399. PMID: 32496518. Full Text

Obstetrics, Gynecology, and Women's Health Services

Hong L, **Smith N**, **Keerthy M**, **Lee-Griffith M**, **Garcia R**, **Shaman M**, and **Goyert G**. Severe COVID-19 infection in pregnancy requiring intubation without preterm delivery: A case report. *Case Rep Womens Health* 2020; 27:e00217. PMID: 32382516. Full Text

Vadlamudi G, **Hong L**, and **Keerthy M**. Evans Syndrome Associated with Pregnancy and COVID-19 Infection. *Case Rep Obstet Gynecol* 2020; 2020:8862545. PMID: 32850163. Full Text

Ophthalmology and Eye Care Services

Bernard A, Weiss S, Stein JD, Ulin SS, D'Souza C, Salgat A, Panzer K, **Riddering A**, **Edwards P**, Meade M, McKee MM, and Ehrlich JR. Assessing the impact of COVID-19 on persons with disabilities: development of a novel survey. *Int J Public Health* 2020; 65(6):755-757. PMID: 32705300. Full Text

Orthopaedics/Bone and Joint Center

Andrews E, **Lezotte J**, and **Ackerman AM**. Lingual compression for acute macroglossia in a COVID-19 positive patient. *BMJ Case Rep* 2020; 13(7). PMID: 32675133. Full Text

Otolaryngology – Head and Neck Surgery

Amit M, **Tam S**, Bader T, Sorkin A, and Benov A. Pausing cancer screening during the severe acute respiratory syndrome coronavirus 2pandemic: Should we revisit the recommendations? *Eur J Cancer* 2020; 134:86-89. PMID: 32473542. Full Text

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**. Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer
Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Pathology and Laboratory Medicine

Ozog DM, Sexton JZ, **Narla S**, Pretto-Kernahan CD, Mirabelli C, **Lim HW**, **Hamzavi IH**, **Tibbetts RJ**, and **Mi QS**. The Effect of Ultraviolet C Radiation Against Different N95 Respirators Inoculated with SARSCoV-2. *Int J Infect Dis* 2020; 100:224-229. PMID: 32891736. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Sharma Y, Nasr SH, Larsen CP, **Kemper A**, **Ormsby AH**, and **Williamson SR**. COVID-19-Associated Collapsing Focal Segmental Glomerulosclerosis: A Report of 2 Cases. *Kidney Med* 2020; 2(4):493-497. PMID: 32775990. Full Text

Pharmacy

Fadel R, **Morrison AR**, **Vahia A**, **Smith ZR**, **Chaudhry Z**, **Bhargava P**, **Miller J**, **Kenney RM**, **Alangaden G**, and **Ramesh MS**. Early Short Course Corticosteroids in Hospitalized Patients with COVID-19. *Clin Infect Dis* 2020; 71(16):2114-2120. PMID: 32427279. Full Text

Mohammad I, Berlie HD, Lipari M, Martirosov AL, Duong AA, Faraj M, Bacon O, and Garwood CL. Ambulatory Care Practice in the COVID-19 Era: Redesigning Clinical Services and Experiential Learning. *J Am Coll Clin Pharm* 2020; Epub ahead of print. PMID: 32838219. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol* 2020; 92(10):1791-1792. PMID: 32314799. Full Text

Shallal A, **Kenney R**, and **Weinmann A**. Missed Vaccine Opportunities to S. pneumoniae and Influenza in Patients Admitted During the COVID-19 Pandemic. *Infect Control Hosp Epidemiol* 2020; Epub ahead of print. PMID: 33100230. Full Text

Public Health Sciences

Arshad S, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, **O'Neill W**, and **Zervos M**. Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19. *Int J Infect Dis* 2020; 97:396-403. PMID: 32623082. Full Text

Chaudhry F, **Bulka H**, **Rathnam AS**, Said OM, Lin J, **Lorigan H**, Bernitsas E, Rube J, Korzeniewski SJ, **Memon AB**, Levy PD, **Schultz L**, Javed A, Lisak R, and **Cerghet M**. COVID-19 in multiple sclerosis patients and risk factors for severe infection. *J Neurol Sci* 2020; 418:117147. PMID: 32980780. Full Text

Chhina AK, **Loyd GE**, **Szymanski TJ**, **Nowak KA**, **Peruzzi WT**, **Yeldo NS**, **Han X**, **Kerzabi LS**, **Galusca DM**, **Cazacu S**, **Brodie C**, and **Penning DH**. Frequency and Analysis of Unplanned Extubation in Coronavirus Disease 2019 Patients. *Crit Care Explor* 2020; 2(12)e0291. PMID: 33251520. Full Text

Corley DA, Sedki M, Ritzwoller DP, Greenlee RT, **Neslund-Dudas C**, Rendle KA, Honda SA, Schottinger JE, Udaltsova N, Vachani A, Kobrin S, Li CI, and Haas JS. Cancer Screening during COVID-19: A Perspective from NCI's PROSPR consortium. *Gastroenterology* 2020; Epub ahead of print. PMID: 33096099. Full Text

Gordon SC, **Rupp LB**, Boscarino JA, Daida Y, Schmidt MA, **Zhou YR**, **Trudeau S**, **Li J**, and **Lu M**. RISK FACTORS FOR SARS-COV-2 INFECTION AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS. *Hepatology* 2020; 72:299A-300A. Conference Abstract.

Lu M, **Rupp LB**, Boscarino JA, Schmidt MA, Daida Y, **Zhou YR**, **Trudeau S**, **Li J**, and **Gordon SC**. IMPACT OF HISTORY OF CHRONIC VIRAL HEPATITIS AND LIVER FIBROSIS ON RISK OF HOSPITALIZATION AND DEATH AMONG PATIENTS WITH SARS-COV-2 INFECTION. *Hepatology* 2020; 72:280A-281A. Conference Abstract.

Miller J, **Fadel RA**, **Tang A**, **Perrotta G**, **Herc E**, **Soman S**, **Nair S**, **Hanna Z**, **Zervos MJ**, **Alangaden G**, **Brar I**, and **Suleyman G**. The Impact of Sociodemographic Factors, Comorbidities and Physiologic Response on 30-day Mortality in COVID-19 Patients in Metropolitan Detroit. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32945856. Full Text

Poyiadji N, **Cormier P**, **Patel PY**, **Hadied MO**, **Bhargava P**, **Khanna K**, **Nadig J**, **Keimig T**, **Spizarny D**, **Reeser N**, **Klochko C**, **Peterson EL**, and **Song T**. Acute Pulmonary Embolism and COVID-19. *Radiology* 2020; 297(3)E335-E338. PMID: 32407256. Full Text

Raad M, **Dabbagh M**, **Gorgis S**, **Yan J**, Chehab O, **Dagher C**, **Jamoor K**, Hussein IH, **Cook B**, **Van Harn M**, **Singh G**, **McCord J**, and **Parikh S**. Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. *Am J Cardiol* 2020; 133:154-161. PMID: 32829913. Full Text

Singh SRK, **Thanikachalam K**, **Jabbour-Aida H**, **Poisson LM**, and **Khan G**. COVID-19 and Cancer: Lessons Learnt from a Michigan Hotspot. *Cancers (Basel)* 2020; 12(9). PMID: 32842584. Full Text

Veenstra J, Buechler CR, **Robinson G**, **Chapman S**, Adelman M, Tisack A, Dimitrion P, **Todter E**, **Kohen L**, and **Lim HW**. Antecedent Immunosuppressive Therapy for Immune-Mediated Inflammatory Diseases in the Setting of a COVID-19 Outbreak. *J Am Acad Dermatol* 2020; 83(6):1696-1703. PMID: 32735965. Full Text

Zervos M, **Arshad S**, Kilgore P, **Chaudhry ZS**, **Jacobsen G**, **Wang DD**, **Huitsing K**, **Brar I**, **Alangaden GJ**, **Ramesh MS**, **McKinnon JE**, and **O'Neill W**. A Sound Approach: Hydroxychloroquine Reduces Mortality in Severe COVID-19. *Int J Infect Dis* 2020; 99:138-139. PMID: 32745629. Full Text

Pulmonary and Critical Care Medicine

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Lamb CR, Desai NR, Angel L, Chaddha U, Sachdeva A, Sethi S, Bencheqroun H, Mehta H, Akulian J, Argento AC, **Diaz-Mendoza J**, Musani A, and Murgu S. Use of Tracheostomy During the COVID-19 Pandemic: CHEST/AABIP/AIPPD: Expert Panel Report. *Chest* 2020; 158(1499-1514). PMID: 32512006. Full Text

Lazar MH, **Fadel R**, **Gardner-Gray J**, **Tatem G**, **Caldwell MT**, **Swiderek J**, and **Jennings JH**. Racial Differences in a Detroit, MI, ICU Population of Coronavirus Disease 2019 Patients. *Crit Care Med* 2020; Epub ahead of print. PMID: 33372746. Full Text

Matar R, Alrahmani L, Monzer N, **Debiane LG**, Berbari E, Fares J, Fitzpatrick F, and Murad MH. Clinical Presentation and Outcomes of Pregnant Women with COVID-19: A Systematic Review and MetaAnalysis. *Clin Infect Dis* 2020; Epub ahead of print. PMID: 32575114. Full Text

Morrison AR, **Johnson JM**, **Griebe KM**, **Jones MC**, **Stine JJ**, **Hencken LN**, **To L**, Bianchini ML, **Vahia AT**, **Swiderek J**, **Ramesh MS**, **Peters MA**, and **Smith ZR**. Clinical characteristics and predictors of survival in adults with coronavirus disease 2019 receiving tocilizumab. *J Autoimmun* 2020; 114:102512. PMID: 32646770. Full Text

Morrison AR, **Johnson JM**, **Ramesh M**, **Bradley P**, **Jennings J**, and **Smith ZR**. Letter to the Editor: Acute hypertriglyceridemia in patients with COVID-19 receiving tocilizumab. *J Med Virol* 2020; 92(10):1791-1792. PMID: 32314799. Full Text

Wahidi MM, Shojaee S, Lamb CR, Ost D, Maldonado F, Eapen G, Caroff DA, Stevens MP, **Ouellette DR**, Lilly C, Gardner DD, Glisinski K, Pennington K, and Alalawi R. The Use of Bronchoscopy During the COVID-19 Pandemic: CHEST/AABIP Guideline and Expert Panel Report. *Chest* 2020; 158(3):1268-1281. PMID: 32361152. Full Text

Radiation Oncology

Tam S, **Wu VF**, **Williams AM**, **Girgis M**, **Sheqwara JZ**, **Siddiqui F**, and **Chang SS**. Disparities in the Uptake of Telemedicine During the COVID-19 Surge in a Multidisciplinary Head and Neck Cancer Population by Patient Demographic Characteristics and Socioeconomic Status. *JAMA Otolaryngol Head Neck Surg* 2020; Epub ahead of print. PMID: 33151289. Full Text

Vscariello I, Evans S, Parker S, Schofield D, **Miller B**, Gardner S, Fong de Los Santos L, Hallemeier C, Jordan L, Kim E, and Ford E. A multi-institutional assessment of COVID-19-related risk in radiation oncology. *Radiother Oncol* 2020; 153:296-302. PMID: 33096163. Full Text

Sleep Medicine

Cheng P, Casement MD, **Kalmbach DA**, **Castelan AC**, and **Drake CL**. Digital Cognitive Behavioral
Therapy for Insomnia Promotes Later Health Resilience During the Coronavirus Disease 19 (COVID-19) Pandemic. *Sleep* 2020; Epub ahead of print. PMID: 33249492. Full Text

Surgery

Andrews E, **Lezotte J**, and **Ackerman AM**. Lingual compression for acute macroglossia in a COVID-19 positive patient. *BMJ Case Rep* 2020; 13(7). PMID: 32675133. Full Text

Brown CS, Albright J, Henke PK, Mansour MA, **Weaver M**, and Osborne NH. Modeling the Elective Vascular Surgery Recovery After COVID-19: Implications for Moving Forward. *J Vasc Surg* 2020; Epub ahead of print. PMID: 33248121. Full Text

Chaudhry ZS, **Williams JD**, **Vahia A**, **Fadel R**, **Acosta TP**, **Prashar R**, **Shrivastava P**, **Khoury N**, **Corrales JP**, **Williams C**, **Nagai S**, **Abouljoud M**, **Samaniego-Picota M**, **Lanfranco OA**, **Del Busto R**, **Ramesh MS**, **Patel A**, and **Alangaden GJ**. Clinical Characteristics and Outcomes of COVID-19 in Solid Organ Transplant Recipients: A Case-Control Study. *Am J Transplant* 2020; 20(11):3051-3060. PMID: 32654332. Full Text

Collins KM, and Doyle MBM. Revisiting the organ procurement organization-based organ procurement center in the COVID era. *Am J Transplant* 2020; 20(11):3263-3264. PMID: 32503083. Full Text

Docimo S, Jr., Jacob B, **Seras K**, and Ghanem O. Closed Facebook groups and COVID-19: an evaluation of utilization prior to and during the pandemic. *Surg Endosc* 2020; Epub ahead of print. PMID: 32926250. Full Text

Lin JC, Humphries MD, Shutze WP, Aalami OO, Fischer UM, and Hodgson KJ. Telemedicine Platforms and Their Use in the Coronavirus Disease-19 Era to Deliver Comprehensive Vascular Care. *J Vasc Surg* 2020; Epub ahead of print. PMID: 32622075. Full Text

Urology

Borchert A, **Baumgarten L**, **Dalela D**, **Jamil M**, **Budzyn J**, **Kovacevic N**, **Yaguchi G**, **Palma-Zamora I**, **Perkins S**, **Bazzi M**, **Wong P**, **Sood A**, **Peabody J**, **Rogers CG**, **Dabaja A**, and **Atiemo H**. Managing Urology Consultations During COVID-19 Pandemic: Application of a Structured Care Pathway. *Urology* 2020; 141:7-11. PMID: 32330531. Full Text

Tandogdu Z, Collins J, Shaw G, Rohn J, Koves B, Sachdeva A, Ghazi A, Haese A, Mottrie A, Kumar A, Sivaraman A, Tewari A, Challacombe B, Rocco B, Giedelman C, Wagner C, **Rogers CG**, Murphy DG, Pushkar D, Ogaya-Pinies G, Porter J, Ramesh Seetharam K, Graefen M, Orvieto MA, Covas Moschovas M, Schatloff O, Wiklund P, Coelho R, Valero R, de Reijke TM, Ahlering T, Rogers T, van der Poel HG, Patel V, Artibani W, Wagenlehner F, Nathan S, Erik Bjerklund Johansens T, Hawkey P, and Kelly J. Management of patients who opt for radical prostatectomy during the COVID-19 pandemic: An International Accelerated Consensus Statement. *BJU Int* 2020; Epub ahead of print. PMID: 33185026. Full Text