

Henry Ford Cancer Institute

Cancer Research Advisory Group

Quarterly Newsletter



This is a quarterly newsletter to keep Henry Ford Cancer Researchers and Clinicians informed about local, regional and national cancer research-related news

Summer 2017

KEY REMINDERS

Internal Money for Cancer Researchers

The Hartman Funding Program “Near-Miss” Initiative is an open internal funding mechanism for HFCI investigators who have submitted a cancer research grant application to the NIH or DOD that has high potential for obtaining external funding and has been reviewed once, but missed the funding payline. Maximum allowable amount for R01 grants is \$100K, R21 and DoD is \$50K. Interested researchers should contact Fatima Ogaily at fogaily1@hfhs.org.

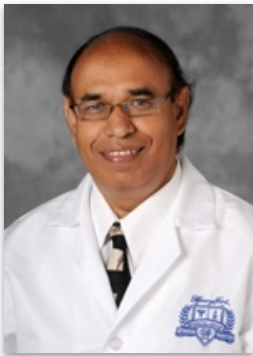
HFCI – CRAG Grant Review Forum

Investigators in the early stages of grant development are invited to vet their ideas at a Cancer Research Advisory Group (CRAG) monthly meeting. The *HFCI – CRAG Grant Review Forum* is designed to give cancer researchers feedback on their new grant ideas or offer advice on grant resubmissions. Interested researchers should contact Fatima Ogaily at fogaily1@hfhs.org.



AWARDS

Meser Ali, Ph.D. to collaborate with Yale Researcher on Study of Optimizing Drug Delivery in Brain Cancer



Dr. Ali



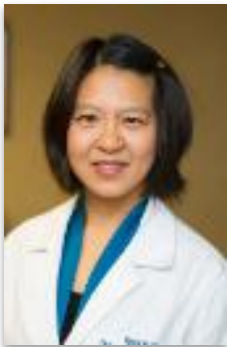
Dr. Hyder

The prognosis remains dismal for most patients with malignant brain tumors, including those with gliomas. These patients often fail treatments because gliomas invade outside tumor boundaries conventionally demarked by magnetic resonance imaging (MRI) contrast and the blood-brain barrier blocks most drugs. The Henry Ford Cancer Institute’s (HFCI) **Meser Ali, Ph.D.** will team up with **D. S. Fahmeed Hyder, Ph.D.** from Yale University on a 4-year NIH-funded study to develop and validate a high-resolution extracellular pH mapping method called BIRDS (Biosensor Imaging of Redundant Deviation in Shifts) to obtain readout of chemotherapy drug treatment (e.g., Temozolomide and Sorafenib) in human glioblastoma models. If successful, extracellular pH mapping by BIRDS will enable monitoring therapeutic response of drug delivery to human gliomas in addition to measuring the tumor size.

Houtan Noushmehr, Ph.D. & Vivian Wu, M.D., MPH Win 2017 Grant Mentorship Awards

The Henry Ford Cancer Institute’s Grant Mentorship Awards are awarded by the CRAG and designed for junior cancer researchers who would like to enlist the services of senior investigators to serve as grant-writing mentors in the applicant’s field of cancer research.

Dr. Noushmehr will be mentored by **Gerhard A. Coetzee, Ph.D.**, a professor at Van Andel Research Institute. Dr. Wu will be mentored by **Michael Chopp, Ph.D.**, Chair of Neuroscience Research at Henry Ford Hospital.



Dr. Wu

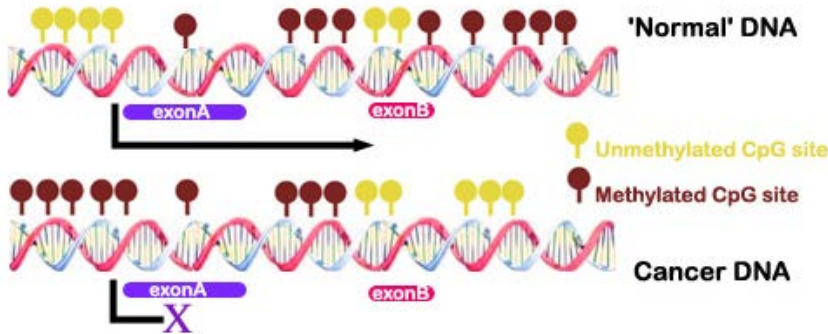


Dr. Noushmehr

NOTEWORTHY HFCI PUBLISHED RESEARCH

Methylation Biomarkers Identify Cancer Tissue in Thyroid

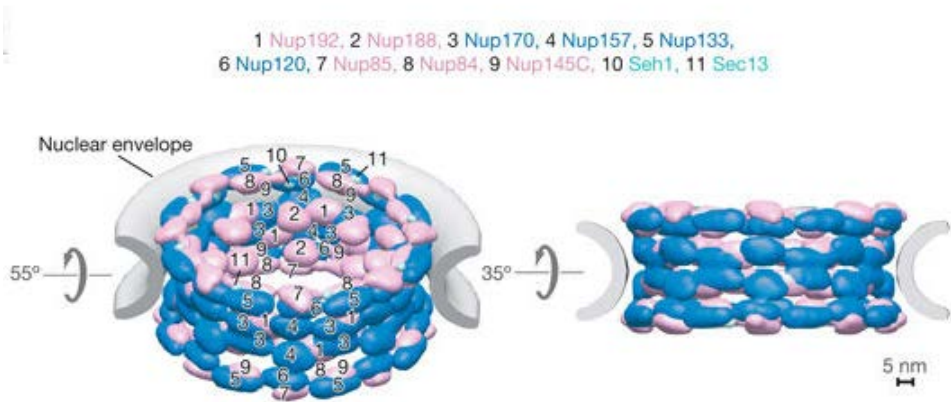
Josena Stephen, M.D. and **Maria Worsham, Ph.D.** (Otolaryngology) report on a study of a large retrospective cohort of 329 patients in which they showed methylation of certain genes helped discriminate between thyroid cancer and benign thyroid nodules. Their findings in this bi-racial cohort showed that using methylation information from combinations of genes could help discriminate between cancer and benign tissue. A 6-gene panel provided the most powerful discrimination power, showing a 91% sensitivity and 81% specificity in accurately identifying thyroid cancer. If this finding is upheld in future studies, methylation panels in the clinic could help reduce the over diagnosis of thyroid cancer and surgeries related to over diagnosis.



Stephen JK, Chen KM, Merritt J, Chitale D, Divine G, Worsham MJ. Methylation markers differentiate thyroid cancer from benign nodules. J Endocrinol Invest. 2017 Jun 13. [Epub ahead of print] PMID: 28612287

Single Variant in Key Nuclear Protein Complex may predict sensitivity to chemotherapy in patients with ovarian cancer

Shaheen Alanee, M.D., MPH (Vattikuti Urologic Institute) recently authored a manuscript where he identified a single variant in the 3'-UTR region of the nucleoporin 107 gene that conferred sensitivity to platinum treatment in ovarian cancer. His group studied twenty-two platinum-sensitive and six platinum-resistant ovarian cancer patients and used next-generation sequencing of exomes focusing on the nucleoporin genes known to play a role in response to chemotherapy. While several variants were associated with response, carriage of a single variant, rs79419059, in the nucleoporin 107 gene, independently conferred a greater than 4-fold increased risk of platinum resistance in ovarian cancer patients. This type of finding shows the power of genetics and precision medicine to tailor treatments for cancer patients.



Alanee S, Delfino K, Wilber A, Robinson K, Brard L, Semaan A. Single nucleotide variant in Nucleoporin 107 may be predictive of sensitivity to chemotherapy in patients with ovarian cancer. Pharmacogenet Genomics. 2017 Jul;27(7):264-269. PMID: 28562428

Nonsteroidal anti-inflammatory drug use improves outcomes in Colon Cancer

Christine Johnson, Ph.D., MPH (Public Health Sciences) and colleagues reported that current users of nonsteroidal anti-inflammatory drugs had a 3-fold decreased risk of recurrence and a >7-fold decreased risk of death from colorectal cancer. Colorectal cancer is the third most common cancer diagnosed in men and women in the United States and is expected to result in over 50,000 deaths in 2017. However, given the availability of effective screening, most tumors are found early enough to offer patients substantial long-term survival. Thus, there is a significant population of colorectal cancer survivors for whom modifiable risk factors for recurrence and survival would be of interest. Dr. Johnson and her team conducted a population-based retrospective cohort study among patients enrolled in two large Midwestern health plans. Men and women who were 40 years of age or older at the time of their cancer diagnosis and diagnosed between January 1, 1990 and December 31, 2000 were included. Their study results suggest that colorectal cancer survivors that are current users of nonsteroidal anti-inflammatory drugs could find a significant benefit in their disease outcomes.



IMPORTANT DATES

August’s HFCI Cancer Research Grand Rounds

Jeffrey M. Fowler, M.D. from the Ohio State Wexner Medical Center will be presenting “*Implications for Physician Burnout in Oncology*” on **August 25th from 8:00–9:00am in E&R Room 2055**. Dr. Fowler’s presentation will discuss the impact of physician burnout on workforce needs, patient safety, and quality of care.



HFCI Special Lecture



Guangyong Peng, M.D., Ph.D., a Professor from the Division of Infectious Diseases, Allergy & Immunology, Department of Internal Medicine, Department of Molecular Microbiology & Immunology at the Saint Louis University School of Medicine Edward Doisy Research Center will present, “*Targeting T-Cell Fate and Function for Anti-tumor Immunity and Immunotherapy*” on **August 10th from 12:00–1:00pm in E&R Room 2071**. Dr. Peng is interviewing for a HFCI faculty position in the Cancer Immunology Program.

HFCI Cancer Research Luncheons

HFCI Research Luncheons serve as an opportunity to connect with fellow researchers and receive the latest cancer related research news and learn what your colleagues are working on.

🚩 Upcoming speakers, dates & topics include:

Carri Glide-Hurst, Ph.D.

“Toward Magnetic-Resonance only Treatment Planning & Delivery”
Wednesday August 16th, OFP 1C00 @ 11:30AM



Josena Stephen, M.D.

“NGS identifies novel mutational landscape in ATC”
Wednesday September 20th, E&R Room 2096 A&B @ 11:30AM



HFCI Research Team

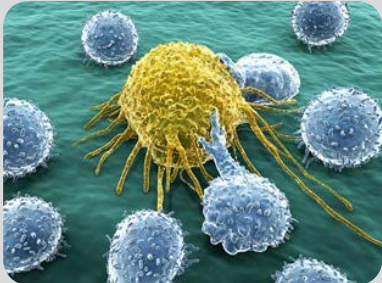
“Updates on HFCI Biorepository & Histology Core Services”
Wednesday October 18th, OFP 1C00 @ 11:30AM

HFCI’s 4th Annual Translational Oncology Research Symposium

* Save the date *

4th Annual HFCI Translational Oncology Research Symposium
~ Cancer Immunology ~

Friday, November 10th
8:00 AM – 3:00 PM
E&R Room 2055



NEW ARRIVALS

Melissa Davis, Ph.D. became the newest faculty member in the department of Public Health Sciences in late July. Dr. Davis came from the University of Georgia where she was an Assistant Professor in the Genetics Department. She is trained as both a molecular geneticist and bioinformatician and her research interests are in understanding biological determinants for racial disparities in breast cancer. Her research has involved studying the role of African-Specific alleles in breast tumor progression with a focus on the tumor microenvironment and immunological responses to tumor progression. Dr. Davis has most recently focused on a blood group phenotype that exists primarily in people of recent African descent, such as African Americans, coded by the Duffy Antigen Receptor for Chemokines (DARC) gene. Her research shows that the DARC gene may play a role in immune regulation of the breast tumor microenvironment and potentially help explain racial disparities in outcomes observed in more aggressive breast cancers. Dr. Davis will be working closely with **Lisa Newman, M.D.** in Surgery to help build a breast cancer research program that spans across both departments. Dr. Davis is a NIH-funded investigator, and will have an office in OFP 3E wing of the PHS department as well as a wet lab at OFP 2D.



Vivian Wu, M.D. arrives at Henry Ford in August, where she will begin a position as a clinician scientist in the Department of Otolaryngology. In the lab, Dr. Wu will spend her time developing a research program focused on using exosomes to develop new targeted therapies for head and neck squamous cell carcinoma. During her medical residency, she was successful at securing funding to support her research in the development of a mouse model of spontaneous head and neck squamous cell carcinoma. At that time, she also developed an interest in studying the biology of HPV associated oropharyngeal squamous cell carcinoma with additional experience in stem cell biology. Dr. Wu was previously an Assistant Professor at the Eastern Virginia Medical School in their Department of Otolaryngology where she spent time as a researcher, clinician and clinical trials. Dr. Wu received her medical training at the Howard University College of Medicine and also received a Masters of Public Health degree from Yale University.



IN CASE YOU MISSED IT!

HFCI has treated the first patient in the world on the ViewRay MRLinac unit which uniquely combines real-time MRI imaging with a linear accelerator!

The ViewRay MRLinac is the only FDA-approved radiation unit that has this novel capability, enabling your friendly radiation oncologist to actually see and track the target (and normal tissues) during the radiation treatment itself! The new system can be used to treat all types of cancers throughout the body and we feel will be particularly beneficial for tumors where there is typically movement during treatment, including the lung, liver, pancreas, and adrenal, among others sites.

Building Hope: Henry Ford Health System Breaks Ground on Destination Cancer Facility

Joined by patients and donors, state and city leaders, Henry Ford Health System broke ground on June 6th on its new home for the Henry Ford Cancer Institute. The Brigitte Harris Cancer Pavilion will be a destination center for ambulatory cancer treatment, precision medicine, clinical trials and research, and enhanced support services for cancer patients.



To read more, click [here](#)

U.S. Preventive Services Task Force Seeks Comments on Draft Recommendation Statement on Screening for Prostate Cancer

On April 11, the U.S. Preventive Services Task Force (USPSTF) posted for public comment a draft recommendation statement and three draft evidence reviews on screening for prostate cancer. Through this draft recommendation, the Task Force is providing clinicians and their patients with information to help guide decisions about screening for prostate cancer.

To read more, click [here](#).

Lisa Newman Appointed to Komen Scientific Advisory Board

Lisa A. Newman, M.D., MPH, director of the Breast Cancer Center at the Henry Ford Cancer Institute, has been appointed by Susan G. Komen – the world’s largest nonprofit funder of breast cancer research – to its Scientific Advisory Board. Dr. Newman is an internationally known breast surgeon and breast cancer researcher. She was named to the Scientific Advisory Board based on her extensive expertise in aggressive forms of breast cancer.



To read more, click [here](#).

1st International Keloid Symposium – AFRICA was held on April 30, 2017 in Marrakesh, Morocco.

The one-day symposium focused on providing a forum for open debate about clinical management of keloid disorder with the aim of having data driven, evidence based clinical management guidelines. There were also presentations on the latest in translational research. There were speakers who came from as far as Australia, Canada, United States, Saudi Arabia, Kenya, Senegal, United Kingdom and France. **Lamont Jones, M.D.** and **Maria Worsham, Ph.D.** were among the esteemed group of lectures and gave both basic science and clinical presentations.



If you haven’t already done so, check out our 2017 HFCI Cancer Research Booklet [here](#)!

If you have an item for the Quarterly Newsletter, feedback or questions, please contact **Fatima Ogaily** at FOgaily1@hfhs.org.