# Henry Ford Health – Detroit Campus Electives

# Contents

Allergy and Clinical Immunology
Anatomic and Clinical Pathology4
Anesthesiology5
Cardiology Intensive Care Unit
Child Psychiatry7
Cardiology Consultation8
Dermatology9
Diagnostic Radiology and Medical Imaging10
Emergency Medicine – Adult11
Emergency Medicine – Ultrasound12
Endocrinology13
Sports Medicine – Primary Care14
Gastroenterology15
Hematology16
Internal Medicine Sub-Internship17
Infectious Disease
Interventional Radiology19
Medical Genetics
Medical Oncology
Nephrology and Hypertension
Neurology Consult
Neurosurgery
Obstetrics and Gynecology
Ophthalmology28
Orthopedic Surgery
Otolaryngology
Pain Management
Plastic and Reconstructive Surgery
Psychiatry
Pulmonary Medical Intensive Care Unit (MICU)
Pulmonary Disease Consultation

Radiation Oncology	36
Rheumatology	37
Sleep Disorders Medicine	38
Surgical Intensive Care Unit	39
Thoracic Surgery	40
Transplantation Surgery	41
Acute Care Surgery	42
Urology	43
Vascular and Endovascular Surgery	47

# Allergy and Clinical Immunology

# Period Offered: Sept – June

### Distribution of Student's Time:

- 90% outpatient care
- 10% conferences

#### Average number of patients seen each week: 5-10 per day

#### Enrollment/Period: 1 maximum, upon availability

Prerequisites: Completion of core clerkship in Pediatrics or Internal Medicine

#### **Rotation Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, interpretation of data, clinical judgment, and procedures (i.e., observational, allergy testing, therapy and advice to patients).
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

#### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills and interpersonal relationships

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Assessment of write-up/reports

#### **Description:**

This four-week program offers a comprehensive overview of allergy and clinical immunology problems in adults and children for the fourth-year medical student in an ambulatory setting. At the end of the rotation, the student can identify what clinical problems may be allergic or immunologic in nature, and what can be done to help these patients as well as learn the diagnostic tools such as skin testing.

# **Anatomic and Clinical Pathology**

Duration: 4 weeks, 2 weeks is an option.

Period Offered: August - November, January - June

### Distribution of Student's Time:

- 20% Conferences/lectures
- 80% laboratory work

Enrollment/Period: 2 maximum, upon availability

#### Prerequisite: None

#### **Clerkship Objectives:**

- Gain significant insight into clinical utilization of the Anatomic and Clinical Pathology Laboratory and the consultative role of the Anatomic and Clinical Pathologist in patient care.
- Enhance knowledge and skills pertaining to interpretation of data and procedures to include reading, interpretating slides, examination of gross tissue, and viewing of autopsy procedures, etc.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

### **Evaluation:**

- Participation and performance in conferences
- Level of knowledge
- Level of skills
- Presentation by Medical Student

# Methods to be Used in Student Evaluation:

- Observation of performance by Faculty
- Observation of performance by House officers
- Observation of performance by Laboratory and Support Staff

#### **Description:**

The clerkship in Anatomic and Clinical Pathology is tailored to give the student an experience in disease diagnosis of tissue and cellular samples.

The clerkship allows experiences in Surgical Pathology, Cytopathology, Autopsy, Immunopathology, including Flow Cytometry, Molecular biology and other components of Anatomic Pathology.

Experiences also in Clinical Pathology in Chemistry, Cyto Genetics, Hematopathology, Microbiology, Molecular Pathology, Transfusion Medicine/Blood Banking.

Participation in Clinical, Teaching and Research Conferences and attendance at Morning Lectures is expected.

Any one area in Anatomic or Clinical Pathology maybe stressed depending on the student's interests and career goals.

# Anesthesiology

# Duration: 2 - 4 weeks

# Periods Offered: September through June

### Distribution of Student's Time:

- 40% inpatient care
- 40% outpatient care
- 20% conferences/lectures

### **On-call Responsibility:** One call optional

Enrollment/Period: 5 maximum, upon availability

#### Prerequisites: None

#### **Clerkship Objectives:**

- To provide exposure to the broad scope of anesthesia practice.
- Learn the pharmacologic and physiologic basis of anesthesia; the principles of
  preoperative patient assessment and devising an anesthetic plan which accommodates
  preexisting disease; the basics of airway management; the indications and techniques
  for the placement of invasive hemodynamic monitors (including arterial lines, central
  venous lines, and swan-ganz catheters) and to interpret the data which they provide; the
  indications and techniques for the performance of regional anesthetic techniques(i.e.
  spinal, epidural, and other blocks).
- Enhance knowledge and skills in the intraoperative and postoperative management of patients.

#### **Evaluation:**

- Quality of care given
- Level of knowledge
- Level of skills and interpersonal relationships

#### Methods to be Used in Student Evaluation:

Observation of performance by faculty and house officers.

#### **Description:**

Each student works with a resident and staff anesthesiologist to provide anesthetic care for patients. Students participate in the preoperative assessment of their patients, I.V. and invasive line placement, airway management and intraoperative and postoperative patient care. The students' responsibilities advance as proficiency is demonstrated and culminates with the student fulfilling the role of an anesthesia resident.

Students will be exposed to anesthesia subspecialties, including cardiothoracic, neurological, obstetrical, pediatric, vascular and critical care medicine and pain management.

The clerkship includes active participation in a didactic program which consists of morning reports, grand rounds, morbidity and mortality conferences and core curriculum lectures.

# **Cardiology Intensive Care Unit**

Duration: 4 weeks

Period Offered: July - May

# Distribution of Student's Time:

- 70% inpatient care
- 20% clinical rounds
- 10% conferences/lectures

Enrollment/Period: 2 maximum, upon availability

#### Average number of patients seen each week: 3

On-call Responsibility: Every 4th night

Prerequisites: Completion of core clerkships; must be 4th year medical student

### **Clerkship Objectives:**

- Increase student involvement in conferences, journal clubs; Increase student use/review of the medical literature.
- Approach an understanding of the pathophysiology, clinical manifestations, management of acute ischemic syndromes, congestive heart failure and arrhythmias.

### Evaluation:

- Quality of care given
- Participation and performance in conferences
- Level of knowledge

### Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports

#### **Description:**

This is an inpatient critical and intensive care subinternship in the Cardiac Intensive Care Unit (CICU). The focus is on clinical cardiology, stressing the clinical examination, evaluation and management of critically ill patients with heart disease. A team approach is stressed where the student sees patients at the bedside with an attending cardiologist and cardiology fellow every day. Teaching rounds and conferences emphasize core curriculum and didactic instruction is placed in clinical context. The student has exposure to thrombolytic administration, right and left heart catheterization, heart failure and pulmonary edema, complex arrhythmias, management of shock and ventilated patients. Each student prepares a 15-minute presentation for daily teaching conference on a subject of his or her choice.

# **Child Psychiatry**

Duration: 4 weeks; days/week: 5; hours/day: 7-8; no night calls

Periods Offered: July-June

**Location(s):** Henry Ford Behavioral Hospital; Henry Ford Medical Center - Ford Road; Henry Ford Medical Center – Columbus

Enrollment/Period: 1 (Year IV only) with plans of applying for residency training in psychiatry

Prerequisites: Students must have completed core clerkship

Rotation Coordinator: Dr. Anjali Thakrar

**Goal:** To learn about psychiatric care for children and adolescents.

#### **Objectives:**

- To learn about cognitive and psychosocial development of children and adolescents.
- To learn about clinical psychopathology in children and adolescents.
- Participate in multidisciplinary treatment team meetings.
- Participate in ongoing management including medication evaluations and therapy appointments.

#### **Description:**

Students will experience of a variety of children and adolescents with psychiatric disorders; evaluation of patients and provision of care. Students will primarily rotate in the child unit of our inpatient Psychiatry hospital. Based on faculty availability and student interest, opportunities to rotate in one of our outpatient child psychiatry clinics may be an option for part of the rotation.

#### Evaluation: Clinical evaluation

**Recommended Reading Material:** Dulcan's Textbook of Child and Adolescent Psychiatry, Second Edition. Free Access for Henry Ford Students

# **Cardiology Consultation**

Duration: 4 weeks

Period Offered: All

# Distribution of Student's Time:

- 80% inpatient care
- 10% outpatient care
- 10% conferences/lectures

Enrollment/Period: 2 maximum, upon availability

Prerequisites: Required Internal Medicine core clerkship

### **Clerkship Objectives:**

- Learn the fundamentals of clinical cardiology.
- Incorporate ECG assessment with management and diagnosis of the cardiac patient.
- Understand the use and limitation of different tests (i.e., echocardiogram, chest x-ray, stress test and cardiac catheterization).
- Enhance knowledge and skills pertaining to interviewing, physical examination and other patient interactions, interpretation of data, clinical judgment, therapy, and advice to patients.
- Increase student involvement in conferences, journal clubs.
- Increase student use of medical literature.

#### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports

#### **Description:**

The student is responsible for inpatient and outpatient cardiology consults. The cardiology fellow and/or staff cardiologist supervises the student. All patients are examined first by the student and then by faculty. There are numerous opportunities for the student to observe patients being tested in the cardiac catheterization lab, echocardiogram lab or exercise stress test lab.

# Dermatology

### Duration: 4 weeks

### Period Offered: All

### Distribution of Student's Time:

- 2% laboratory work
- 88% outpatient care
- 10% conferences/lectures

### Average number of patients seen each week: 40

#### Enrollment/Period: 4 maximum, upon availability

### Prerequisites: Year IV

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to basic dermatology with emphasis on dermatologic terminology, diagnosis and therapy of common conditions and detection of potentially serious lesions or condition; interviewing, physical examination, or patient interactions, interpretation of data and clinical judgment.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

### Evaluation:

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills
- · Professionalism, interaction with staff, house officers, and support staff
- Enthusiasm to learn, attitude, response to constructive criticism

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports
- Written/Oral tests possible

Final evaluation will be based on input from all the staff and residents with whom the student has interacted.

#### **Description:**

This elective is designed for the student who desires significant patient experience in Dermatology. A high proportion of learning is derived from direct patient care in both inpatient and clinical situations. This training is supplemented by daily conferences, lectures and programmed audiovisual study.

# **Diagnostic Radiology and Medical Imaging**

Duration: 4 weeks

Period Offered: All

### Distribution of Student's Time:

- 40% inpatient care
- 30% outpatient care
- 30% conferences/lectures

#### Enrollment/Period: 15 maximum, upon availability

**Prerequisites:** Open to 3rd and 4th year medical students with completion of core clerkship in Medicine, Surgery or Pediatrics

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interpretation of data, clinical judgment and procedures (i.e., angiography, and interventional radiology).
- Increase student involvement in conferences, journal clubs.

### Evaluation:

- Participation and performance in conferences
- Level of knowledge
- Teaching file contributions

### Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports

#### **Description:**

Diagnostic Radiology offers students a comprehensive, practical rotation designed to introduce them to the many facets of medical imaging. Interventional, Neuro-radiology, Ultrasound, Nuclear Medicine, MRI and Computed Tomography are included. Entry-level audiovisual programs and books are available to the student.

# **Emergency Medicine – Adult**

Duration: 4 weeks minimum, 5 weeks maximum

### Period Offered: All

### Distribution of Student's Time:

- 80% outpatient care
- 20% conferences/lectures

#### Average number of patients seen each week: 20

Enrollment/Period: 4 maximum, 1 minimum, upon availability

Prerequisites: Must be 4th year medical student

#### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, patient interactions, interpretation of data, clinical judgment, and procedures in an emergent and critical care environment.
- Understand administrative and medicolegal issues impacting emergency medicine.

### **Evaluation:**

- Clinical attendance
- Participation and performance in conferences
- Level of knowledge
- Level of skills
- Professional conduct

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports
- Lecture and clinical attendance

#### **Description:**

This rotation is designed to introduce the student to the field of Emergency Medicine. The student assumes primary care for Emergency Department patients under the supervision of residents. The students perform the initial history and physical exam, develop and discuss a diagnostic and therapeutic plan and perform any procedures needed to implement these plans. Assessment and management of critically ill patients occurs with the supervising resident's evaluation of the patient. Students participate in medical and surgical resuscitation. Attendance at weekly grand rounds is expected.

# **Emergency Medicine – Ultrasound**

Duration: 2-4 weeks (4 weeks preferred)

Period Offered: July-June

### Distribution of Student's Time:

- 90% outpatient care
- 10% conferences/lectures

#### Average number of patients seen each week: 20

Enrollment/Period: 4 week maximum, upon availability

#### Prerequisites: None

#### **Clerkship Objectives:**

- Enhance knowledge and image acquisition skills pertaining to point-of-care ultrasound in an emergent and critical care environment.
- Develop ultrasound needle tracking skills for procedural guidance.
- Incorporate independent learning in the HERALD lab with high fidelity ultrasound simulators for both normal and pathology scenarios.
- Participation in didactics and image review sessions.
- Attend educational sessions at the medical school, and various courses run throughout the year.

#### **Evaluation:**

- Clinical attendance
- Participation and performance in conferences
- Level of skills and knowledge
- Professional conduct

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and fellow(s)
- Assessment of image interpretation reports
- Lecture and clinical attendance
- Multiple choice question final examination

#### **Description:**

This four-week elective is designed to introduce students to the field of Emergency Medicine Ultrasound. Students will perform point-of-care ultrasound in the Emergency Department on weekdays to enhance their image acquisition and interpretations skills. Sessions will consist of a combination of scanning with residents, fellows, faculty, as well as independent scanning. Students will have access to the HERALD lab with three high fidelity ultrasound simulators. The clerkship includes active participation in a weekly didactic program which consists of core curriculum lectures and ultrasound image review. Students will be required to give a 10-minute lecture on a topic of their choice relating to ultrasound. Depending on the month, there are various teaching opportunities the student will be able to gain experience with providing education to a variety of learners. Students will have opportunities for case-report publication. Additionally, this is an excellent opportunity for an EM Subspecialty SLOE.

# Endocrinology

Duration: 4 weeks

Period Offered: 4-weeks

Enrollment/Period: 1 maximum, upon availability

**Average number of patients seen each week:** 5 to 7 per half day clinic session and 1-3 per inpatient session.

**On-Call Responsibility:** None

Prerequisites: Must be a 4th year medical student

#### **Clerkship Objectives:**

The objective of this course is to teach medical students the pathophysiology, diagnosis, and general therapeutic approaches to disease of endocrinology, diabetes and metabolism. An emphasis is on the consultative approach to patient care of these diseases and disorders. The content of the curriculum emphasizes diabetes mellitus, thyroid disease, lipid disorders, adrenal and pituitary disorders, bone and mineral disorders, transgender care, and hormone replacement therapy.

#### **Description:**

This course offers to the medical student the opportunity to learn the pathophysiology, diagnosis, and general therapeutic approaches to endocrine and metabolic disorders. It is conducted in the outpatient and inpatient settings. One student would be taught per block of time.

# **Sports Medicine – Primary Care**

Duration: 4 weeks

Period Offered: August - June

# **Distribution of Student's Time:**

- 80% patient care
- 10% amateur athletic events
- 10% operating room

Enrollment/Period: 1 maximum with pre-approval necessary

#### Prerequisite: Year IV

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to musculoskeletal evaluations.
- Become familiar with particular problems common to various sports and with historytaking of athletes.
- Develop the ability to complete the pre-participation exam and to assess acute injury.
- Develop ability to interpret data and use clinical judgment in providing therapy and advice to the athlete.
- Increase student presentation skills.
- Increase student use/review of medical literature.

#### **Evaluation:**

- Quality of care given
- Participation in team care
- Participation and performance in conferences
- Level of knowledge

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of presentation
- Assessment of write-ups/reports

#### **Description:**

Students explore the practice of sports medicine on the amateur level from screening the athlete in a pre-participation exam to assessing an acute injury and rehabilitation. Students spend most of their time at the Center for Athletic Medicine with family physicians trained in sports medicine experience and certified trainers working with local high school teams. Didactics add to this clinical experience.

# Gastroenterology

Duration: 4 weeks

Period Offered: All

### **Distribution of Student's Time:**

- 70% inpatient care
- 20% outpatient care
- 10% conferences/lectures

Enrollment/period: 2 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine

#### **Description:**

The student rotating in Gastroenterology/Hepatology will spend 2 weeks on the inpatient Gastroenterology consultative service, 1 week on the Hepatology inpatient consultation service, and 1 week in the outpatient Gastroenterology clinic. During the inpatient component, the student will see 1-2 consultations per day. He/she completes the evaluation and develops a differential diagnosis with management recommendations. A fellow and senior staff gastroenterologist or hepatologist reviews the student's evaluation and findings and makes the final recommendations. During the outpatient component, the student sees 1-2 outpatient consults per week in a similar fashion. It is at the discretion of the staff whether the student shadows in clinic or sees the patient independently first. The student attends all teaching conferences. A core curriculum of 8-10 lectures per month is presented by GI fellows or staff. At the end of the rotation, students will provide evaluations to be completed.

# Hematology

# Duration: 4 weeks

### Period Offered: All

# **Distribution of Student's Time:**

- 40% inpatient care
- 50% outpatient care
- 10% conferences/lectures

### Enrollment/Period: 1 maximum, July - April

Prerequisites: Completion of core clerkship in Medicine

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to clinical judgment.
- Increase student involvement in conferences, journal clubs.

#### **Evaluation:**

- Quality of care given
- Number of patients cared for
- Participation and performance in conferences
- Level of knowledge
- Level of skills

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Logbook entries
- Assessment of write-ups/reports

#### **Description:**

Students participate in both inpatient and outpatient consultation with senior staff and didactic conferences and teaching rounds on inpatient floors. Students are expected to read hematology literature prior to their case presentations in hematology conferences. At the end of the rotation, students are expected to be able to interpret peripheral blood films, diagnose common anemias, leukopenia and thrombocytopenia, recognize hematologic malignancies and diagnose and treat coagulopathies.

# Internal Medicine Sub-Internship

Duration: 4 weeks

Period Offered: All

### Distribution of Student's Time:

- 60% inpatient care
- 20% conferences/lectures
- 20% clinical/teaching rounds

Enrollment/Period: 6 maximum, upon availability

**Prerequisites:** Completion of core clerkships

#### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, as well as interpretation of data, clinical judgment, and procedures (i.e., L.P., thoracentesis, paracentesis, arterial blood gas and central line).
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

#### **Evaluation:**

- Quality of care given
- The number of patients given care
- Level of knowledge
- Level of skills

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports

#### **Description:**

The student acts as an intern with primary responsibility for patient care. The student is the first to evaluate patients admitted. The student's work is then reviewed by senior staff. Frequent teaching rounds and conferences include rounds by the chief of service. Level of responsibility and intensity of teaching are designed to meet the requirements of the subinternship.

# **Infectious Disease**

Duration: 4 weeks or 8 weeks

Period Offered: July - May

# Distribution of Student's Time:

- 80% inpatient care
- 15% conferences/lectures
- 5% laboratory work

Enrollment/Period: 4 maximum, upon availability

Prerequisites: Completion of core clerkship in Internal Medicine

#### **Objective:**

Improve understanding of the evaluation and management of patients with infections, antimicrobial spectrum, antimicrobial usage, and microbiology tests upon completion of this rotation.

#### **Description:**

The student functions as a member of the Infectious Diseases consult team and sees patients with the fellow, residents, and senior staff. The student is expected to review patient charts, see the patient, and review Infectious Disease literature prior to rounds. They will attend all ID didactics and microbiology rounds with the team.

# Interventional Radiology

Duration: 4 weeks

Period Offered: All

# Distribution of Student's Time:

- 60% inpatient care
- 35% outpatient care
- 5% conferences/lecture

Enrollment: 3 maximum, upon availability

### **Prerequisites:**

Open to 3rd and 4th year medical students with completion of 1 core clerkship in Surgery

### Goals and Objectives:

- Explain how the listed imaging modalities are used to guide procedures and differentiate when each is used: ultrasonography, fluoroscopy, CT.
- List the common indications and techniques of the following common IR procedures: central venous access, fluid aspiration and drain placement, angiography, percutaneous nephrostomy, percutaneous transhepatic cholangiography, gastrostomy tube placement, percutaneous angioplasty and stent placement, various interventional oncology procedures.
- Describe to a patient the following procedures: vascular access, angiography, fluid aspiration and drainage, feeding tube placement in stomach (gastrostomy), drainage catheter placement in kidney (nephrostomy)
- Critically assess requests for IR procedures and explain the factors that go into determining if a procedure is necessary and indicated, safe, and able to be performed.
- Explain and demonstrate the factors used to reduce radiation dose during fluoroscopic and CT interventions

# **Description of Educational Experiences:**

- Participate in daily inpatient rounding with IR team (Staff, Fellows, Residents, MLPs).
- Assist in patient workup, consents, and procedures
- Review relevant patient history, allergies, mediations, PMH, labs, and pertinent imaging studies. Understand indications for the requested procedure and how it is performed.
- Observe and help radiology technologists and nurses as they set up the room, bring the patients in, position them, and prep and drape the field. Understand techniques used to perform the procedure.
- Practice suturing with instruments as well as one and two hand knot tying.
- Attend all IR related conferences IR bi-weekly conference, didactics, M &M, journal club, Liver tumor board

# Location(s) of Course:

Henry Ford Hospital, Detroit, MI - K3 - Interventional Radiology

#### **Resources:**

- Kessel, D. Interventional Radiology: A Survival Guide, 3rd Edition
- Kandarpa, K. Handbook of Interventional Radiologic Procedures 5th Edition
- Valji, K. Vascular and Interventional Radiology, 2nd Edition

# **Evaluation Methods:**

- Presentation: Students are expected to give a single 15-minute presentation on a topic of their choice during the IR divisional conference by the end of the rotation. Topics can be anything related to the rotation that is of interest an interesting case, patient, disease process, or review of new literature regarding a procedure, technique, or disease process.
- Evaluation: A written evaluation will be completed on all elective students. Input is requested from all staff and residents in IR. Students will also be asked to evaluate the rotation.

# **Medical Genetics**

# Duration: 4 Weeks

Enrollment/Period: maximum 1, pre-approval required

Prerequisites: Completion of core clerkships in Medicine, Pediatrics and OB/GYN

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination and other patient interactions; interpreting data; clinical judgment; and therapy and advice to patients.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

# **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports

### **Description:**

Students get experience in clinical genetics both in counseling and in care of patients. Basic genetic history taking and approaches to diagnosis and counseling are stressed. Prenatal diagnosis by ultrasound, amniocentesis and chorion villus sampling are part of the learning.

# **Medical Oncology**

# Duration: 4 weeks

Period Offered: July - May

# Distribution of Student's Time:

- 80% outpatient care
- 20% conferences/lectures

Enrollment/Period: 1 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine and Pediatrics

# **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing physical examination, or patient interactions, interpretation of data, clinical judgment, therapy, and advice to patients.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature; rational use of analgesics.
- Understand how medical oncologist interacts with other disciplines in designing combined modality therapies.
- Understand scientific and ethical issues, which should govern use of antineoplastic therapies.

### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Assessment of write-ups/reports

#### **Description:**

This is an outpatient and inpatient rotation. Students work closely with senior staff oncologists in morning and afternoon clinics during 2 weeks of the rotation and in the inpatient oncology consult service on the other 2 weeks. New outpatient consultations, as well as interesting follow up patients, are seen by students and discussed with staff and fellow. Students are expected to participate in journal clubs and weekly interdisciplinary case conferences.

# Nephrology and Hypertension

Duration: 4 weeks

Period Offered: July - May

### Distribution of Student's Time:

- 65% inpatient care
- 15% outpatient care
- 20% conference/lectures

Enrollment/Period: 4 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine

#### **Description:**

Students work primarily on consult service, which sees a broad range of nephrologic and hypertension problems. Patients are seen by the medical student, reviewed with the nephrology fellow and discussed in detail by the Nephrology/Hypertension senior staff. Participation in the Nephrology/Transplantation ward rounds is encouraged. Students also work with residents, fellows and faculty, seeing outpatient consults. Weekly conferences include two journal clubs, renal grand rounds, fluid-electrolyte and biopsy sessions.

# **Neurology Consult**

Duration: 4 weeks

Period Offered: All months

**Distribution of Students Time:** Flexible combination of inpatient, NeuroICU, and consult service

Enrollment/Period: 1 maximum, upon availability - pre-approval required

Prerequisites: Completion of course in physical diagnosis and at least one medical clerkship

#### **Description:**

Students work closely with neurology attending physicians and residents on the inpatient neurology services, seeing patients in the emergency room, intensive care units, inpatient medical and surgical services. Clinic time is optional when desired. Students will follow their own patients and present cases on teaching rounds. Students will attend regularly scheduled educational sessions and have the option to attend Tuesday afternoon Academic Half-Day sessions. Evaluations are completed by each faculty and resident exposed to the student, as requested by the student.

# Neurosurgery

### Duration: 4 weeks

### Distribution of Student's Time:

- 60% inpatient care
- 20% clinical rounds
- 20% conferences/lectures

### On-call Responsibility: Every 4-5 days

Enrollment/Period: 5 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine and Surgery

### Evaluation:

- Level of knowledge
- Level of skills
- Professionalism and quality of patient care
- Participation and performance in conference

### Methods to be Used in Student Evaluation:

Observation of performance by faculty and house officers

### **Description:**

Educating medical students is a key mission of the Henry Ford Department of Neurosurgery. We welcome senior medical students from medical schools across the U.S. to rotate with our department. This subinternship at the Henry Ford Hospital is designed to initiate the subintern into the neurosurgical milieu by rapid and total immersion in the activities of a busy urban neurosurgical practice treating a comprehensive array of neurosurgical conditions, including cerebrovascular disorders (stroke, intracranial hemorrhage, aneurysm/AVM), neuro-oncology/skull base, brain and spinal trauma, functional neurosurgery and spine surgery. The subintern will take call with our house staff, providing a unique opportunity to participate in the primary diagnosis and treatment of diverse array of urgent and emergent cases, which present to our level 1 trauma center. Active participation is further broadened by the participation in a variety of neurosurgical procedures, both at the bedside and in the operating room. Direct faculty contact is enhanced by participation in outpatient clinics. Experience at the Henry Ford West Bloomfield Hospital rounds out the rotation which spans the subspecialty services, including neuro-oncology, vascular, spine, and functional neurosurgery.

# **Obstetrics and Gynecology**

Duration: 4 weeks

Period Offered: Must call to schedule

Enrollment/Period: 1 maximum, upon availability

Average number of patients seen each week: 3

**On-Call Responsibility:** None

Prerequisites: Must be a 4th year medical student

# **Clerkship Objectives:**

This clerkship offers a chance to profoundly widen knowledge and understanding of women's health issues, and continue the third-year task of incorporating theoretical knowledge into clinical care. OB/GYN is an exciting specialty, requiring varied skills.

# **Clerkship Goals:**

The OB/GYN clerkship is designed to help student:

- Gain an understanding of OB/GYN as a specialty to aid in career planning.
- Increase skill in performing complete breast and pelvic exams and recognizing the significance of abnormal findings.
- Deepen understanding of common issues in women's health care, enabling students to appropriately manage, triage, and refer, regardless of future practice choice.
- Obtain targeted OB/GYN histories.
- Perform a routine gynecologic exam including breast exam, speculum exam, pap smear, cervical cultures and bimanual exam.
- Identify pelvic anatomic structures during operative cases.
- Write daily patient progress notes that include problem lists, patient assessments and management plans.
- Write operative and postoperative notes on all patients you assist in surgery.
- Write delivery and postpartum notes for all patients that you deliver/assist in deliver.
- Demonstrate the ability perform a vaginal delivery on a real or simulated patient.
- Demonstrate an understanding of basic gynecologic procedures.
- Demonstrate the ability to sure and tie surgical knots.
- Present OB/GYN patients on rounds in the format as demonstrated by residents and attending physicians
- Grasp medical knowledge related to women's health care at least at the level required to pass licensing exams.
- Didactics: Group sessions, case reviews, and problem-based learning with core faculty
- Clinical experience: Hands-on experiences include patient interviewing, preceptorobserved physical diagnosis, assisting in surgery and at births, lab interpretation and office lab testing, clinical team meetings and case discussions.
- Directed independent learning: Through general reading of the suggested text, Obstetrics and Gynecology, 2nd Edition of The Comprehensive Handbook by Thomas Zheng MD.

# Textbook Suggestions and Objectives:

Second Edition Comprehensive Handbook Obstetrics & Gynecology By: Thomas Zheng MD

# **Clerkship Administration:**

Students with any questions or concerns about clerkship requirements, clinical sites, or career choices and opportunities are encouraged to contact:

Robert Goldfarb MD – Clerkship Director

- Phone: 248-420-1175
- E-mail: <u>Rgoldfa1@hfhs.org</u>

# **Evaluation Process:**

All evaluations are done through the computer application Evalue. Each student is asked to submit five names of Attendings, Fellows, Residents, and CNM that they would want to evaluate their progress throughout their Ob/Gyn Rotation. Evalue will calculate the scores given by each evaluator which will determine their final grade along with the Directors input.

# Ophthalmology

Duration: 4 weeks

Distribution of Student's Time: 100% outpatient/specialty

On-call Responsibility: Once per clerkship

# Average number of patients seen each week: 40

Enrollment/Period: 2 maximum, upon availability

Prerequisites: Completion of core clerkships in Medicine

# **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, clinical judgment and procedures (i.e., physical exam techniques, therapy and advice to patients).
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

# **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills
- Conference presentations

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports
- Conference presentations

#### **Description:**

The student is introduced to medical and surgical ophthalmology. He/she should learn basic terminology. The student is taught to recognize common diseases and approaches to management. The student will become familiar with examination and diagnostic techniques and be taught a systematic approach to an ophthalmological history and physical. The student will also have the option to observe surgery.

# **Orthopedic Surgery**

### Duration: 4 weeks

# Distribution of Student's Time:

- 40% inpatient care
- 50% outpatient care
- 10% conferences/lectures

### Average number of patients seen each week: 10-15

### **On-call Responsibility:** Every 3 days

Enrollment/Period: 2 maximum, upon availability

#### Prerequisites: None

#### **Clerkship Objective:**

Increase student knowledge of orthopedic diagnosis and treatment.

### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Ability to participate in patient care clinics and in operating room

# Method to be Used in Student Evaluation:

Observation of performance by faculty

#### **Description:**

There will be four-week-long rotations in different sections of the Orthopedic Department, including Arthritis Surgery, Hand Surgery, Foot and Ankle Surgery, Pediatric Orthopedic Surgery, Spine Surgery, Sports Medicine and Surgery and Orthopedic Trauma Surgery. Courses are appropriate for those considering careers in Orthopedic or other surgery specialties.

# Otolaryngology

# Duration: 4 weeks

# Distribution of Student's Time:

- 20% inpatient care
- 40% outpatient care
- 30% operating room
- 5% laboratory work
- 5% research

Enrollment/Period: 2 maximum, upon availability

Prerequisites: Completion of core clerkships in Medicine or Pediatrics and Surgery, July - May

### **Clerkship Objective:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, interpretation of data, clinical judgment and procedures (i.e., therapy and advice to patients).
- Increase student involvement in conferences, journal clubs; Increase student use/review of the medical literature.

### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills
- Interest in the rotation

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Written/oral tests

# **Description:**

The senior surgical clerkship in Otolaryngology is an opportunity to learn the techniques of thorough examination of the head and neck. Students manage outpatient problems under direct supervision of the senior staff physicians. Inpatient, outpatient, research and operative exposures suit students' individual interests. Continuously updated lectures and exposures include neck masses, head and neck cancer, airway obstruction, facial trauma, ear disease and sinus disease. Students are taught otolaryngologic concepts both in the operating room and in clinical outpatient areas.

# **Pain Management**

### Duration: 2 - 4 weeks

### Periods Offered: July through June

### Distribution of Student's Time:

- 85% outpatient care
- 10% conferences/lectures
- 5% inpatient care

#### **On-call Responsibility: None**

Enrollment/Period: 4 weeks maximum, upon availability

Prerequisites: None

#### **Clerkship Objectives:**

To provide exposure to the broad scope of pain medicine, including responsible opioid management.

Enhance knowledge and skills pertaining to interviewing, physical examination, patient interactions, interpretation of data, clinical judgment, and observation of procedures (i.e., epidurals, rhizotomies, and spinal cord stimulation).

Learn the pharmacologic and physiologic basis of pain medicine; the principles of assessment and devising a plan for the patient with acute, chronic, or cancer pain; the basics of opioid management; the indications and techniques available for interventions.

#### **Evaluation:**

- Quality of care given
- Level of knowledge
- Level of skills and interpersonal relationships

#### Methods to be Used in Student Evaluation:

Observation of performance by faculty and house officers.

#### **Description:**

This two to four-week program offers a comprehensive overview of pain medicine problems in adults in an ambulatory setting. At the end of the rotation, the student is able to identify common pain pathologies and devise a treatment plan. When opioids are indicated, the student will know the key elements of management. Each student works with a resident/fellow and senior staff to provide for and care for their patients.

The clerkship includes active participation in a didactic program which consists of grand rounds, morbidity and mortality conferences, and core curriculum lectures.

# **Plastic and Reconstructive Surgery**

Duration: 4 - 8 weeks

### Period Offered: All

### **Distribution of Student's Time:**

- 25% inpatient care
- 50% outpatient care
- 10% clinical rounds
- 15% conferences/lectures

Enrollment/Period: 1 maximum, upon availability, July - May

#### Prerequisites: Year IV

### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, interpretation of data, clinical judgment, and procedures (i.e., suturing techniques, therapy, and advice to patients).
- Increase student involvement in conferences, journal clubs, etc.
- Increase student use/review of the medical literature.

#### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports
- Written/oral tests
- Other structured skills testing

#### **Description:**

The student accompanies the residents and staff on inpatient rounds, in the clinic and operating room. The Plastic Surgery Division is set up for maximal involvement of residents and students in all aspects of inpatient and outpatient care. For students electing the eight-week rotation, participation in a "mini-research" clinical project is expected. The student also must attend a mandatory Hand Anatomy Dissection Course given by Plastic Surgery senior staff. For two-month rotators -- a Microsurgery Course is optional.

# Psychiatry

Duration: 4 weeks

Period Offered: All

Enrollment/Period: 1 student per month

Prerequisites: Open to 4th year medical students interested in Psychiatry

# **Opportunities:**

4-week rotation will be spent either on Inpatient Psychiatry, Consultation-Liaison Psychiatry, or Addiction Psychiatry depending on availability and student interest

# Goals:

- Introduce students to the diagnosis and treatment of psychiatric illness.
- Understand the principles of behavioral medicine and psychosomatic illness.
- Develop skill in interviewing patients, performing a focused physical exam including a mental status examination, and in formulating and supporting a psychiatric differential diagnosis.
- Expand the student's ability to understand the complex interactions between psychological, physiological, and social factors affecting psychiatric illness.

# **Objectives:**

At the end of the rotation the student is expected to:

- Conceptualize psychiatric illness using a biopsychosocial model.
- Perform a basic psychiatric interview with formal mental status examination.
- Detail risk factors associated with suicide / homicide / violence and describe appropriate interventions.
- Be familiar with medical illnesses that commonly have psychiatric presentations, including delirium.
- Be familiar with the role of the physician in assessing capacity.
- Elicit diagnostic symptoms associated with common psychiatric disorders, including depression, bipolar disorder, panic disorder, generalized anxiety disorder, psychoses, delirium and dementia.
- Understand symptoms and sequelae of common drugs of abuse and dependence.
- Formulate a bio-psycho-social treatment plan for common psychiatric illnesses.
- Describe pharmacological treatment of common psychiatric illnesses.

# Evaluation: Clinical Evaluation

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Observation of performance by house officers
- Assessment of write-ups/reports

# Pulmonary Medical Intensive Care Unit (MICU)

### Duration: 4 weeks

#### Distribution of Student's Time:

- 10% formal didactics (lectures, conferences)
- 25% clinical/teaching rounds (informing learning)
- 65% patient care

#### Average number of patients seen each week: 5

Enrollment/Period: 1 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine

### **Clerkship Objectives:**

By the end of the rotation, the learner will be able to:

- Summarize a critically ill patient's problems in a focused presentation
- Differentiate types of shock by presentation and treatment
- Name the commonly used modes of ventilation
- Describe common readiness for extubation criteria
- Outline a process for investigating ICU-specific clinical questions using available resources

### **Evaluation:**

Evaluations will focus on:

- Quality of care delivered to patients
- Clarity and thoroughness of oral presentations
- Clarity and thoroughness of written documentation
- Clinical reasoning and medical knowledge demonstrated

# Methods to be Used in Student Evaluation:

- Direct observation/evaluation by faculty
- Direct observation/evaluation by house officers
- Assessment of written documentation

#### **Description:**

The student acts as a functional member of the ICU care team, which is comprised of residents, advanced practice providers, a fellow, and a rounding faculty. The student is expected to care for 2 patients on the team per day, and is the primary point of contact for these patients. Students are expected to round on their patients daily, write succinct and accurate progress notes, and present these patients on teaching rounds to the faculty. Students are expected to write orders and place consults for their patients with appropriate supervision by residents and fellows. On admitting shifts, the student should endeavor to admit at least 1 patient and staff these admissions with on-call faculty on the same day. Formal didactics will be supplemented by extensive teaching during rounds. Students should take advantage of the entire ICU teaching service to expose themselves to the procedural aspects of ICU medicine, including intubations, bronchoscopy, central and arterial line placement, ventilator management, and point of care ultrasound throughout the rotation.

# **Pulmonary Disease Consultation**

### Duration: 4 weeks

# Distribution of Student's Time:

- 85% inpatient care
- 15% conferences/lectures

#### Average number of patients seen each week: 5

Enrollment/Period: 1 maximum, upon availability

Prerequisites: Completion of core clerkship in Medicine

#### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, interpretation of data, clinical judgment, therapy, and advice to patients.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

### **Evaluation:**

- Quality of care given
- Level of knowledge
- Level of skills

### Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Assessment of write-ups/reports

#### **Description:**

The student works with a senior staff member, pulmonary fellow and two medical residents on the inpatient consultation service which performs 4-6 consults daily, including a variety of conditions and diagnostic problems. Attendance at division conferences (4 per week) is expected.

# **Radiation Oncology**

Duration: 4 weeks

Period Offered: 3 -10

# Distribution of Student's Time:

- 10% inpatient care
- 50% outpatient care
- 30% conferences/lectures
- 10% research

#### Average number of patients seen each week: 10

Enrollment/Period: 1 maximum, upon availability, pre-approval required

Prerequisite: Required General Medicine and Surgery core clerkships

#### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination, or patient interactions, interpretation of data, clinical judgment, therapy and advice to patients.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

### **Evaluation:**

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports

#### **Description:**

Radiation Oncology is a specialty involving the use of external beam radiation therapy, brachytherapy and radiosurgery in the treatment of diseases of various parts of the body, usually malignant tumors. The student is expected to become familiar with certain aspects of the natural history, diagnosis, treatment and follow-up of various malignancies.

# Rheumatology

### Duration: 4 weeks

### Period Offered: All

### **Distribution of Student's Time:**

- 85% outpatient care
- 15% conferences/lectures

Enrollment/Period: 1 maximum, upon availability, July - May

#### Average number of patients seen each week: 10-12

Prerequisites: Completion of core clerkship in Medicine

#### **Clerkship Objectives:**

- Enhance knowledge and skills pertaining to interviewing, physical examination and other patient interactions, interpretation of data, clinical judgment, procedures and therapies.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

#### **Evaluation:**

- Quality of care given
- Participation and performance in conference

### Methods to be Used in Student Evaluation:

Observation of performance by faculty

#### **Description:**

Students gain broad experience in evaluation of the musculoskeletal symptoms ranging from patients with Lupus, Rheumatoid arthritis and Scleroderma. Students are thoroughly exposed to history-taking and physical evaluation of joint disease and are closely involved in the management of these rheumatic disorders.

# **Sleep Disorders Medicine**

Duration: 4 weeks

Period Offered: July - May

# Distribution of Student's Time:

- 80% outpatient care
- 20% conferences/lectures

Enrollment/Period: 1 maximum, upon availability

**Prerequisites:** Must be 4th-year medical student. Completion of core clerkship in Medicine and Psychiatry.

# Clerkship Objectives:

- Provide sufficient exposure and experience in the field of sleep medicine to understand how to approach, work up and treat the patient with sleep disorders
- This rotation exposes you to the most common sleep disorders including sleep apnea, restless legs syndrome, narcolepsy and insomnia
- It will also help you to have basic understanding of in-laboratory and portable polysomnography

# Evaluation:

- Quality of care given
- Participation and performance in conferences
- Level of knowledge
- Level of skills

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty
- Assessment of write-ups/reports

# **Description:**

This course offers to the medical student the opportunity to learn the pathophysiology, diagnosis and general therapeutic approaches to Sleep Disorders. It is conducted in the outpatient.

# **Surgical Intensive Care Unit**

### Duration: 4 weeks

Period Offered: All

# Distribution of Student's Time:

60% inpatient care 30% clinical rounds 10% conferences/lectures

### Average number of patients seen each week: 10

**On-call Responsibility:** Five to seven 12 hour shifts with a senior resident during the second half of the rotation

Enrollment/Period: 3 maximum, upon availability

Prerequisites: Must be 4th year medical student, and completion of all core clerkships

### **Clerkship Objectives:**

- The student will participate as a team member on a busy surgical intensive care service seeing critically ill pre and post-surgical patients.
- The student will participate in rounds each day and present patients, observe and assist with minor invasive bedside procedures (a-lines), and major invasive bedside procedures (central lines, tracheostomy, endoscopy, and percutaneous gastrostomy).
- The student will spend time on the night shift with senior level residents, advance practice providers and fellows gradually increasing hands-on experience and have the opportunity to observe and assist with invasive bedside procedures (a-lines and central lines).

#### Evaluation:

- Engagement as a team member with active participation on rounds.
- Evidence of self-directed learning and application of this in the interpretation of clinical data and care of patients.
- Participation in conferences.

# Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports

# **Description:**

During this course, the student will function as a member of a busy surgical intensive care service, working closely with faculty, fellows, residents, and advanced practice providers. They will be exposed to a variety of critically ill patients with traumatic and acute pre and post-surgical conditions. They will have the opportunity to develop their knowledge and clinical decision-making skills with regards to the initial resuscitation, ongoing work-up, and definitive medical and surgical care of these critically ill patients.

# **Thoracic Surgery**

Duration: 4 weeks

Period Offered: July - May

# **Distribution of Student's Time:**

- 80% inpatient care
- 10% clinical rounds
- 10% conferences/lectures

Enrollment/Period: 1 maximum, upon availability

Prerequisites: Required Surgery clerkship

# **Clerkship Objectives:**

At the conclusion of the clerkship, the student should have familiarity with the major thoracic surgical disease prostheses. Each student is given a syllabus outlining the reading requirements. Didactic sessions cover most of the material outlined. Students are to perform a complete history and physical examination on two patients per week. The students participate in both operative and ward activities with the thoracic staff.

#### **Evaluation:**

The history and physical examination workups are reviewed by both the resident and the attending surgeon. Each student accompanies the surgical team on ward activities where daily discussions of patients and thoracic problems are conducted.

#### **Description:**

The student is exposed to the full spectrum of tertiary care thoracic surgery. The clerkship can be individualized to the student's interest so as to maximize exposure in the operating room, intensive care unit, outpatient clinic and wards or medical/surgical conferences. Students can focus specifically on thoracic surgery for a more in-depth learning experience.

# **Transplantation Surgery**

### Duration: 4 weeks

# Distribution of Student's Time:

- 40% inpatient care
- 20% outpatient care
- 20% conferences/lectures
- 20% operating room

#### Enrollment/Period: 2 maximum, upon availability

### Prerequisites: Required Surgery clerkship

#### **Clerkship Objectives:**

- Teach students the basic surgical principles and the pathophysiology, diagnosis, management of a variety of surgical conditions.
- Increase student involvement in conferences, educational rounds.
- Increase student use/review of the medical literature.
- Appreciate surgical work style.

### **Evaluation:**

- Quality of care given
- Interest, commitment, and stamina
- Participation and performance in conferences
- Level of knowledge
- Level of skills and H&P's notes
- Enthusiasm, willingness, ability to function as part of resident team

#### Methods to be Used in Student Evaluation:

- Observation of performance by faculty and house officers
- Assessment of write-ups/reports
- Other structured skills testing
- Preparatory for Operating Room Division

#### **Description:**

The goal is to provide the student with a more in-depth understanding of the science and clinical practice of organ transplantation. The student spends time with residents and staff on inpatient rounds and at outpatient clinics where organ transplant recipients (kidney, liver, pancreas, and heart) are followed. The student participates in organ recovery procedures and organ transplant surgery. Opportunity for exposure to Tissue Typing Laboratory is available, as well as to Vascular Access Surgery (for hemodialysis patients).

# Acute Care Surgery

### Duration: 4 weeks

# Distribution of Student's Time:

- 85% inpatient care
- 5% outpatient care
- 10% conferences/lectures

### Average number of patients seen each week: adjusted to level of student experience

#### **On-call Responsibility:** one per week

### Enrollment/Period: 2

Prerequisites: Successful completion of Core Surgery Clerkship

### **Rotation Objectives:**

- The student will participate as a team member on a busy acute care surgery service.
- The student will participate in rounds each day and present patients, help with wound care and other minor bedside procedures (negative pressure wound therapy, drain management, etc.)
- The student will spend time in the operating room with gradually increasing hands-on experience and can observe and assist with invasive bedside procedures (incision and drainage, chest tubes, etc.)
- Perform emergency room and inpatient consults with supervision.

#### Evaluation:

- Engagement as a team member with active participation on rounds and in the OR.
- Evidence of self-directed learning and application of this in the interpretation of clinical data and care of patients.
- Attendance and participation in conferences.

# Methods to be Used in Student Evaluation:

- Observation and assessment of performance by faculty and house officers.
- Assessment of a written report and/or oral presentation as assigned by chief resident or faculty rounder.

#### **Description:**

During this course, the student will function as a member of a busy acute care surgery team, working closely with faculty, residents, and advanced practice providers. They will be exposed to a variety of patients with traumatic and acute surgical conditions. They will have the opportunity to develop their knowledge and clinical decision-making skills with regards to the initial resuscitation, work-up, and definitive medical and surgical care of these patients.

# Urology

# Duration: 4 weeks

# Distribution of Student's Time:

- 30% inpatient care/operating room
- 50% outpatient care
- 20% conferences/lectures

Enrollment/Period: 3 maximum, upon availability

# Average number of patients seen each week: 20

Prerequisites: Completion of core clerkship in Surgery

### Sub-Internship Student Rotation Objectives:

Attend scheduled conferences and other assigned lectures: Grand rounds, didactics, tumor board, journal club, specialty conferences.

- Operative experience: Students should have broad exposure of operative experience, including robotic and laparoscopic, endoscopic, general urology, and microsurgery, if applicable. Office and outpatient procedure should also be part of the exposure.
- Clinic and outpatient experience. Clinic exposure to allow the opportunity to evaluate, diagnose, and develop an outpatient treatment plan for different urologic conditions. Call and weekend rounds that will mirror an intern schedule. Over the course of the rotation students are expected to be on call and demonstrate inpatient management of patients. Focus areas should be sign-out and communication regarding transition of care, post-op patients, and triage calls.
- Rounds: round with consult service and exposure to triaging and evaluating inpatient and emergency room consults, including patient calls. Write a medical student note for consults, follow up notes, sign off, and any procedures (student note) for patients they see.
- Presenting patient on rounds: Expectation to present patients to residents and rounding staff, including a full history and physical and assessment and plan.
- Grand Rounds Presentation: Expectation to present during grand rounds.

# **Rotation Structure:**

We want you to have a comprehensive and diverse experience during your rotation. Generally, your rotation with us will be split into four separate week-long blocks, each with a different service—the services are listed below

- Robotics/Oncology—genitourinary oncology (prostate, kidney, bladder, penile, testicular), robotics for benign pathology including BPH, upper/lower tract reconstruction, etc.
- Female/Neurourology—pelvic organ prolapse, incontinence, urodynamics, etc.
- Pediatrics—all things pediatric, from hydronephrosis to hypospadias to intersex/DSD, etc.
- General/Endourology/Men's Health—benign prostatic disease, nephrolithiasis, prosthetics and implants, hydroceles, men's health, etc.

Please note, if you are interested in working with a specific staff member, please speak with the chief/senior residents early in your rotation so that we can try to make that happen.

# **Conferences/Meetings:**

In general, you will be expected to attend all conferences and meetings.

Grand Rounds conference on Wednesday mornings from 7:00-9:00 am. These are more formal conferences, and topics vary widely. The first Wednesday of every month is M&M, and the final Wednesday of the month is generally reserved for medical student presentations. You are expected to dress in clinical attire for this conference (no scrubs). This conference takes place in our conference room on K9 at Henry Ford Main Hospital.

Every Friday morning from 7:00-8:00 am, our faculty will give a lecture to the rotating medical students on various urologic topics. You are expected to attend these lectures regardless of the clinical site at which you are rotating. This conference takes place in our conference room on K9 at Henry Ford Main Hospital.

Multidisciplinary tumor board is every Thursday from 7:00-8:00 am. This is staffed by urological oncology staff, medical oncologist, radiation oncologists, radiologists, and pathologists. Residents/students are expected to attend if available.

At Children's Hospital of Michigan, there is a radiology conference every Thursday morning from 7:30-8:30. Only the residents/students assigned to CHM for any given week are expected to attend.

Men's Health Conference once a month on a Friday in the Afternoon. Women's Health Conference every Thursday in the Morning.

### Journal Club:

Scheduled every 4 months part of Grand rounds or part of the visiting professor's series This conference is attended by the residents, senior staff, and scientific staff (Ph.D.). Articles for review are chosen by the senior resident with input from the senior staff. Many of the articles are selected from The Journal of Urology, Urology, and European Urology. In addition, any article pertaining to a urological topic in JAMA, NEJM, and Lancet are discussed. Each article is presented on PowerPoint by one of the residents with emphasis on study design, validity of interpretation of results, and its relevance to patient care.

#### **Rotation Expectations:**

We want this rotation to be of high educational value—we want you to see and do as much as possible—if we can get you functioning like a first-year resident, then we have all achieved our goals—you will learn an immense amount and have the opportunities to distinguish yourself.

- Prepare for clinic and OR cases. If you are scheduled to be in the OR, please read about the cases ahead of time. The more you can demonstrate your knowledge/interest, the easier it is to get you involved.
- You should attend all academic educational sessions.
- Every morning, you will be expected to present patients on rounds—you should preround on this patient, so that you can deliver an informed, comprehensive presentation. In turn, the residents will be responsible for giving you feedback on your presentations. This feedback may take place either on rounds, or after rounds at a later time. Also you will have the opportunity to present those patient to the senior staff when they round.
- You will be expected to work one weekend of your choice (both Saturday and Sunday during the day). Please coordinate with the other medical students to minimize double coverage and ensure there is a student each weekend.
- You will be expected to take overnight call one weeknight during your time with us; please coordinate with the other medical students to ensure that no two students are on the same night.
- You will be expected to deliver an approximately 15 minutes presentation on the final week of your rotation—this can be on any urologic topic you find interesting and can be related to research you have done. Early on in your rotation, please talk with the chiefs

and senior residents about your presentation. They will be able to direct you to a staff member who can help provide mentorship.

- You are expected to wear clinical attire for clinic days, as well as all (eliminate Monday, Tuesday and Wednesday) conferences
- Do NOT wear your scrubs into and out of the hospital
- Be prompt and on time.

### Locations

### Henry Ford Hospital 2799, W. Grand Blvd Detroit, MI 48202

Our flagship hospital, located in a neighborhood of Detroit called New Center, ~2.5 miles north of downtown. As an inner city tertiary referral center, this hospital serves an ethnically and socioeconomically diverse population. The majority of our clinical volume is at this location, including most of our oncology cases and robotics. Additionally, most of our female urology cases, reconstructive cases, and our infertility cases, are here.

The Vattikuti Urology Institute (VUI) is located on the 9th floor of the K clinical tower (K-9)—that is where we meet in the mornings before/for rounds. The OR is located on the fourth floor. The scrub machine is located on the 4th floor in the back hallway outside of the operating rooms and the locker room.

### Henry Ford West Bloomfield

### 6777 W Maple Road, West Bloomfield, MI 48322

Our second largest clinical site located ~25 minutes from Henry Ford Main Hospital in one of the northwestern Detroit suburbs.

There are two urology clinics here—the larger is on the 3rd floor in the East Clinic Wing, and the other is on the 1st floor in the West Clinic Wing. The OR is located on the 2nd floor of the hospital, reached via the main elevators beyond the cafeteria. Scrubs are located in the hallway reached through the back door of the locker rooms.

# Children's Hospital of Michigan

# 3901 Beaubien Boulevard, Detroit, MI 48201

Our pediatric center, located in the Midtown neighborhood of Detroit, near the Detroit Medical Center and Wayne State University, and ~1.5 miles south of Henry Ford Hospital. We currently have 3 pediatric urologists who manage the full spectrum of pediatric urologic disease. Students need specific credentials to have access to Children's Hospital.

The urology department is located on the 2nd floor of the Carl's Building.

# Henry Ford Medical Center - Fairlane

19401 Hubbard Dr, Dearborn, MI 48126

One of our regional clinic locations, also equipped with an outpatient surgical center. We do a number of outpatient cases here every week, and the clinic is staffed daily by our urologists. The urology clinic is located in the west wing of the building.

# Henry Ford Medical Center - Lakeside

14500 Hall Rd, Sterling Heights, MI 48313

One of our regional clinic locations, and one at which we are rapidly expanding. It is also equipped with an outpatient surgical center. We also do a number of outpatient cases here every week, and the clinic is staffed daily by our urologists.

The urology clinic is located on the 2nd floor of the building

# **Useful Clinical Resources**

The following resources are recommended. With the exception of Weider's Pocket Guide to Urology, the rest are available through Henry Ford's Sladen library, or your AUA account, for free.

- Campbell's Urology: The definitive urologic textbook.
- Pocket Guide to Urology—Jeff A. Weider: An all-around excellent introduction to urology, including the basics of managing numerous urologic conditions
- Hinman's Atlas of Urologic Surgery:Great step-by-step guide to multiple procedures, including pertinent anatomy. A good resource for preparing for cases.
- PubMed: Nothing like going straight to the source to find primary research to support your theory/opinion, or prove the residents wrong.
- AUA University/AUA Guidelines: If you are a member of the AUA, download these apps—they contain A TON of great information—most of our SASP questions come straight from these resources.
- AUA Medical Student Curriculum: An easy resource with basic urology knowledge that students should know. The format is easy to follow.
- Washington Manual of Surgery
- Mont Reid Surgical Handbook: Useful for core curriculum general surgery topics that are always useful: shock, fluids and electrolytes, sutures and instruments, peri-op troubleshooting/issues etc.
- Henry Ford Medical Student Rotation Handbook: A booklet of lecture slides with useful urologic information; you will all receive a copy when you begin the rotation.

# **Contact Information**

Urology on Call—ASK for this number on DAY ONE

Always carried by one of the residents—if you need to get ahold of someone and you aren't able to, call this number. If we don't answer, we may be in a procedure or seeing a consult— don't leave a voicemail—instead, text the phone with your question and then call the phone back in a while. We recommend putting this number in your phone for use during your time at Henry Ford.

Michelle Nickel Residency Coordinator Phone: (313) 916-9375

Dr. Ali A. Dabaja Residency Program Director Email: adabaja2@hfhs.org

For contact information for each of the faculty, please feel free to ask them. They are very welcoming and will be happy to speak and meet with you.

# Vascular and Endovascular Surgery

# Duration: 4 weeks

### Distribution of Student's Time:

- 70% inpatient care/operating room
- 15% outpatient care
- 15% conferences/lectures

#### Enrollment/Period: 2 maximum, upon availability

Average number of patients seen each week: We expect the student to follow 1-2 inpatients while on the service.

#### Prerequisites: Completion of core clerkship in Surgery

### **Clerkship Objectives:**

- Gain the ability to obtain a good vascular history and perform a physical examination.
- Teach the diagnosis and treatment of common vascular problems.
- Develop both open surgical and endovascular skills.
- Increase student involvement in conferences, journal clubs.
- Increase student use/review of the medical literature.

#### **Evaluation:**

- Level of knowledge as well as skill is assessed.
- Participation and performance in conferences is encouraged.
- Ability to function as a team, interest, and quality of care given to patients.

#### **Description:**

Each student accompanies the surgical team on ward activities where daily discussions of patients and vascular problems are conducted. The student is exposed to a broad spectrum of vascular disease. Rounds and conferences are integrated into the clerkship and basic pathophysiology of vascular disease is taught. The clerkship can be individualized to the student's interests. At the end of the rotation, students should be able to diagnose, work up, and initiate treatment on common and some complex vascular diseases.

Opportunities for clinical research is available for interested students.