# **UF College of Medicine 2021-2022 4th Year Catalog**

#### **Adolescent Medicine - Pediatrics**

PED E 10 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Adolescent Medicine

#### **Prerequisites**

Fourth year medical student, successful completion of pediatrics clerkship.

#### **Course Description**

Adolescence is a time of change whether socially, mentally, or physically. Adolescent Medicine is an important aspect of Pediatrics, Family Medicine, and Internal Medicine. Adolescent patients are also seen in most other areas of medicine. Having an understanding of Adolescent Medicine will benefit you no matter what area of medicine you choose. Often there is not adequate time during Internship or Residency for this valuable part of your education. The 4th year of medical school is an ideal time to take this elective.

- 1. Appreciation of adolescent development as it pertains to Health care and delivery.
- 2. Application of standard interviewing techniques to adolescent healthcare provision.
- 3. Understanding of common adolescent health care needs.

## **Course Faculty and Staff**

- Ratna Acharya MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Monday - Thursday 8:00 a.m. - 5:00 p.m. Friday 9:00am to 6pm, Adolescent Clinic, CMS building A, 1701 SW 16th Ave

#### **Course Materials**

Various Adolescent Medicine texts, Journal Articles, Appropriate Internet sources

#### **Additional Information**

Students will see patients in the adolescent clinic and present to the preceptor. They will present a topic to high school students in the community with the pediatric resident on the rotation. They will also present on a topic of interest to the team at the end of the rotation.

## **Ambulatory - Pediatrics**

PED E 14 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Ambulatory Pediatrics

## **Prerequisites**

The successful completion of the 3rd year of medical school training, specifically the pediatric clerkship.

## **Course Description**

COURSE GOALS: To participate in a variety of pediatric ambulatory sub-speciality outpatient clinical settings. To enhance the student's ability to obtain, evaluate, and process multiple forms of clinical data in pediatric subspecialty patient encounters.

## **Course Faculty and Staff**

- <u>Diane Howell MD</u> (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

The majority of clinics are located in the Shand's Medical Plaza, Children's Medical Service's Center, and Shands Children's Hospital.

#### **Course Materials**

A general pediatric text. This may include Nelson's Textbook of Pediatrics or Rudolph's Pediatrics. An additional quick review condensed text may also be helpful in the quick paced ambulatory settings.

#### **Additional Information**

The student will contact the course administrator, Meghan Lopez (meghanlopez@peds.ufl.edu) no less than two weeks prior to the rotation. The student and course director will create a rotation with pediatric subspecialty care clinics based on the students interests and specific goals while also considering clinic availabilities.

# **Ambulatory and Community Family Medicine**

CM E 32 | 4th Year Elective | Community Health and Family Medicine | Clinical Science

## **Prerequisites**

Completion of 3rd year requirements

#### **Course Description**

COURSE GOALS: This course is designed to provide the student with exposure to an outpatient experience in the family practice center. In the FPC, students will experience the continuity of care in the residency program, and enhance their knowledge of ambulatory care, evaluation and management.

## **Course Faculty and Staff**

- Kimberly K Zinkel (Course Staff)
- Maribeth Williams MD (Director)
- Shellayna Warman (Unknown)
- Kat Lindsey (Unknown)

## **Meeting Place and Time**

Present to 1707 N. Main Street at 8:00 AM. Let the front desk know you need to go to the preceptor room. A preceptors will Orient to the clinic. Any questions prior to the start of rotation, please contact Kimberly Zinkel at 265-9564 or Zinkel@ufl.edu.

#### **Course Materials**

Family Medicine Textbook

# **Anatomic and Clinical Pathology**

PATH E 1 | 4th Year Elective | Pathology | Clinical Science

MDT 7530 | Surgical Pathology

#### **Prerequisites**

Completion of first 2 years of medical school/basic science curriculum.

## **Course Description**

This course is designed to introduce medical students to Surgical Pathology. Students work closely with residents and faculty and learn about techniques in pathology that facilitate tissue diagnosis of biopsies and surgical resections. There will be ample opportunities to observe and

assist (if interested) in specimen triage and processing (gross description), frozen section evaluation and microscopic examination. Students considering a career in pathology will be mentored to gain an in-depth understanding of the specialty and its scope. Students considering medical or surgical specialties who would benefit from working knowledge of pathology are also encouraged to apply. The course can be structured to the student's interests, such as Gynecologic pathology for a student interested in Ob/Gyn.

Kendra Smith (krs2@ufl.edu) may be emailed with questions about the rotation.

## **Course Faculty and Staff**

- Ashwin Akki MD (Director)
- Kendra Smith (Course Staff)

## **Meeting Place and Time**

Meeting Place: Stetson Medical Sciences Building, Room MG -35

Meeting Time: 8.00 AM, daily (first day orientation time will be set up by contacting Dr. Akki

prior to start date)

Students may wear scrubs for this rotation.

#### **Course Materials**

Case material includes biopsies and resections performed at UF Shands covering several subspecialties (GI, GYN, Breast, ENT, GU, Ortho, Neuro, Peds) areas.

Reference texts provided as necessary.

#### Additional Information

Please contact Dr. Akki prior to beginning the rotation to relay areas of interest so the rotation can be structured appropriately. Any days of absence or scheduling of make-up days will be made directly with Dr. Akki (a.akki@ufl.edu).

#### ANS E 1-Clinical Elective in Anesthesia-Shands OR and VA OR/Pain Clinic

ANS E 1 | 4th Year Elective | Anesthesiology | Clinical Science

MDT 7700 | Anes Shands OR/VA OR Pain Clin

#### **Prerequisites**

This course listing is specifically for 4th year NON- UF medical students requesting an EXTERNSHIP rotation at UF COM.

This course is NOT to be scheduled by UF COM students.

Please contact the course director, Dr. Chris Giordano, at cgiordano@anest.ufl.edu with any questions.

#### NOTE:

Non-UF students who apply to participate In this rotation should submit the following in addition to their application: copy of transcript; photo attached to application; letter of recommendation; letter of good standing and a written statement of why you are Interested In participating in an Anesthesiology elective with the University of Florida College of Medicine. All applicants must apply through VSAS in order to be considered.

## **Course Description**

During this course the student will learn the basics of airway management, mechanical ventilation, invasive hemodynamic monitoring, management of fluids, and use of vasoactive medications. In addition, the student will be taught concepts of preoperative evaluation, basic principles of anesthesia and management of acute postoperative events. Participants will be exposed to the operating rooms of Shands and FSC ambulatory center

The course will begin with an Introduction at 8 am on the first Monday of each elective period. The students are required to complete each online module prior to attending the simulation, which will be time stamped and recognized for grading. There are two simulations on the first Monday, meaning that they need to be completed prior to beginning the clerkship. There are a total of nine modules corresponding to the nine simulations or problem-based learning discussions. There will be two lectures on the first two Mondays and Tuesdays of the clerkship followed by two small group discussions on the third Tuesday.

## **Course Faculty and Staff**

- <u>Christopher Giordano MD</u> (Director)
- Joyce Myers \* (Unknown)
- Ricky McHugh (Unknown)
- Morgan Anderson (Course Staff)

## **Meeting Place and Time**

Course Lectures/Labs will be held in the Harrell Medical Education Building in Room 465 and 460. Any adjustments will have a notification prior to the lecture.

#### **Course Materials**

Recommended textbook: Essential Anesthesia by Euliano & Gravenstein (available on reserve in the HSC library).

Online Modules

#### **Additional Information**

Dates available are highly subjected to monthly internal student load and the limited capacity available according to the time of year. Therefore please be very flexible on dates and have alternatives readily available.

Day-to-day scheduling is flexible including possible rotation through several sub-specialties or focus on a single sub-specialty (neurosurgery, cardiothoracic, pediatrics, obstetrics, orthopedics, pain, regional, etc) please let the course manager (Ms. Madalyn Murray) know in advance if you have any preferences. There are a few lectures throughout the course but clinical experience and contact with faulty is emphasized.

#### ANS E 4-Obstetric Anesthesia

ANS E 4 | 4th Year Elective | Anesthesiology | Clinical Science

MDT 7700 | Obstetric Anesthesia

#### **Prerequisites**

Often taken consecutive with Anesthesiology/Critical Care Clerkship.

## **Course Description**

This rotation is designed for senior medical students with significant interest in either obstetrics or anesthesiology. We strive to provide additional depth beyond the required Anesthesiology/Critical Care Clerkship. We expect students who complete this rotation to gain an understanding of neuraxial anesthesia and analgesia, overview of physiologic changes of pregnancy and their clinical implications and management of the critically ill obstetric patient.

This course will provide:

- 1. Clinical experience with spinal blocks for labor analgesia and operative procedures in the obstetric patient.
- 2. Education in daily obstetrical anesthesia rounds (7:30am).
- 3. Opportunity to deliver an oral presentation on a topic of the student's choice or patient presentation with discussion of management options and implications.

## **Course Faculty and Staff**

- Adam L. Wendling MD (Director)
- Ricky McHugh (Unknown)
- Morgan Anderson (Course Staff)

#### **Meeting Place and Time**

Patients will be seen in the Labor &. Delivery Suite of Shands. Labor and Delivery, 3rd Floor, 7:30am-5:00pm weekdays.

Optional recommended attendance of Friday mornings to our Department's Grand Rounds at 6:30am in North Tower 2147.

#### **Course Materials**

Recommended textbook: Essential Anesthesia by Euliano & Gravenstein (available on reserve in the HSC library).

You will receive a book chapter from Clinical Anesthesia Practice as well.

#### Recommended articles:

- 1. Renyolds F. Labour analgesia and the baby: Good news is no news. Int J Obstet Anest. 2011 Jan;20(1):38-50.
- 2. Butwick AJ, Goodnough LT. Transfusion and coagulation management in major obstetric hemorrhage. Curr Opin Anaesthesiol. 2015 Jun;28(3):275-84.
- 3. Anim-Somuah M, Smyth RMD, Jones L. Epidural versus non-epidrual or no analgesia in labour. Cochrane Database of Systematic Reviews. 2011(12); Art.

#### **Additional Information**

The intent of this clerkship is to give the student interested in anesthesiology or Ob-Gyn an understanding of OB Anesthesia.

The clerkship can be taken for only 2-weeks.

## Applied Electricity in Psychiatry: Invasive & Noninvasive Neuromodulation

PSY E 23 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | App. Electricity in Psychiatry

## **Prerequisites**

Completion of third-year clerkship.

## **Course Description**

This 4th year elective introduces two interventional psychiatric treatment modalities: Deep Brain Stimulation and Electroconvulsive Therapy—both of which require the dosing of applied electricity. Students will gain a basic foundation into the fundamental mechanisms of actions of these modalities. Approximately 50%-time allocation for observation and direct participation in the safe application of these neuromodulation techniques. The remaining time will be allocated for personalized lectures, guided text readings and journal articles for an exploration into various

brain stimulation techniques, electric field concepts, learning concepts on constant current versus constant voltage in devices, and applied bioelectricity in the brain. And if desired, may include an overview on electromagnetic induction and magnetic field theory for a basic overview and participation in transcranial magnetic stimulation. In addition to learning the basics of ECT and DBS delivery the successful student will demonstrate an understanding of underlying dosing concepts; and, will explore variation in device designs and various methods for determining specific patient dose selections. Students should take into consideration their interest and/or comfort with basic physics prior to enrolling.

## **Course Faculty and Staff**

- Brent Carr MD (Director)
- Britany Ratliff (Course Staff)
- Bobbi Reynolds (Unknown)
- Cemeron Smith MD (Co-Director)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

ECT Suites: Sites at both UF Vista and UF Shands; Springill MOB

#### **Additional Information**

For more information please contact Britany Ratliff britanyg94@ufl.edu or (352) 265-2863.

## **Autopsy Pathology**

PATH E 2 | 4th Year Elective | Pathology | Clinical Science

MDT 7530 | Autopsy Pathology

## **Prerequisites**

Successful completion of the basic science curriculum.

#### **Course Description**

COURSE GOALS: This elective is structured to provide senior medical students an introduction to autopsies and postmortem examinations, including death investigations, forensic autopsies, detailed dissections, toxicology and court testimony. During this elective, the student will:

- 1. Review medical, social and other information, formulating appropriate workup strategies
- 2. Review organ pathology through active participation in autopsies (including dissecting), autopsy conferences, and case reviews.

- 3. Enhance physical diagnostic skills applicable to gross analysis of organs, and expand those findings with the microscopic examination of samples taken.
- 4. Understand COD (cause of death) and MOD (manner of death) determinations and which deaths must be reported to the medical examiner's office
- 5. Become competent at certifying natural deaths.
- 6. Become familiar with technical aspects, quality assurance and medico-legal issues involving patient care, society and the autopsy.

## **Course Faculty and Staff**

- Wendy Stroh DO (Director)
- Kendra Smith (Course Staff)

## **Meeting Place and Time**

8:30 am: Autopsy Unit (MG-35).

#### **Course Materials**

Current autopsy cases, including hospital and forensic cases. Selected readings as assigned by director.

## **Additional Information**

This rotation combines the resources of the Shands/UF morgue and the District 8 MEO, necessitating travel between the two locales. Students are given the opportunity to attend crime scenes and perform autopsies, at the discretion of the director.

# **Breast Cancer: A Multidisciplinary Perspective**

SUR E 15 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Breast Ca Multidisc Approach

#### **Prerequisites**

Satisfactory completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

## **Course Description**

Students will gain a multidisciplinary perspective on the current management of breast cancer by spending time with members of the UF-Shands Breast Cancer multidisciplinary program (Surgical Oncology, Medical Oncology, Radiation Oncology, Radiology, Pathology, and Genetics). Through hands-on patient experience students will develop a thorough understanding of the role that each specialty plays in the modern management of breast cancer patients. Students also will participate in the weekly breast cancer tumor board culminating with a brief lecture to the members of the breast cancer tumor board on a current topic in breast cancer

#### **Course Faculty and Staff**

- <u>Julia K Marshall</u> (Other Faculty)
- Lisa Spiguel MD (Other Faculty)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Contact Dr. Christiana Shaw (christiana.shaw@surgery.ufl.edu) 1 week prior to course for meeting time and location and schedule.

#### **Course Materials**

Handouts provided as needed.

#### **Additional Information**

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

#### **Burn Unit**

SUR E 7 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Burn Unit

## **Prerequisites**

Satisfactory completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

#### **Course Description**

COURSE GOALS: Participate as an active team member providing comprehensive patient management under supervision of faculty and mid-level residents, thus permitting the student to

become familiar with the role of an intern. Assessment and treatment of patients with thermal, chemical and electric injury stressing resuscitation and emergency management, infection control, nutritional support, surgical treatment and rehabilitation. Patient management involves the critical care, surgical, rehabilitative and outpatient settings.

## **Course Faculty and Staff**

- <u>David W Mozingo MD</u> (Director)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Ian Driscoll MD (Co-Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Contact the Surgery Education Office at 265-0916 one week before the start of the rotation for reporting instructions.

#### **Additional Information**

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

# **Cardiology - Pediatrics**

PED E 1 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Cardiology

## **Prerequisites**

Fourth year medical student

#### **Course Description**

This is a course in clinical pediatric cardiology. The goals are as follows:

- 1. Develop cardiovascular physical examination skills. Distinguishing an innocent murmur from structural congenital heart disease in an ambulatory clinical setting.
- 2. Develop an approach to the Diagnosis of the critically ill neonate with congenital heart disease by understanding a pathophysiological as well as an anatomical/morphological approach.
- 3. Understand oxygen transport as it is applied to congenital heart disease.
- 4. Develop skill in the interpretation of the pediatric electrocardiogram and chest roentgenogram. In addition, develop an appreciation for the diagnostic capability of echocardiography in the management of children with congenital heart disease.

This rotation will focus on outpatient evaluation of children with a variety of congenital heart lesions. These patients will be new referrals to Pediatric Cardiology and those patients returning for follow-up evaluation. Each student will see three to five patients during a half-day session and will be precepted by the cardiology staff involved in those clinics. This arrangement provides detailed one-on-one teaching with the staff cardiologist.

Students also attend teaching and patient care clinical conferences.

#### **Course Faculty and Staff**

- <u>Jennifer Co-Vu</u> (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Human Development Bldg., Room HD313; Arrive at 7:30 AM on day 1 of the rotation. Call 352-273-5542 with any questions.

#### **Course Materials**

- 1. Introductory and reference textbooks of pediatric cardiology. We will provide core curriculum of articles for students' initial review.
- 2. Personal instruction in physical examination using the cardiology patient simulator "Harvey" available.
- 3. Pathological demonstrations of common congenital heart lesions.

## **Child and Adolescent Psychiatry**

PSY E 5 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Child & Adolescent Psychiatry

#### **Prerequisites**

Fourth Year Medical Student - students must contact the Course Director prior to the start of their rotation.

#### **Course Description**

This rotation will be tailored to the specific interests and needs of participating students. Students will see a variety of psychiatric diagnoses in the child and adolescent population, including Depression and Mood Disorders, Anxiety Disorders, ADHD, Autism, OCD, Tourette's Disorder, Disruptive Behavior Disorders, and occasional Bipolar Disorder and Psychotic disorders. It consists of a mix of experiences at the Child & Adolescent Psychiatric Hospital, located within UF Health Shands Psychiatric Hospital, outpatient experiences at the UF Child & Adolescent

Psychiatry Clinic at Springhill Health Center, and Consult experiences at Shands Children's Hospital. It may include rotations to community-based or off-clinic sites. This elective is well-suited for students who want to learn more Child and Adolescent Psychiatry; whether they wish to enter a primary care or a Psychiatry residency in the future.

## **Course Faculty and Staff**

- <u>Jacqueline Hobbs MD, PhD</u> (Co-Director)
- Michael Shapiro MD (Director)
- Britany Ratliff (Course Staff)
- <u>Bobbi Reynolds</u> (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

Hospital: https://ufhealth.org/uf-health-shands-psychiatric-hospital

Rounds @ 7:30am, arrive early to check-in with security.

Clinic (3rd Floor): https://ufhealth.org/uf-health-child-psychiatry-springhill/maps. MOB II 4197

NW 86 Terrace Gainesville

#### **Course Materials**

SUGGESTED (NOT Required)

A Concise Guide to Child and Adolescent Psychiatry Third Edition; M. Dulcan & R. Martine; Washington; DC: American Psychiatric Press; Inc; 2003

Child and Adolescent Clinical Psychopharmacology Fourth Edition; W. H. Green; Philadelphia; PA: Williams and Wilkins; 2006.

SOS Help for Parents: A Practical Guide for Handling Common Everyday Behavior Problems Lynn Clark; Ph.D. Bowling Green; KY: Parents Press; 1996.

#### **Additional Information**

Faculty Participants - All faculty of the Division of Child and Adolescent Psychiatry.

## **Clinic and Consultation Service in Neurology**

NEUR E 1 | 4th Year Elective | Neurology | Clinical Science

MDT 7800 | Neurology Clinic/Consult Svc

#### **Prerequisites**

#### 2nd year Neuroscience course

## **Course Description**

To increase the student's knowledge of the nervous system, and of neurologic diseases; to improve his/her ability to evaluate patients with neurologic disease; to enhance his/her analytical skills in the diagnosis and treatment of neurologic disease. The inpatient and outpatient service settings allow students considerable time for reading and in-depth consideration of the patients they see. This course is recommended for students committed to a career in neurology and for those students potentially interested in neurology as a career and seeking help in making a choice. The course also is intended for students not interested in neurology as a career but wanting to improve neurological skills in preparation for a career in a related field or simply those seeking a well-rounded clinical education. The settings (inpatient or outpatient) time distribution can be tailored to address the student's needs and personal goals.

## **Course Faculty and Staff**

- Kelly Martin (Course Staff)
- Polly Glattli (Course Staff)
- Miguel Chuquilin MD (Director)

#### **Meeting Place and Time**

Contact clerkship director to organize your schedule for time & location before the start date. Then meet with faculty and residents on room depending on the service you were assigned.

#### **Course Materials**

Neurology clerkship lectures, powerpoints Clinical Neurology 9th Edition by Michael Aminoff and David Greenberg Blueprints Neurology (Blueprints Series) by Frank W. Drislane and Dr. Juan Acosta Adams and Victor's Principles of Neurology 10th Edition by Allan Ropper and Martin Samuels Tools: reflex hammer, tuning fork, penlight

## **Additional Information**

The location (inpatient/outpatient) and focus of the activities will be tailored to each student's needs and goals. It is possible to focus on a subspecialty (example - behavioral neurology, movement disorders, neuromuscular, MS, TBI, epilepsy, etc) or a location (example - Malcom Randall VAMC, Shands Stroke, General, Consult, ICU service) with prior approval of the clerkship director before beginning the course.

# **Clinical Cardiology**

## **Prerequisites**

Fourth Year Medical Student

#### **Course Description**

Students will work closely with specific faculty preceptors and fellows in cardiovascular medicine. Duties will consist of evaluating patients with cardiovascular problems on the inpatient medical and surgical services. This typically includes patients with coronary artery disease, angina, and atrial fibrillation. In addition, students can expect to evaluate patients for preoperative cardiovascular risk assessment prior to non-cardiac surgery. Other common referrals include syncope, chest pain, dyspnea, congestive heart failure, and congenital heart disease in adults. Students will evaluate patients semi-independently and will present information to the fellow and attending on consult rounds. In addition, students on this elective participate in our cardiovascular teaching conferences, which include a weekly Clinical Case conference, a conference series for Housestaff, Cardiology Grand Rounds, and Medical Grand Rounds. During the elective, students will have formal directed exposure to reading ECG's, supervising treadmill stress tests, and observing a limited number of cardiac catheterization procedures. Students may take the elective for 2 weeks or 4 weeks. Only one student will take the elective at a time.

## **Course Faculty and Staff**

- Monica Aggarwal MD (Director)
- Rachel Lepanto (Course Staff)
- <u>Liz Cowart</u> (Unknown)

## **Meeting Place and Time**

Schedule a day and time the week before rotation, to report to the 1329 building located at 1329 SW 16th Street, Gainesville, Florida 32610 - 5th floor Cardiology - room 5120.2 (Contact Dor to set this up).

#### **Course Materials**

A written handout with schedules and instructions will be provided on the first day of the elective.

## **Additional Information**

Before and during the elective, contact Dori Romrell at 352-273-9075 or dori.romrell@medicine.ufl.edu for assistance. You may also contact Monica Aggarwal, MD at 352-273-9075 or monicaaggarwal@medicine.ufl.edu for questions or concerns.

# Clinical Chemistry, Hematology and Coagulation: Laboratory Approaches to Clinical Medicine

PATH E 4 | 4th Year Elective | Pathology | Clinical Science

MDT 7530 | Clin Chem/Hem/Coag Lab Pathol

## **Prerequisites**

Successful completion of the basic science curriculum.

## **Course Description**

This seminar rotation (that is accessed through zoom) is provided by Drs. Neil Harris and William E. Winter. Students are required to choose the seminar topics so that students will gain high-yield information that prepares them for other clinical rotations and their residency. Topics to be reviewed in seminar format include the application of laboratory testing to clinical medicine, clinical interpretation of laboratory results and, when relevant, analytical methods used in clinical laboratory practice. Included in this rotation is an emphasis on chemistry, hematology and coagulation testing. An emphasis is also placed on the effects of pre-analytical variability on laboratory testing. At least one zoom seminar will be held daily with the attending faculty. Seminars will last between 60 and 120 minutes with periodic breaks. It is expected that students will spend a minimum of 2 hours preparing for the seminar and 2 hours of reading after each seminar. Additionally 4 hours of study are allotted daily to the student's own interests.

## **Course Faculty and Staff**

- Neil S. Harris MD (Director)
- Kendra Smith (Course Staff)
- William E Winter MD (Co-Director)

## **Meeting Place and Time**

Students should contact Dr. Harris or Dr. Winter by email to determine the time and zoom address of the first meeting.

#### **Course Materials**

Recommended reading; Teitz Textbook of Clinical Chemistry and Molecular Diagnostics, 6th edition, 2017; Lapasoda: Laboratory Medicine, 2nd Edition, 2014, McGraw Hill - Lange.

#### **Additional Information**

This rotation provides an overview of the daily life of the academic clinical pathologist. This is a great opportunity for students to review the integration of basic and clinical science in preparing for USMLE step 2.

## **Clinical Dermatology**

MED E 11 | 4th Year Elective | Dermatology | Clinical Science

MDT 7200 | Clinical Dermatology

## **Prerequisites**

4th year medical students.

Non-UF students applying for this rotation should also submit a copy of their transcript and a personal statement.

## **Course Description**

Provide instruction in the techniques of examination of skin.

Enhance the student's vocabulary in describing skin lesions.

Introduce the student to most of the common skin diseases and a few of the less common diseases.

Provide experience in dermatological prescribing and compounding. Demonstrate the techniques of skin biopsy as well as surgical excision.

Complete a written exam at the end of the course.

Complete an oral presentation at either the end of the third or fourth week.

## **Course Faculty and Staff**

- Megan McCann (Course Staff)
- Marjorie Montanez-Wiscovich MD (Director)

## **Meeting Place and Time**

7:45 am on First day of rotation - report to UF Dermatology, located in Springhill Medical Building, located at 4037 86th Terrace, Gainesville (off 39th Ave near Santa Fe College) 4th floor of the building.

Phone 352-594-1500

#### **Course Materials**

Clinical Dermatology, Soutor and Hordinsky (book provided during the rotation)

#### **Additional Information**

Participants should receive email from Derm Ed Coordinator prior to rotation - Megan McCann. email = meganjmccann@ufl.edu phone = 352-594-1925

## **Clinical Elective in Gynecology**

OBG E 3 | 4th Year Elective | Obstetrics and Gynecology | Clinical Science

MDT 7160 | Clin Elective in Gynecology

## **Prerequisites**

Fourth year medical student

Students from outside institutions must meet the minimum criteria for being granted an interview for a UF OB/GYN residency position in order to be considered for the clerkship.

## **Course Description**

During the elective, students will gain experience in the:

- management of outpatient problems commonly encountered by a general gynecologist
- performance of major and minor gynecologic surgical procedures
- perioperative management of gynecologic surgery patients
- care of patients who present with emergent problems
- management of patients with cervical dysplasia

Students on the elective will gain experience by:

- working closely with the faculty and residents in clinics at the Medical Plaza
- performing minor surgical procedures and assisting with major cases
- rounding with the resident team
- assisting with coverage of the Emergency Department
- attending division educational conferences

#### **Course Faculty and Staff**

- Shireen Madani-Sims MD (Director)
- Heather Ellis (Course Staff)

## **Meeting Place and Time**

Attend core lecture at 7 AM on the first Monday of the rotation. Dr. Davis will meet with you right after core lecture and orient you to the service.

#### **Course Materials**

Heather Ellis will provide you with reading materials by email before the rotation starts. During the elective, I suggest you use TeLinde's Operative Gynecology and Comprehensive Gynecology as references.

#### Additional Information

The department contact person for this course is the student clerkship coordinator, Heather Ellis. She can be reached at ellish@ufl.edu or 273-7675. Please contact her by email 1 week before the start of the elective so she can share important information with you. Please copy me at davisjd@ufl.edu when you email Heather.

#### **Clinical Elective in MICU**

MED E 12 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Clinical Elective in MICU

#### **Prerequisites**

Medicine clerkship is mandatory Sub-internship in Medicine is desirable

## **Course Description**

Student will participate in the care of critically ill patients under the supervision of upper level internal medicine residents, pulmonary & critical care fellow and MICU attending.

Student will deliver succinct presentations during interdisciplinary MICU rounds. Student will write informative and insightful progress notes. Student will learn about coordination of care in the ICU. Student will learn about physician-to-family communication with special attention to end-of-life issues.

Student will learn to interpret arterial blood gases, portable chest X-rays, Chest CTs and data from invasive monitoring of hemodynamics. Student will learn to evaluate and manage common problems in the ICU including fever, hypoxemia and hypotension. Student will learn to manage septic shock, ARDS, toxic syndromes and other problems. Student will learn about principles and practice of invasive and non-invasive mechanical ventilation. Students will learn about use of analgesics and sedatives in the ICU. Students will learn to manage discontinuation of mechanical ventilation. Student will learn about use of continuous infusions of various agents (vasopressors, vasodilators, inotropic / chronotropic agents, anti-arrhythmics, insulin, drotrecogin, analgesics, sedatives, paralytics). Student will learn about nutrition in ICU patients. Student will learn best practices for prevention of pulmonary embolism, ventilator-associated pneumonia, line infection, and gastritis / stress ulcer in ICU patients.

Student may perform certain invasive procedures including placement of arterial catheter and placement of central venous catheter. Student will learn indications for and may observe certain invasive procedures including intubation, bronchoscopy, chest tube placement, pulmonary artery catheterization, and percutaneous dilational tracheosotomy.

Students will participate is a series a small group discussions led by MICU fellow and / or attending addressing several topics of incontrovertible importance to the practice of critical care medicine. Discussions will include references to clinical cases, clinical trials, clinical guidelines and other materials.

## **Course Faculty and Staff**

- Ali Ataya MD (Director)
- Ibrahim Faruqi MD (Director)
- Chris Pintado MPH (Unknown)
- Liz Cowart (Unknown)
- Bailea Gnann (Course Staff)

## **Meeting Place and Time**

Contact Bailea Gnann prior to the start of the rotation 352-273-8738 or via email bailea.gnann@medicine.ufl.edu. An email with an introduction to the MICU document will be sent out prior to starting the course with details about teams and round.

#### **Course Materials**

- Marino The ICU Book
- Fink Textbook of Critical Care

helpful websites: https://pulmccm.org/ https://emcrit.org/

Articles of Interest (may not be all updated)

ARDS.

1. - http://www.nejm.org/doi/full/10.1056/NEJM2000005043421801 Results of this study found the use of low (6 ml/kg predicted weight) rather than "standard" (12 ml/kg predicted weight) tidal volumes reduced mortality from 40 to 30%.

2. - http://www.nejm.org/doi/pdf/10.1056/NEJMoa032193

A NHLBI ARDS net randomized trial comparing high and low PEEP strategies in 549 patients with ALI or ARDS found no significant difference in mortality, ventilator-free days, ICU-free days, or organ failure-free days in the two groups.

3. - http://www.nejm.org/doi/pdf/10.1056/NEJMoa051693 This study randomized 180 patients with persistent ARDS (7 to 28 days after onset) to methylprednisolone (daily dose 2 mg/kg x 14 days then 1 mg/kg x 7 days) vs. placebo. Hospital mortality and 180-day survival were comparable, but patients enrolled 14 or more days after ARDS onset had increased 60-day mortality (35% vs. 8% placebo, p = .02).

4. - http://chestjournal.chestpubs.org/content/131/4/954.full.pdf+html
This study of 91 patients with severe ARDS has added fuel to the debate over systemic corticosteroid use in acute lung injury. The intervention group received steroids within 72 hours of ARDS diagnosis and a slow taper. Steroid recipients had decreased duration of mechanical ventilation and ICU stay. The higher proportion of patients with catecholamine-dependent shock among controls, cross over from control to steroids in "nonresponders" at day 7, and 2:1

randomization of treatment to control are among the concerns raised since its publication

5. - http://www.nejm.org/doi/pdf/10.1056/NEJMoa062200'

A randomized study, comparing conservative vs. liberal fluid management (via explicit protocols) applied over seven days to 1000 patients with acute lung injury. Although there was no significant difference in the primary outcome of 60-day mortality, the conservative strategy of fluid management shortened the duration of mechanical ventilation and ICU stay without increasing nonpulmonary-organ failure.

## SEPSIS.

1.http://www.ncbi.nlm.nih.gov/pubmed/18158437?ordinalpos=10&itool=EntrezSystem2.PEntre z.Pubmed.Pubmed ResultsPanel.Pubmed RVDocSum

This update of the 2004 guidelines utilized a new approach for grading the evidence underlying recommendations. Noteworthy changes include elimination of the cosyntropin stim test and downgrading the recommendation to "weak" for hydrocortisone in patients with persistent shock and for activated protein C in patients with severe sepsis.

2.http://www.ncbi.nlm.nih.gov/pubmed/18184957?ordinalpos=1&itool=EntrezSystem2.PEntrez. Pubmed.Pubmed ResultsPanel.Pubmed RVDocSum

RCT (N = 499) found no 28-day mortality benefit to "physiologic" doses of hydrocortisone administered within 72 hours of sepsis onset, independent of the response to a corticotropin stim test. Difficulty with patient recruitment and lower than expected mortality led to the study having a power of < 35% to detect a 20% reduction in relative risk of death.

3.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=11794169

This RCT of 263 patients found benefit from early (in E.D.) aggressive resuscitation (in-hospital mortality of 30% in the goal-directed group compared to 46% in the standard therapy group). The intervention arm was noteworthy for prn use of blood transfusion and/or inotropes to maintain central venous O2 sat >70%. Authors speculate the earlier aggressiveness accounts for better outcomes than previous studies of goal-directed hemodynamic optimization

#### **HYPOTHERMIA**

1. http://content.nejm.org/cgi/reprint/346/8/549.pdf

This article shows that in patients who have been successfully resuscitated after cardiac arrest due to ventricular fibrillation, therapeutic mild hypothermia increased the rate of a favorable neurologic outcome and reduced mortality.

#### NEPHROLOGY AND ICU

1. http://chestjournal.chestpubs.org/content/132/4/1379.full.pdf+html

This review article explains the various forms of hemodialysis, ultrafiltration, and hemofiltration as well as the most common ICU indications for Renal Replacement Therapy.

## LIVER AND ICU

1. http://ajrccm.atsjournals.org/cgi/reprint/168/12/1421

Review of the most common liver problems in the ICU as well as their management.

2. http://onlinelibrary.wiley.com/doi/10.1002/hep.21907/abstract

Update of the current practice guidelines for the treatment of varices, including use of antibiotics, octreotide, and IV PPI in the intensive care setting.

#### ENDOCRINE AND ICU

1. http://pmj.bmj.com/content/83/976/79.long

This review discusses the management of diabetic ketoacidosis, hyperosmolar hyperglycemic state, hypoglycemia, hypercalcemia, thyroid storm, myxedema coma, acute adrenal insufficiency, pheochromocytoma hypertensive crisis and pituitary apoplexy in the adult population.

#### SEDATION AND ICU

1. http://www.nejm.org/doi/pdf/10.1056/NEJM200005183422002

RCT found daily interruption of sedation in a MICU population resulted in shorter duration of mechanical ventilation and ICU stay, less total dose of sedation, and less use of diagnostic tests to work-up impaired mental status compared to the control group. No increase in short term adverse outcomes in the intervention group identified but patients were not evaluated for subtle or long-term adverse outcomes.

2. http://jama.ama-assn.org/cgi/reprint/301/5/489

This study is noteworthy for finding use of dexmedetomidine reduced the prevalence of delirium (54% vs 77% with midazolam) and for providing further evidence of the safety of using dexmedetomidine at higher doses and longer duration than currently approved by the FDA. There was no difference in the primary outcome, time spent at target level of sedation. Duration of mechanical ventilation was shorter with dexmedetomidine but length of ICU stay was similar.

#### WEANING MECHANICAL VENTILATION

1. http://www.nejm.org/doi/pdf/10.1056/NEJM199502093320601 Prospective, randomized study found once daily or multiple daily trials of spontaneous breathing (T-piece or CPAP <5 cm) resulted in more rapid successful extubation than gradual weaning of pressure support or IMV.

2. http://www.sciencedirect.com/science/article/pii/S0140673608601051 This RCT found the combination of daily sedation holiday and daily weaning trials resulted in reduced ventilator days and reduced mortality compared to daily weaning trials alone (HR 0.68, p = .01, NNT to save one life 7).

#### **BMT AND ICU**

1. http://ajrccm.atsjournals.org/cgi/reprint/170/1/22

A State of Art article that provides an excellent overview of the complications of solid organ and hematopoietic stem cell transplantation

#### **Additional Information**

You will received an introduction to the MICU document before you start the rotation highlighting expectations.

Of note, Starting March 4th 2019, the MICU will be moving from 11th floor to Unit 82 which will be the new location to start the elective.

# **Clinical Endocrinology and Metabolism**

MED E 7 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Clin Endocrinology/Metabolism

#### **Prerequisites**

4th year medical students

## **Course Description**

Previous information:

Hands-on experience in diagnosing and treating patients with endocrine diseases.

Supervision by attendings, fellows and residents on the Adult Endocrine consult and clinic services. The consultation service responds to referrals from both the VA and Shands hospitals and emphasizes teaching, both within the consult team and also directed toward the referring team.

Students are given the opportunity to see patients in Various specialty clinics. Students experience a wide range of illnesses in these clinics (Diabetes, Lipid, Osteoporosis, Pituitary Tumors, Thyroid) and get exposure to thyroid ultrasound.

Weekly clinical conferences include, presentation of great cases and student presentations on clinically inspired topics.

## **Course Faculty and Staff**

- Kenneth Cusi MD (Co-Director)
- Sushma Kadiyala MD (Director)
- <u>Liz Cowart</u> (Unknown)
- <u>Hillary Loper</u> (Course Staff)
- Naykky Singh-Ospina MD (Co-Director)
- <u>Juan Munoz Pena MD</u> (Co-Director)

## **Meeting Place and Time**

At 8:30 a.m. CLINIC LOCATION: Medical Plaza Building, 3rd floor IMMS Clinic

#### **Course Materials**

Consults daily with scheduled out-patient clinics and/or in-patient consult service (5 days per week). Assigned readings.

#### **Additional Information**

Endocrinology Out-Patient clinic is located on the 3rd floor of the Medical Plaza Bldg., except for the Pituitary Clinic which is held on Tuesday AM in the Neurosurgical Clinic (on the 1st Floor of the main hospital building just beside Shands Atrium and the outpatient lab and pharmacy

# **Clinical Gastroenterology**

MED E 2 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Clinical Gastroenterology

#### **Prerequisites**

4th year medical student.

## **Course Description**

This course will provide an introduction to an understanding of common digestive and liver diseases including pathophysiology, diagnosis and treatment. The course will include inpatient consultation, outpatient, and weekly lecture series.

## **Course Faculty and Staff**

- Virginia Clark MD (Director)
- <u>Tiffany Rhoden</u> (Course Staff)

## **Meeting Place and Time**

TBD. Please see "other notes" below for additional information.

#### **Course Materials**

Appropriate references and handouts "if available" will provided by the faculty and/ or fellows within the Division. The reference textbook to be utilized will be Gastrointestinal Disease, Schlesinger and Fordtran, 9th Edition, 2010.

The divisional website is to learn about the Faculty and what we offer. www.medicine.ufl.edu/gastro

#### Additional Information

For more information regarding contact information, etc please email Tiffany Rhoden at Tiffany.Rhoden@medicine.ufl.edu. Also please contact Tiffany 2 weeks prier to the rotation starting.

# **Clinical Hematology**

MED E 18 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Clinical Hematology

#### **Prerequisites**

Fourth Year Medical Student

## **Course Description**

Goal of the course: To understand the approach to patients with hematological problems including red cell disorders, hemostasis and thrombosis, cytopenias, and primary bone marrow disorders. Anticoagulation and periopertive managment of hematologic issues will also be an empahasis. The student will be a team member of the Shands-UF Hematology inpatient consult service and see patients with attending physicians in the Hematology outpatient clinics.

Activities will include weekly Hematology case conferences and other Hem/Onc teaching conferences.

## **Course Faculty and Staff**

- Marc S Zumberg MD (Director)
- Liz Cowart (Unknown)

## **Meeting Place and Time**

E-mail Dr. zumberg at zumbems@medicine.ufl.edu. The rotation will start at 8:30 am on the first day of your rotation. You may also reach the adult hematology fellow through SPOK the day you begin the rotation.

#### **Course Materials**

MEDLINE, web-based resources, clinical guidelines, and additional references including relevant textbook material provided by the faculty. Evidence-based approaches will be emphasized.

#### Additional Information

We welcome and encourage your participation in this elective. The amount of inpatient vs. outpatient experience can be negotiated based on the specific interests of the students.

## **Clinical Ophthalmology**

OPH E 1 | 4th Year Elective | Ophthalmology | Clinical Science

MDT 7550 | Clinical Ophthalmology

#### **Prerequisites**

4th year medical student - Basic understanding of ophthalmology

This course is not open for periods 1 and 2 to non-UF students.

#### **Course Description**

Clinical Ophthalmology is generally a 4-week elective during which time the medical student has the opportunity to rotate on a variety of sub-specialty ophthalmic services. Students will work directly with the residents, fellows, and attending physicians. The rotations in which the student can participate include cornea and external disease/general; retina-vitreal; glaucoma; oculo-plastics; pediatrics; and neuro-ophthalmology.

## **Course Faculty and Staff**

- Ashley West (Course Staff)
- <u>Siva Iyer MD</u> (Director)

## **Meeting Place and Time**

The student must initially come to Ashley West (352-273-8777) in the Department of Ophthalmology sometime the week before the rotation begins, or on the beginning Monday. Students are expected to be in clinic on Monday.

#### **Course Materials**

There is a hand-out which can be obtained from Ashley West in the Department of Ophthalmology. Students can ask for reading materials, which are abundant, and can be obtained at the Library or online through various websites. A list of course objectives will be provided in the orientation packet on the first day of the rotation.

#### **Additional Information**

Students interested in pursuing ophthalmology residency at UF are encouraged to present at a Grand Rounds for the department.

## Clinical Sciences of the Musculoskeletal System

ORTH E 1 | 4th Year Elective | Orthopaedics | Clinical Science

MDT 7570 | Clin Sciences of MSK System

## **Prerequisites**

Senior medical student - Satisfactory completion of core clerkship rotations - Students pursuing a career in Orthopaedics should schedule this elective for no less than 4 weeks.

NOTE - Non-UF students who apply to participate in this rotation should submit the following in addition to their application: copy of transcript; photo attached to application; letter of recommendation; USMLE Step 1 score (copy of document); and a written statement of why you are interested in participating in an Orthopaedic Surgery elective with the University of Florida College of Medicine.

#### **Course Description**

The program will be offered at UF&SHANDS COURSE GOALS

- 1. Provide experience and education in the evaluation and management of musculoskeletal disorders in an inpatient, outpatient, and Emergency Room setting.
- 2. Students will be have supervised responsibility in patient care, receive instruction in methods of examination, diagnosis, pre-and postoperative care and surgical techniques as applied to the musculoskeletal system.
- 3. Students participate in daily clinical conferences.
- 4. Students will be assigned to one of the Orthopaedic services. There will be a limit to one extern (senior medical student) per service.

If scheduling permits, students may rotate on one or more of the Orthopaedic services during their ortho elective rotation.

#### **Course Faculty and Staff**

- <u>Kendra Gordon</u> (Course Staff)
- Richard G Vlasak MD (Director)
- Kasey Barrett Sheffer (Course Staff)

## **Meeting Place and Time**

South Tower, OR Conference Room, 2nd Floor - 7:00 AM Mon-Fri

#### **Course Materials**

Greene, W.B.

Essentials of Musculoskeletal Care.

Other reference sources depending on orthopaedic rotation

# **Colorectal Surgery**

SUR E 16 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Colorectal Surgery

## **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

## **Course Description**

COURSE GOALS: Upon completion of this course, the learner will be able to: MEDICAL KNOWLEDGE 1. Evaluate and discuss common presenting signs and symptoms frequently seen by the practicing Colon and Rectal surgeon. 2. Complete a general surgery History and Physical. 3. Briefly describe the operative management of basic colon and rectal surgical problems, including, but not limited to: colon and rectal cancer, benign colon problems including colonic inertia, diverticulitis, inflammatory bowel disease, anorectal and pelvic floor disorder, and application of laparoscopy. 4. Recognition of recommended cancer screening and surveillance programs for colon and rectal patients. PATIENT CARE 1. Demonstrate proficiency in common intern-level duties including nasogastric tube insertion, excision of thrombosed hemorrhoids, incision and drainage of perianal abscesses, and basic suturing. 2. Recognize the role of existing and emerging technology and research in the field and practice of Colon and Rectal surgery. 3. Reliably use the Internet and electronic tools as a medical resource. PROFESSIONALISM 1. Expand his/her exposure to, and appreciation for, a career in colon and rectal surgery and academic surgery. 2. Become more keenly aware of the opportunities available to residents in general surgery. LEARNING ACTIVITIES: The students who choose this rotation as an elective will participate as a member of a very busy and academic Colon and Rectal Service in the Department of Surgery at the University of Florida. He or she will become aware of the daily responsibilities of the general surgery intern, including education of 3rd year medical students and perioperative care of the surgical patient. Students will be expected to attend all General Surgery related conferences including Morbidity and Mortality Conference, Surgical Grand Rounds, Basic Science Conference and Mortality Conference, and Journal Club. Furthermore, the student will be assisting in the Operating Rooms and seeing patients in clinic. Although the curriculum is flexible, it is expected that the student will prepare for cases and conferences as any other member of the team, and will be held accountable for these. At the conclusion of the 4week rotation, the student will present a 15-minute slide presentation on some aspect of Colon and Rectal Surgery in the didactic format to the residents. He or she should choose a faculty mentor who will assist in the assimilation and delivery of this lecture. This lecture should be evidence-based, and articles from accredited journals should be referenced.

## **Course Faculty and Staff**

- Sanda Tan MD, PhD (Director)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Contact Mandi Lamonda in the Surgery Education Office at 594-5116 (carolyn.lamonda@surgery.ufl.edu) one week before the start of the rotation for reporting instructions.

#### **Course Materials**

Selected readings from Greenfield's Surgery: Scientific Principles and Practice, Fifth Edition; Colon and Rectal Surgery Text book, Second Edition - Additional readings from current journals will be assigned during the rotation orientation on the first day.

#### **Additional Information**

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

#### **Critical Care - Pediatrics**

PED E 11 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Critical Care Med.

#### **Prerequisites**

Successful completion of 3rd year pediatrics clerkship

#### **Course Description**

#### **COURSE GOALS:**

- 1. The student will become familiar with a systematic approach to recognizing, assessing, and stabilizing the critically ill child.
- 2. The student will gain experience in some of the technical aspects of caring for the critically ill child, including venous access, arterial access, airway management, and critical care ultrasound. This also includes knowing the indications and contraindications for interventions and understanding how to interpret laboratory and physiologic data.
- 3. The student will gain experience in assisting in the care of postoperative children.
- 4. The student will gain experience with applied physiology and pharmacology of all organ systems, with special emphasis on the central nervous, cardiovascular, renal and respiratory systems.

## **Course Faculty and Staff**

- Torrey D. Baines MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Shands PICU, 0730 to 1700 daily, with optional call responsibility. Brief orientation after rounds on the first day. Call PICU Fellow cell phone at (352) 494-8383 if directions needed.

#### **Course Materials**

Standard textbooks on pediatric critical care medicine are available within the intensive care unit. Key articles are located in the 'Library' folder on the PICU shared drive. In addition, students are expected to use the online Health Science Library resources to look for evidence-based articles on topics and the online pharmacy information.

#### **Additional Information**

There is an ICU attending, an ICU fellow and a pediatric resident in the unit every night providing supervision and teaching.

## **ECG Interpretation**

MED E 52 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | ECG Interpretation

## **Course Description**

Students will enhance their interpretation of electrocardiograms through didactic review of ECGs, practice reading with faculty, and teaching ECG interpretation to their peers. Sample ECGs will be distributed in modules, to be reviewed and preliminarily interpreted before each class meeting.

## **Course Faculty and Staff**

• David E Winchester MD (Director)

## **Meeting Place and Time**

Primarily online content. Class will meet for 1-2 hours once a week to review and answer questions. Time TBD.

#### **Course Materials**

Distributed electronically

# Electroconvulsive Therapy – Anesthesia Track

PSY E 21 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | ECT Anesthesia Track

## **Prerequisites**

Please contact Britany Ratliff (britanyg94@ufl.edu) prior to starting the course.

## **Course Description**

NOTE: This course requires special permission from both departments prior to enrollment.

This elective is designed for a student considering anesthesiology. The student will learn the basic workflow in the psychiatric technique of ECT. Students will learn its indications, participate in anesthesia pre-procedure workups, review medical history of new patients, learn commonly used ECT anesthetics and their potential for augmenting or interfering with ECT seizures, assist in the anesthesia team morning setup, prepare an ECT patient roster that includes previous ECT meds/doses and any changes or suggestions from the previous anesthesia team. Become comfortable with mask ventilation. Become familiar with use of a twitch monitor and succinylcholine dosing. Successful students plan to be present early for setup, and actively participate throughout the treatment day. And, will learn Phase I care, and learn proper and safe discharge of patients from PACU. To optimize their experience, students should plan to clinically correlate anesthesia meds, ECT electrical stimulus, and patient seizure with the various physiological responses that ensue during treatment.

## **Course Faculty and Staff**

- Brent Carr MD (Director)
- Britany Ratliff (Course Staff)
- <u>Bobbi Reynolds</u> (Unknown)
- Jack Hagan MD (Co-Director)
- Jeffrey White MD (Co-Director)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

ECT Suites: Sites at both UF Vista and UF Shands

#### **Additional Information**

For more information please contact Britany Ratliff britanyg94@ufl.edu or (352) 265-2863.

# **Electroconvulsive Therapy: Psychiatry Track**

PSY E 20 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | ECT Psychiatry Track

#### **Prerequisites**

Completion of third-year clerkship.

## **Course Description**

This elective is designed for the motived student to develop mastery in the psychiatric technique of ECT. Students will learn its indications, participate in pre-procedure consultations, identify good ECT candidates, review the medical workup of selected candidates, be knowledgeable of ECT protocols, commonly used ECT anesthetics, engage with ECT treatment team members and case manager, obtain basic psychometrics for monitoring memory and treatment response, understand nursing pre-op workflow, learn proper operation both ECT devices, MECTA and Thymatron, understand basic principles of dose selection, participate in ECT dosing selection, interpret EEG data, follow their patient through the PACU experience, understand post-ECT agitation strategies, and participate in advancing ECT intervals in during the Continuation and Maintenance Phases of ECT. Students will also be expected to host their 3rd year med student peers who may be rotating through ECT, become familiar with the basic physics of ECT, its effects on human physiology, and cite theories of potential ECT mechanisms of action. Students should learn to foster rapport building, team building, and engage in esprit de corps to foster an efficient and enthusiastic team. Lastly, students will learn to establish rapport and empathy with patients such that the patient is always placed first and remain attentive to any possibility of the patient's potential feelings of vulnerability.

## **Course Faculty and Staff**

- Brent Carr MD (Director)
- Britany Ratliff (Course Staff)
- Jacqueline Hobbs MD, PhD (Co-Director)
- <u>Bobbi Reynolds</u> (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

ECT Suites: Sites at both UF Vista and UF Shands

#### **Additional Information**

For more information please contact Britany Ratliff britanyg94@ufl.edu or (352) 265-2863.

## **Emergency Medicine - Elective Shands**

EMD E 1 | 4th Year Elective | Emergency Medicine | Clinical Science

MDT 7710 | Emergency Med Elective Shands

## **Prerequisites**

Satisfactory completion of third year curriculum.

Non-UF students applying for this rotation must submit a current CV and letter of recommendation along with the externship application.

## **Course Description**

## COURSE GOALS: This course will provide:

- 1. An introduction to acute care medicine where the student will be expected to function as a member of the physician team and actively participate in diagnosis and treatment of life-threatening illnesses. Students will be active participants in cardiopulmonary and trauma resuscitations.
- 2. Direct one-on-one supervision and teaching with an Emergency Medicine Attending and Senior Emergency Medicine Resident.
- 3. Experience in diagnosis and treatment of common ailments (i.e., wound management, treatment of ankle sprains, etc.) not routinely seen during inpatient rotations.
- 4. Experience in performing procedures (e.g. incision and drainage, lumbar puncture, suturing wounds, placing IVs, ABG sampling, central lines, nerve blocks, etc)
- 5. Ability to apply splints, and managne and dress wounds appropriately.
- 6. Opportunities to refine ECG and X-ray interpretation skills.
- 7. An understanding of how emergency room operates and how to effectively utilize its resources.
- 8. Study of separate curriculum from that of Required Clerkship.

## **Course Faculty and Staff**

- Amanda Glynn (Unknown)
- Matthew Ryan MD, PhD (Director)
- Amy Smith (Unknown)
- Michael Marcheck MD (Co-Director)
- Meredith Thompson MD (Other Faculty)
- Courtney Cribbs (Course Staff)

## **Meeting Place and Time**

Orientation: First Monday of the rotation, Gainesville Time and location TBA, the Emergency Medicine conference room. Students will be contacted via email.

#### **Course Materials**

First Aid for the Emergency Medicine Clerkship, 3rd Edition, Stead and Kaufman, 2011.

## **Additional Information**

Rotation Shift locations: Shands - 14; EMS Ride Along - 1;

## **Emergency Medicine Ultrasonography**

EMD E 4 | 4th Year Elective | Emergency Medicine | Clinical Science

MDT 7710 | Emerg Medicine Ultrasonography

## **Prerequisites**

4th year medical student - Must be planning to match in emergency medicine

## **Course Description**

- The mission of this rotation is to train future emergency physicians in the basics of emergency limited ultrasonography and to help them become proficient emergency sonographers who will use and incorporate their knowledge to positively enhance patient care. We will focus on bedside echo, aorta, gallbladder, EFAST, thoracic, renal, pelvic, central and peripheral venous access and soft tissue. Other studies include assessment of volume status, foreign body location, musculoskeletal, nerve blocks, ocular, dvt, etc.

#### **Course Faculty and Staff**

- <u>Amanda Glynn</u> (Unknown)
- <u>L. Connor Nickels MD RDMS</u> (Co-Director)
- Amy Smith (Unknown)
- Courtney Cribbs (Unknown)
- Chloe Evans (Course Staff)

## **Meeting Place and Time**

Emergency Room. Please email Chloe Evans (evansc@ufl.edu) one week prior to first day. Chloe will meet with you the first day of your rotation to go over the schedule and guidelines of the Ultrasound Rotation.

## **Course Materials**

https://itunes.apple.com/us/book/introduction-to-bedside-ultrasound-volume-1/id554196012?mt=11 https://itunes.apple.com/us/book/introduction-to-bedside-ultrasound-volume-2/id647356692?mt=11

#### **Additional Information**

Please download the textbook from the web to read.

#### Equipment:

- 2 Sonosite Xportes with 2 probes each
- 3 Sonosite Turbos

Multiple Phantoms available for teaching including pelvic, Internal jugular vascular access, other vascular access (peripheral, branched, pediatric) and foreign body models

Minimum of 100 scans for 4 wk rotation

Student required to save stills/video clips of all scans not performed live with Dr. Nickels, Dr. De Portu and/or Ultrasound Fellow for video review onto his/her own memory stick or external drive=

Must have a "case of the month" in which he/she researches the current literature regarding this subject and composes a short ppt presentation reviewing the case

Must scan on his/her own every week day that other assignments not made

Must complete scanning shifts with Dr. Nickels, Dr. De Portu and/or Ultrasound fellow as assigned

\*\*\*Important: If you are scanning alone or with other students/faculty/residents besides Dr. Nickels or Dr. De Portu, you are ONLY ALLOWED to scan patients who are getting a CONFIRMATORY test DURING THEIR ED STAY which will include the area you are scanning. (for example, if the patient is getting an abdomen and pelvis ct, then you can ultrasound gallbladder, aorta, renal, pelvic, appendix, any fb/abscess/cellulites within this area only. However, if the patient is getting a gallbladder scan from radiology, then you may only scan their gallbladder.)

# **Endocrinology - Pediatrics**

PED E 8 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Peds Endocrinology/Diabetes

## **Prerequisites**

4th year medical student

## **Course Description**

**Endocrinology Elective: Goals** 

The goal of this elective is to allow the resident or student to acquire sufficient familiarity with common pediatric endocrine problems to deal with them intelligently at the general pediatric level including an appreciation of the range of normal variation in growth and development and when referral to a pediatric endocrinologist is indicated.

Successful completion of the elective should allow you to approach the pediatric shelf examination with confidence and meet long-term professional career goals. By completing the elective in pediatric endocrinology you should not expect to become proficient in the field. Nevertheless, by participating in the various activities of the division in the hospital, in outpatient clinics, and in diabetes summer camping and weekend retreat programs, the resident will be exposed to a diversity of pediatric endocrine problems.

In clinic you will work with diabetes educators, nutritionists, research coordinators, and members of the Psychology department who assist in difficult psychosocial cases. You are encouraged to talk to all personnel associated with the multiple aspects of our clinical and research practice to learn more about pediatric endocrinology. You will be expected to interact courteously and professionally with all team members (professionalism, communication).

In order to ensure that all residents have adequate exposure to all aspects of pediatric endocrinology, residents or students attending diabetes camp (July or August) will be asked to separate their rotation into 2 week blocks such that they will have 2 weeks of the rotation during a non-camp month. We will work with you as well as the chief residents and medical school to coordinate your rotation for the best possible educational experience.

The Division of Pediatric Endocrinology has produced a detailed curriculum which will introduce you to the field of pediatric endocrinology. You will be expected to read the curriculum and engage in further reading/literature searches as needed for patient care and to satisfy your curiosity.

You will be given a copy of Styne's Pediatric Endocrinology to use as your primary reading source during the rotation. This must be returned before you complete the rotation. You are strongly encouraged to read this brief review of pediatric endocrinology in its entirety during your rotation. (PBL, medical knowledge, professionalism).

### A. Specific Objectives

Residents and students taking this elective will be expected to attain the necessary skills to mange common pediatric endocrine problems. The endocrine syllabus has been divided into three categories in which different degrees of expertise are expected at the termination of the rotation. These are: Highly competent, i.e. the resident should acquire detailed knowledge of the topic and be able to diagnose and manage most patients with this condition and recognize those requiring referral for definitive diagnosis and treatment. Competent, i.e. the student should acquire general knowledge of the condition and be able to diagnose and treat with consultative help. Aware, i.e. the resident or student should be aware of the condition but should refer the patient to the subspecialty service for evaluation and management.

1. Highly Competent
Short stature
Failure to thrive
Obesity
Puberty-normal variations
Adrenarche

Thelarche Gynecomastia Delayed puberty Nutritional rickets

## 2. Competent

Childhood goiter
Congenital hypothroidism
Acquired hypothyroidism
Precocious puberty
Cryptorchidism
Turner syndrome
Klinefelter syndrome

#### 3. Aware

Diabetes mellitus in children Education of the family of a newly diagnosed patient Outpatient management Diabetic ketoacidosis Complications of diabetes

Adrenal insufficiency

Congenital adrenal hyperplasia

Hypoglycemia

Cushing syndrome

Growth hormone deficiency and therapy for non-GH deficiency states

Thyroid nodules, carcinoma

Disorders of the adrenal medulla

Adrenal and gonadal tumors

Endocrine hypertension

Ambiguous genitalia

Epidemiology, etiology, and prevention of

Autoimmune endocrinopathies

Disorders of calcium, phosphate, and Vitamin D (other than nutritional rickets)

Parathyroid deficiency states

Hyperparathyroidism

Metabolic bone disease

Neonatal calcium and phosphate disorders

Disorders of water balance

Diabetes insipidus (central, nephrogenic)

**SIADH** 

Hyperlipidemia

# B. Specific Learning Experiences

### 1. Inpatient Service

You will be expected to follow patients on the inpatient and consult services. Student should preround on inpatients and consults so that rounds flow smoothly and there is time for teaching. Students are expected to be on time for rounds. Students are expected to present their patients accurately and concisely. Students are expected to read about their patients and participate actively in rounds. The attending on service will coordinate with the resident and the on service fellow how inpatients and consults will be assigned. (professionalism, practice based learning, medical knowledge, patient skills).

## 2. Outpatient Clinics

Clinic experiences are available all day Monday, Tuesday afternoon, all day Wednesday, and Friday morning (see Schedule below). Students will be expected to be on time for clinics. Clinic attendance will be the primary focus of the elective as the majority of pediatric endocrinology involves outpatient work-up. Students will be working under the direction of an Attending Physician. Patients will be put into rooms by the Nurse. Take this time to review the chart. Students should refrain from discussing the patient or reviewing the chart in any general area. Make sure that the door is closed in the Clinic Conference Room when patients are being discussed. (PBL, medical knowledge, professionalism)

Patients should be seen promptly and courteously. Residents will identify themselves to the patient, obtain the history and perform the physical examination, and present to one of the clinic Attendings who will review the history and physical findings with the patient/patient's family. Residents are expected to dictate all Endocrine patients. Students will not be required to dictate. Residents are expected to dictate all new Diabetes patients. Residents and students should fill out a clinic note on returning Diabetes patients, but do not need to dictate them. Please dictate/write up charts promptly- at the end of the day at the latest (professionalism, PBL, patient skills).

#### 3. Nutrition

In the first week of the rotation, residents should schedule a session with our nutritionist to discuss the nutritional aspects of Diabetes and Obesity with a focus on carbohydrate counting and low fat diets (medical knowledge).

### 4. Diabetes Education

In the first week of the rotation, residents should schedule a session with one of the C.D.E.'s to discuss practical aspects of diabetes management. Attending the education session for a newly diagnosed diabetes patient is a priority and will be encouraged in lieu of attending clinic. This session should include discussions on the various types of meters, insulin delivery devices, etc. (medical knowledge).

### 5. Referrals to the Endocrine Service

Every Tuesday morning, residents will review with the attending the previous week's referrals to the endocrine service. Residents will be expected to make recommendations as to whether/how quickly the new referrals should be seen based on a review of the chart and reading (PBL, medical knowledge).

#### 6. Fellow's Journal club

Residents should attend the monthly fellows' journal club (Tuesday noon to 1:30PM). Residents will be expected to have read the articles assigned by the attending (medical knowledge, PBL).

#### 7. Fellow's Core Conference

Students and Residents are expected to attend the weekly Core Conferences (Thursday noon to 1:30) where a didactic lecture will be given by a fellow or attending related to an important topic in pediatric endocrinology. We recognize the potential conflict with the Core lecture series of the Residency Program, so the decision on which lecture to attend will depend on the lecture topic and the interests of the resident.

## 8. Student Pediatric Endocrine Presentation

The last Thursday of the rotation, students are expected to present a 30 minute review of a topic which was of interest during the rotation. The presentation should include a short literature review of the topic (PBL, medical knowledge).

### 9. Endocrine Testing

Early in the rotation, residents should acquire a familiarity with provocative hormone testing by observing/assisting with a test. These are usually scheduled for Monday and Friday mornings during Endocrine Clinic (PBL, patient skills, medical knowledge).

### 10. On Call

Residents/Students will be expected to be on call an average of every fourth night during the rotation. Call will be from home. Residents will not directly get phone calls from patients or physicians. These will go to the fellow/attending on call. Residents/students will be notified if the fellow/attending has to go to the ER/hospital and will be expected to meet the fellow/attending and participate in the evaluation and treatment of the patient. If the resident is sleep deprived from having had to come to the hospital, she/he should notify the attending by 8 AM so they can be relieved of their duties for the day.

Students will be evaluated by all pediatric endocrine attendings with whom they have had contact and with the Division nurses/nutritionists with whom they have worked.

### C. Weekly Schedule

These are guidelines and flexibility is possible within the schedule Monday

- o 7:30 AM In-patient rounds
- o 8:00 AM Endocrine clinic
- o Noon 1st and 3rd Monday Endocrine conference for in-patient resident team (44 conference room)
- o 1:00 PM Diabetes clinic

Tuesday

- o 8:00 AM M morning report followed by in-patient rounds
- 8:30 AM Laboratory follow-up/inpatient rounds
- o 12:00 Journal Club (once per month)

- o 1:00 PM Obesity/lipid clinic
- o 1:00 PM (1st & 3d Tues) diabetes clinic

## Wednesday

- o 8:00 AM Diabetes clinic
- o 1:00 PM Diabetes clinic- every other week

### Thursday

- o 8:00 AM Morning report
- o 8:30 AM In-patient rounds
- o 10:00 AM Teaching conference
- o 12 noon Core conference

### Friday

- o 7:30 AM inpatient rounds
- o 8:00 AM Grand Rounds
- o 9:00 AM endocrine clinic

Outreach clinic: Daytona Beach by telemedicine every other week, with annual visit for 2 days

We welcome you to our Department and hope to make this a fun and instructive month for you. Please feel free to approach any of us with questions, concerns or suggestions.

# **Course Faculty and Staff**

- Andelina Bernier MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Pediatric Subspecialty Clinic at Medical Plaza, 0830 or Pedatric morning report at 0800. An email will be sent to you the Thursday prior to your first day with instructions for the first day of clinic.

## **Course Materials**

- 1.Core curriculum presentations and associated key articles are available online <Y:\USERS\ENDO\Pediatric Endocrine Core Lectures>
- 2.Textbooks in pediatric endocrinology are available in faculty offices and you will be provided a pediatric endocrinology reveiw book to use during the rotation

## **Family Medicine Inpatient Elective**

CM E 1 | 4th Year Elective | Community Health and Family Medicine | Clinical Science

MDT 7100 | Family Med Inpatient Elective

### **Prerequisites**

Fourth Year Medical Student - UF medical students, must have completed a senior student Sub-I prior to participating in this elective.

Student must have prior approval for the period in which they would like to rotate through this elective. Please contact Kimberly Zinkel, 265-9564 or (zinkel@ufl.edu) Box 100383-Family Medicine at Main for approval.

## **Course Description**

COURSE PREREQUISITES: Fourth Year Medical Student

COURSE GOALS: The students will serve as acting interns under supervision of a supervising resident and attending physician from the Department of Community Health and Family Medicine. In the rotation, the externs will develop assessment and management skills needed for the care of general medical problems through bedside teaching, didactic lectures and academic conferences.

# **Course Faculty and Staff**

- <u>Kimberly K Zinkel</u> (Course Staff)
- <u>David B Feller MD</u> (Director)
- Shellayna Warman (Unknown)
- Kat Lindsey (Unknown)

## **Meeting Place and Time**

Prior to the rotation, you will receive an email with the time and location as well as the name of the Senior Resident and attending physician. If you have questions, please contact Kimberly Zinkel, 265-9564 or (zinkel@ufl.edu) Family Medicine at Main.

#### **Course Materials**

No special equipment.

#### **Additional Information**

Student must have prior approval for the period in which they would like to rotate through this elective. Please contact Kimberly Zinkel, 265-9564 or (zinkel@ufl.edu), Box 100383-Family Medicine at Main for approval.

# Flexible Psychiatry

PSY E 2 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Flexible Psychiatry

## **Prerequisites**

Satisfactory completion of third year clerkship in Psychiatry. Note, students from outside UF COM must get prior approval from Course Director.

# **Course Description**

Senior medical students wishing to receive additional training in a setting that does not meet the parameters described under other 4th year Psychiatry Elective offerings may chose this course. Examples include experience on the inpatient adult psychiatry services at Vista (including the Florida Recovery Center), the VA medical center inpatient and consultation services, the outpatient facility in Vero Beach, Jacksonville community psychiatry services, ECT, TMS, psychotherapy, and others. It is preferable for students to complete all 4 weeks in the same location. Other special projects may be considered during the elective time with discussion and permission by Dr. Jacqueline Hobbs.

## **Course Faculty and Staff**

- Jacqueline Hobbs MD, PhD (Director)
- Terry Lemesh (Unknown)
- Britany Ratliff (Course Staff)
- <u>Bobbi Reynolds</u> (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

To be arranged depending on the specific site/experience chosen. Contact Britany Ratliff britanyg94@ufl.edu / 352-265-2863 for arranging the elective at least a few weeks prior to anticipated start date; final approval is required by Dr. Hobbs.

### **Course Materials**

Vary depending on the experience chosen.

#### Additional Information

Please note, those wishing to complete any portion of this elective with a Child/Adolescent Psychiatry experience should contact Dr. Mariam Rahmani and register for the Child and Adolescent Psychiatry Elective instead.

# **Gastroenterology - Pediatrics**

PED E 6 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatrics Gastroenterology

## **Prerequisites**

Fourth Year Medical Student

## **Course Description**

On-line curriculum available

COURSE GOALS: Learn basic aspects of pediatric gastroenterology/hepatology/nutrition.

# **Course Faculty and Staff**

- Genie Kahn Beasley MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

RG-120; 8:00am, Monday-Friday. (Outpatient and Inpatient experience)

## **Course Materials**

File of pediatric gastroenterology/hepatology/nutrition articles; access to Medline.

# **Hematology/Oncology - Pediatrics**

PED E 5 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Hematology/Oncology

## **Prerequisites**

3rd Year Pediatrics

## **Course Description**

COURSE GOALS: This is a primarily outpatient based elective. The student will attend pediatric hematology/oncology clinic on unit 41 5 days per week. There, s/he will see patients in

conjuction with the attending physician, perform exams, and establish a treatment plan. There will be a wide variety of patients to be seen including those with malignancies on treatment or following completion of treatment, children and adolescents with benign hematology problems including anemia, sickle cell anemia, hemophilia and other disorders. New consults will also be seen in clinic and/or the inpatient hematology/oncology/stem cell transplant service. The student will participate in the regular conferences of the Division.

# **Course Faculty and Staff**

- Tung Wynn MD (Director)
- Meghan Lopez (Course Staff)

# **Meeting Place and Time**

Unit 41 and Pediatric Inpatient Service 8:00am - 5:00pm, Monday-Friday.

#### Additional Information

No required on-call responsibilities.

### **Infectious Disease - Pediatrics**

PED E 4 | 4th Year Elective | Pediatrics | Clinical Science

**MDT 7400 | Pediatrics Infectious Diseases** 

### **Prerequisites**

Fourth year medical student

## **Course Description**

COURSE GOALS: The student will evaluate pediatric patients admitted to the inpatient service with infectious disease problems as well as those patients for whom consultations are requested by other services. He/She will discuss the patients with the inpatient attending, review pertinent literature and write consultation or service notes. Additional experience includes attendance in clinics held each Monday [Infectious Diseases], Wednesday [HIV / AIDS], and Thursday [Infectious Diseases / Travel Clinic]. He/She will be expected to see new and return patients independently, including obtaining history and physical examination, and then present their findings to the clinic attending. Review of the literature regarding interesting patients is expected. He/She is expected to read about common topics in these areas during the rotation. Goals Objectives Competencies

Key: P=Professionalism, MK=Medical Knowledge; PC=Patient Care; IC=Interpersonal Communication; SBP=System Based Practice, PBLI=Practice-based Learning & Improvement Goals for Pediatric Infectious Diseases

- -; To gain a working knowledge of how to approach, evaluate and manage patients with infectious diseases. (PC,MK)
- -; To understand how a consultation service provides patient care. (PC,MK,IC)
- -; Work up new patients in outpatient clinic (second year).(PL,MK)
- -; Develop a greater understanding of how to use anti-infective and anti-inflammatory medications, and passive and active immunizations in the treatment and prevention of infectious diseases.(PC,MK,SBP)
- -; Develop skills as a life-long learner relative to infectious diseases using information sources, and evidence-based medicine data and principles (MK, PBLI)
- -; Develop skills as a physician teacher (IC,P)

## Objectives for Pediatric Infectious Diseases

- -; Complete 4-8 inpatient consultations (written or dictated) and follow them as the primary consultant re: follow-up, communicating with and teaching other students/residents involved the case. (PC,MK,IC)
- -; Complete 3-4 outpatient consultations.(PC,MK)
- -; Research at least one topic (of your own interest) related to ID to present to the group.(MK,PBLI)
- -; Prepare and give a 10-15 minute didactic presentation (with the help of the Faculty) to the Blue Team as part of their ID education (MK, PBLI)
- -; Complete at least one Evidence-based Medicine search, identify one appropriate EBM article, analyze it and present your analysis to the attending / ID team. (MK,PBLI)
- -; Prepare a case in Morning Report Format with specific objectives for discussion and have a brief (<10 minute) summary/discussion in response to the important aspect(s) of the case (MK,PBLI)

### Specific Topics to be addressed

- 1) Antimicrobial Therapy decision making, choices, potential side effects, risks/benefits
- 2) Antiviral Therapy indications, decision making, potential side effects, risk/benefit
- 3) Antifungal Therapy indications, decision making, potential side effects, risk/benefit
- 4) How to use the Red Book what information is in there
- 5) How to use an antibiotic handbook and learn from it The Sanford Guide to Antimicrobial Therapy 41st ed., Editors Gilbert, Moellering, Eliopoulos, Chambers, Saag. 2011 www.sanfordguide.com
- 6) The "Standard" ID Evaluation and Work-up
- 7) Approach to FUO
- 8) Complications of "Routine" or Common Infections in Children
- 9) Approach to the Evaluation of a Child with "Too many infections!"
- 10) How to receive / give the best ID consult and how to use your consultant
- 11) Identification/characterization of pediatric patients at high risk for infection (e.g. CF, neonates/premature infants, Immune deficiency, Immune suppression, etc.)
- 12) Active and Passive Prophylaxis for "High Risk Patients"
- 13) Evaluation and Management of Neonatal HSV Infection
- 14) Evaluation and Management of Pediatric HIV Infection
- 15) Prevention of Perinatal HIV Transmission the pediatrician's role

## **Course Faculty and Staff**

- Meghan Lopez (Course Staff)
- <u>Kathleen Ryan MD</u> (Director)

## **Meeting Place and Time**

Human Development Building Rm 216, 8:00am Monday-Friday.

### **Course Materials**

- 1. Textbooks available in division.
- 2. Library/Internet search as needed.
- 3. Recommended Bibliography

Evidenced-Based Medicine, Sackett 2005 \* Principles and Practices of Pediatric Infectious Diseases, Long/Pickering/Prober \* Virology, Fields \* RedBook 2009 Report of the Committee on Infectious Diseases, 28th ed. AAP 8 Sanford Guide to Antimicrobial Therapy 41st ed. Editors - Gilbert, Moellering 2011. www.sanfordguide.com

#### **Additional Information**

Student is expected to give a 20- 30 minute presentation (knowledge or information about a condition, disease process or medical treatment / intervention by the end of rotation on an area of interest in Rheumatology, ID, or Immunology. A separate EBM presentation will also be expected --> clilnical scenario, PICO question, literature search and analysis of the EBM paper and its applicability to the original clinical scenario.

### **Infectious Diseases**

MED E 9 | 4th Year Elective | Internal Medicine | Clinical Science

**MDT 7200 | Infectious Diseases** 

### **Prerequisites**

4th Year Medical Student

### **Course Description**

Students will participate in the inpatient consultation service to provide first-hand patient contact and apply their knowledge. There is an option to rotate at Shands or the VA Hospital (limit of 2 students per facility). There will be a weekly ID lecture, ID pharmacy journal club as well as a weekly patient management conference where challenging infectious disease cases will be discussed. Students will be allowed to leave at 5 pm on the weekdays. There is no weekend call for students.

## **Course Faculty and Staff**

- <u>Kartikeya Cherabuddi MD</u> (Other Faculty)
- Gautam Kalyatanda (Director)
- <u>Liz Cowart</u> (Unknown)

## **Meeting Place and Time**

Health Science Center, Dental Tower Rm. D2-39, 9:00am (first day) Office: 352-294-5481

#### **Course Materials**

There is no required course material for this elective.

#### Additional Information

"Infectious Diseases in 30 days", McGraw-Hill, is written by Dr Frederick Southwick. This book can be purchased at the UF Bookstore.

The book can also be borrowed for the duration of the rotation at the ID office.

## **Internal Medicine Consult Service**

MED E 24 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Internal Medicine Consult Svc

# **Prerequisites**

Successful completion of the Internal Medicine MS-3 Clerkship

## **Course Description**

#### COURSE GOALS:

Learn how to perform effective, evidence-based internal medicine consultation.

Gain practical experience in the evaluation and management of a variety of common medical problems such as: anemia, Leukocytosis, thrombocytopenia, fever, dyspnea, chest pain, edema, electrolyte imbalances, oliguria, abdominal pain, delirium, and jaundice.

Learn how to perform a preoperative medical evaluation in surgical patients.

Learn how to communicate effectively and establish professional relationships as a consultant with patients, families, nursing staff and medical colleagues from non-internal medicine services.

Recognize appropriate indications and assist with transfer of patients to appropriate internal medicine inpatient services when warranted.

# **Course Faculty and Staff**

- Nila Radhakrishnan MD (Director)
- Mallory Billings (Course Staff)
- Liz Cowart (Unknown)
- Megan Jacobson (Course Staff)

## **Meeting Place and Time**

Shands North Tower Call 352-294-8278 for specific details.

### **Course Materials**

Internal Medicine Consultation website:

http://internal.medicine.ufl.edu/education/internalmedicineconsultservice/

This contains course syllabus, all required readings and reference materials

### **Additional Information**

Please email Mallory Billings at mallory.billings@medicine.ufl.edu TWO weeks prior to your rotation.

# **Intro. to Radiation Oncology**

RON E 1 | 4th Year Elective | Radiation Oncology | Clinical Science

MDT 7780 | Intro to Radiation Oncology

### **Prerequisites**

The student should have completed most, if not all, of their third year clinical rotations.

## **Course Description**

COURSE GOALS: The principle objective of this course is to provide the student with an intimate exposure to the examination, diagnosis and treatment of the cancer patient. Emphasis is placed on methods of physical diagnosis and include detailed instruction in head and neck examination techniques, diagnostic maneuvers in gynecological examination and workup of patients with lymphoreticular malignancies. In general, the program is structured to allow the

student to concentrate his/her effort in areas that compliment career plans. This course is a tremendous opportunity for a medical student to evaluate and examine a large number and variety of cancer patients. Any student who is interested in a specialty which will interact with radiation oncologists is encouraged to use this opportunity to learn about the specialty. Approximately 250 cancer patients are seen each week in the department. The University of Florida Proton Therapy Institute in Jacksonville, FL is an excellent opportunity for the student to learn about Proton therapy. This is an off-site clinic- an extension of the U.F. Gainesville Rad/Onc clinic.

## **Course Faculty and Staff**

- Anamaria Yeung MD (Director)
- Nora Martin (Course Staff)

## **Meeting Place and Time**

Shands Cancer Center - Department of Radiation Oncology, Robert J. Amdur, M.D., Chairman & Program

### **Course Materials**

Instruction takes place via daily new patients consultations, follow up clinics, treatment simulations, tumor conferences, implant procedures, individual faculty discussion sessions and departmental teaching conferences. Individual research projects are available and optional.

#### **Additional Information**

The University of Florida Proton Therapy Institute (UFPTI) is located in Jacksonville,FL, the student will be responsible for their own transportation & lodging if they need to stay overnight.

# Introduction to EMS, Prehospital Care and ShandsCair

EMD E 2 | 4th Year Elective | Emergency Medicine | Clinical Science

MDT 7710 | EMS/Prehospital/Shands Cair

## **Prerequisites**

Satisfactory completion of third year curriculum.

## **Course Description**

COURSE GOALS: At the end of this rotation, the student will:

1. Gain an appreciation for the role of prehospital care in the management of the critically ill or injured patient.

- 2. Be able to assess the appropriateness of a patient for transport by ground or air.
- 3. Understand, through active participation in prehospital care operations, the unique challenges of packaging, monitoring, and performing patient care in the prehospital environment.
- 4. Know how to access emergency medical service systems and explain dispatch principles used by these systems.
- 5. Gain an appreciation of the needs for prehospital education, quality assurance and research.
- 6. Understand integrated trauma management.

During these four weeks, you will be exposed to all aspects of emergency medical services (EMS). Your experience will include flying with Shands Cair (October through May Only - must not be taller than 6'2" and under 200 lbs.), riding on paramedic units, participating in quality assurance activities, paramedic education, and prehospital protocol assessment. You will discover the satisfaction which comes in assisting in the out-of-hospital management of the critically ill or injured patient and in knowing that your efforts can benefit the health of a community, not just an individual.

For more information about the rotation please visit our web site, http://emergency.med.ufl.edu/education/rotations/ems-student-rotation/.

## **Course Faculty and Staff**

- Amy Smith (Unknown)
- <u>Jason Jones MD</u> (Director)
- Amanda Glynn (Unknown)
- Courtney Cribbs (Unknown)
- Chloe Evans (Course Staff)

### **Meeting Place and Time**

By arrangement with course sponsor.

#### **Course Materials**

Handouts and training materials are provided by the course sponsor and sponsoring agencies. Prehospital patients come from all sections of the county and all segments of society, and will be seen in the field as students ride with paramedics. The only common thread binding these patients is their need for assistance.

### **Additional Information**

NOTE - This course will be offered only by specific arrangement with course director/co-director.

# **Introduction to Integrative Medicine**

MDT 7200 | Intro to Integrative Medicine

### **Prerequisites**

4th year medical student Primary care clerkship (MS3) in either Family Medicine or Internal Medicine

# **Course Description**

This 2- week elective is designed to provide students with an evidence-based and experiential understanding of integrative medicine. The students will observe faculty members, learn how perform a history and physical examination with an integrative focus. They will observe acupuncture performed by a medical doctor and a licensed acupuncturist.

## **Course Faculty and Staff**

- <u>Irene M. Estores MD</u> (Director)
- Rebecca Beyth MD (Other Faculty)
- Monica Aggarwal MD (Other Faculty)
- <u>David McMahon MD</u> (Other Faculty)
- Marika Alois MD (Other Faculty)
- Liz Cowart (Course Staff)
- Nancy Hendricks (Course Staff)
- Ku-lang Chang MD (Other Faculty)
- Paulette C Hahn MD (Other Faculty)

## **Meeting Place and Time**

UF Internal Medicine at Spring Hill
Office of Dr. Estores for Orientation
Clinical rotation sites will be at IMSH2 and IMSH1

### **Course Materials**

Recommended reading:

Textbooks:

- 1.Rakel D. Integrative Medicine, 4th ed. \Elsevier 2017
- 2. Katz, Nutrition in Clinical Practice, 3rd ed. Walters-Kluwer 2014.
- 3. Craigie, F. Positive Spirituality in Health Care, Mill City Press, 2010

Journal Articles will be assigned by faculty preceptors

Websites: National Center for Integrative Medicine and Health https://www.nccih.nih.gov/

### **Additional Information**

This elective elective focuses on self-directed learning. Integrative Medicine is a broad field that covers botanicals, nutrition, traditional whole systems, mind-body interventions, nutrition, exercise, among others. The elective can be tailored to the students using journal article reviews and discussions. Interested students will be given guided writing exercises to craft personal statements and origin stories to stay connected with purpose and meaning in medicine and to promote self-care.

### **Maternal-Fetal Medicine**

OBG E 4 | 4th Year Elective | Obstetrics and Gynecology | Clinical Science

MDT 7160 | Maternal-Fetal Medicine

### **Prerequisites**

This course is open only to senior students who specifically plan to pursue a career in Obstetrics and Gynecology.

### **Course Description**

The objectives of this course are as follows:

To diagnose and treat medical complications of pregnancy.

To perform and interpret a basic screening ultrasound examination.

To apply prenatal diagnosis tests such as serum analyte screening, CVS, amniocentesis, cordocentesis, and cell-free fetal DNA assessment.

To develop skills in interpreting antepartum fetal assessment tests such as the NST, CST, biophysical profile, and doppler velocimetry.

To critically discuss major subject areas in perinatal medicine, such as cesarean delivery, diabetes in pregnancy, and prenatal diagnosis.

To learn the names and uses of common surgical instruments.

To learn the indications for use of different suture materials.

To learn to tie one and two-handed surgical knots.

### **Course Faculty and Staff**

- Patrick Duff MD (Director)
- Heather Ellis (Course Staff)

## **Meeting Place and Time**

Students should report to the Harrell Medical Education Building, Room 210 at 7:30 am on the first Monday of the rotation.

### **Course Materials**

Reading assignments will be distributed prior to the start of the elective.

## **Additional Information**

Students will be evaluated on the basis of their clinical performance in the High Risk Obstetrics Clinic, Prenatal Diagnosis Clinic, Labor and Delivery Suite, and in the special tutorials with the course director. There are no night-time or weekend assignments.

# **Medical Oncology**

MED E 6 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Medical Oncology

# **Prerequisites**

Fourth Year Medical Student

## **Course Description**

Students will work with a diverse faculty to learn the basic and applied principles for the care of patients with solid and hematologic malignancies. This is primarily an outpatient clinic rotation in the oncology clinics, however some inpatient time, if desired by the student, may be negotiated.

## **Course Faculty and Staff**

- Jennifer Duff MD (Co-Director)
- Veronica Weekly (Course Staff)
- Karen Daily DO (Director)

## **Meeting Place and Time**

Contact Course Directors by email (karen.daily@medicine.ufl.edu AND jennifer.duff@medicine.ufl.edu) at least 1 week prior for exact meeting place and time.

Most clinics are held in the Medical Plaza/Davis Cancer Pavilion, 2nd Floor.

#### **Course Materials**

MEDLINE, HSC Library resources, web-based resources, clinical guidelines, and additional references including relevant material provided by the faculty. Evidence-based approaches will be emphasized.

#### **Additional Information**

A weekly schedule will be provided to the student at the start of the rotation. This will outline clinic experiences and conference attendance which will be expected during the rotation.

# **Medical Student Clerkship in Emergency Critical Care**

EMD E 5 | 4th Year Elective | Emergency Medicine | Clinical Science

MDT 7710 | Med Stu Emerg Crit Care

### **Prerequisites**

BCC 7180 Required Emergency Medicine clerkship; for externs, one month of Emergency Department

# **Course Description**

The purpose of this course is to introduce senior Medical Student with career goals in Emergency and or Critical Care Medicine to gain significant exposure, education and experience, in Emergency Critical Care; specifically the acute assessment, and management of medical, traumatic and pediatric resuscitations. Students will be scheduled to work shifts in the Resuscitation area of the Shands UF Emergency Department and will work closely with faculty, residents and fellows in the management of the highest acuity cases that present to the ED. Students are expected to become integrated into the care team. Students will also spend significant time in the department's simulation lab learning and perfecting critical care procedures and resuscitation skills.

Course Goals: This course is designed for the MS4 who has completed the EM requirement and has a career interest in EM. This course will provide a focused experience in Emergency Critical Care including airway management, and care of Trauma, Sepsis, Respiratory failure, Acute MI's, Strokes and other acute severely ill patients. The student will be paired with an EM resident or Critical Care fellow during shifts and be active participant in the care team in the Resuscitation module of the ED.

Course Objectives: Demonstrate the ability to rapidly assess the critically ill and injured. Obtain an AMPLE history, and perform a focused problem based examination. Demonstrate ability to perform ACLS algorithms for V-fib arrest, stable and unstable V-tach and tachyarrhythmias, and bradycardia.

Demonstrate the ability to read ECG and interpret then above arrhythmias.

Demonstrate ability to manage respiratory distress including BiPAP, intubation, and ventilator management.

Demonstrate ability to interpret ABG

Demonstrate the ability to calculate ISS score

Demonstrate the ability to calculate APACHE II score

Demonstrate the ability to perform follow up on patients resuscitated in the ED

Teaching Methods: Assigned readings, Direct patient care, , On-line lectures and online shock module.

Feedback: Directly from Residents, fellows and faculty during shifts. Mid-clerkship review sessions with clerkship director, program director or EM CCM faculty.

Student Portfolio: Procedure log, APACHE II and ISS scores of patients seen during shifts, Case log.

Evaluation: Clinical evaluations by supervising resident, fellow and faculty; , End of clerkship oral exam.

### Competencies:

Objectives: ACGME competencies covered by each objective:

PC=Patient care, PL=Practice Based Learning, MK=Medical Knowledge, IC= Interpersonal Communication, Pr= Professionalism, SP= System Based Practice

DO=Direct Observation Vsim=Simulation CE=Case examples

#### Assessment & Treatment:

- 1. Demonstrate ability to rapidly perform history and physical exams in critically ill patients. (1) (PC)[DO]
- 2. Describe the dosages, indications and contraindications of pharmacologic interventions for shock, cardiac failure, dysrhythmias, sepsis, trauma, toxins, respiratory failure, hepatic failure, renal failure, and neurologic illnesses. (1) (PC)[DO, Vsim]
- 3. Demonstrate appropriate prioritization of diagnostic and therapeutic interventions in critically patients. (1) (PC, MK)[DO, Vsim]
- 4. Demonstrate an understanding of the appropriate use of consultants in critically ill patients. (1) (PC, MK, IC, Pr, )[DO]
- 5. Demonstrate an understanding of the ethical and legal principles applicable to the care of critically ill patients. (1) (PC, PL, MK, IC, Pr,)[DO, CE]
- 6. Demonstrate the ability to notify family of patient's death in professional and compassionate way. (1) (PC, Pr,IC) [DO]
- 7. Understand the pathophysiology of hypertensive emergencies including acute pulmonary edema, acute renal failure, stroke and encephalopathy. (1) (PC, MK, IC, ) [CE, DO]
- 8. Understand the typical evaluation for acute mental status depression including indications for

intubation. (1) (PC, MK) [CE, DO]

- 9. Discuss differential diagnosis of acute mental status changes. (1) (PC, MK) [DO]
- 10. Know and be able to discuss all toxidromes for which a specific antidotes exists or which can be treated with hemodialysis. (1) (PC, MK) [CE, DO]
- 11. Demonstrate understanding of "Do not resuscitate" orders, advance directives, living wills and brain death criteria. (1) (PC, PL, MK, IC, Pr, SP) [CE, OD]
- 12. Demonstrate thorough knowledge of antibiotic selection in critically ill patients. (1) (PC, MK) [DO, CE]

#### Trauma:

- 1. Demonstrate the ability to perform the following procedures: oral endotracheal intubation, nasotracheal intubation, cricothyrotomy, tube thoracostomy. (1) (PC, MK) [DO, VP, Vsim]
- 2. Understand the appropriate evaluation and resuscitation for geriatric trauma patients with multiple injuries. (1) (PC, MK, IC,) [DO, CE, ]
- 3. Understand the different diagnostic and treatment variations in penetrating vs. blunt trauma. (1) (PC, MK) [CE, Vsim]
- 4. Understand the management of major trauma as outlined in ATLS. (1) (PC, MK) [CE, DO, Vsim]

### Cardiac:

- 1. Demonstrate the ability to perform the following procedures: Transvenous cardiac pacing, External Cardiac Pacing. (1) (PC, MK) [CE, DO, Vsim]
- 2. Demonstrate knowledge of the various etiologies of cardiac arrest and the corresponding therapeutic approaches. (1) (PC, MK) [CE, DO]
- 3. Demonstrate knowledge of the factors affecting blood flow, oxygen delivery and oxygen consumption in shock and cardiac arrest. (1) (PC, MK) [CE, DO, Vsim]
- 4. Demonstrate ability to recognize dysrhythmias associated with cardiac arrest and knowledge of ACLS protocols for their treatment. (1) (PC, MK) [CE, DO, Vsim]
- 5. Understand the dosages, indications and contraindications for pharmacologic therapy during cardiac arrest and following resuscitation. (1) (MK, PC) [CE, DO, Vsim]
- 6. Demonstrate the ability to interpret pressure waveforms from CVP, RA, RV, PA and PCWP. (1) (PC, IC, MK) [CE, DO)
- 7. Understand the sensitivity and specificity of ancillary studies for life threatening chest pain presentations including EKG, chest x-ray, cardiac enzymes, and arterial blood gases. (1) (PC, MK) [CE, DO]
- 8. Discuss the proper management of and therapeutic options for STEMI. (1) (PC, MK) [CE, DO]
- 9. Demonstrate ability to safely perform internal and external defibrillation. (1) (PC, PL, MK, IC, ) [CE, DO, Vsim]
- 10. Describe the clinical findings of cardiogenic shock and outline therapy for cardiogenic shock. (1) (PC, MK) [CE, DO]

## Resuscitation:

- 1. Demonstrate understanding of the Fick equation and its application in monitoring shock states. (1) (PC, MK) [CE, DO]
- 3. Demonstrate ability to diagnose and treat shock, sepsis, fluid and electrolyte abnormalities,

cardiac failure, cardiac dysrhythmias, acute renal failure, and toxicologic emergencies. (1) (PC, MK) [CE, DO, Vsim]

## Severe Sepsis:

Demonstrate the ability to perform the following procedures: Central Venous Line, Subclavian or Internal Jugular (1) (PC, MK) [PC, MK]

Demonstrate knowledge of and ability to perform Early Goal Directed Resuscitations in severe sepsis (1) (PC, MK, PL, SBP)[CE, DO, Vsim]

## Neurologic:

- 1. Differentiate between ischemic and hemorrhagic Stroke. (1) (PC, MK) [CE, DO]
- 2. Demonstrate knowledge of current recommendation for the treatment of acute ischemic Stroke, Hemorrhagic Stroke,(1) (PC, MK) [CE, DO]
- 3. Demonstrate ability to calculate NIH stroke score. (PC, MK, IC, SBP) [CE, DO]
- 4. Discuss the rationale for deciding which patients should or should not receive fibrinolytic therapy including timing, imaging, clinical course and risk-benefit analysis. (PC, MK, SBP, Pr) [CE, DO]
- 5. Demonstrate ability to provide patient & family with information in understandable format to permit informed consent on the decision to institute or withhold thrombolytic therapy. (1) (MK, PC, IC) [CE, DO]

## Critical Care Monitoring:

- 1. Demonstrate the ability to perform the following procedures: Arterial line placement, central intravenous catheter placement, CV pressure monitoring of volume resuscitation. (1) (PC, MK, SBP) [DO, Vsim]
- 2. Demonstrate the ability to use and interpret data from ECG monitors, ECG's, Central venous pressure monitors and other hemodynamic monitoring, arterial and central venous blood gases, pulse-oximetry, end tidal CO2 monitors and ventilators. (1) (PC, MK, IC) [CE, DO]
- 3. Understand current modalities of non-invasive hemodynamic monitoring including US, pulse contour and impedance cardiography. (1) (PC, MK) [CE, DO]
- 4. Demonstrate the ability to safely perform procedural sedation for emergent procedures, including use of narcotics, benzodiazipines, and hypnotics. (PC, MK,) [CE, DO]

## Advanced Airway Management

- 1. Demonstrate at least 3 methods of definitive airway control when standard oral tracheal intubation fails. (1)(PC, MK) [DO,VP, Vsim]
- 2. Develop a written personal difficult airway algorithm on pocket card. (1)(PC, MK) [DO,VP, Vsim]
- 3. Be able to recite their personal difficult airway algorithm. (1)(PC, MK) [DO]
- 4. Demonstrate their ability to perform each procedure involved in their personal difficult airway algorithm. (1)(PC, MK) [DO,VP]
- 5. Demonstrate their ability to use the personal difficult airway algorithm in case scenario (1)(PC, MK) [DO, Vsim]
- 6. Demonstrate ability to write ventilator orders (1) (PC, MK) [DO, Vsim]
- 7. Demonstrate the ability to manage a patient on a ventilator and non-invasive respiratory support (CPAP BiPAP). (1) (PC, MK)[DO]

- 8. Demonstrate ability to manage the airway during cardiac arrest, including mouth-to-mask ventilation, bag-valve-mask ventilation, endotracheal intubation, cricothyroidotomy, and recognition of the obstructed airway. (1) (PC, MK)[DO, VP]
- 9. Demonstrate ability to perform nasopharyngeal and bronchoscopy. (1) (PC, PL, MK, IC, Pr, SP) [DO, VP]
- 10. Demonstrate ability to wean patient from ventilatory support. (1) (PC, MK) [CE,DO]

## **Course Faculty and Staff**

- Amanda Glynn (Unknown)
- Amy Smith (Unknown)
- Rohit Patel MD (Director)
- Courtney Cribbs (Unknown)
- Chloe Evans (Course Staff)

## **Meeting Place and Time**

Shifts will be scheduled in the Shock-Trauma unit of the Emergency Department.

### **Course Materials**

Required Textbook: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 7e

# **Minimally Invasive Surgery**

SUR E 19 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Minimally Invasive Surgery

### **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

### **Course Description**

Clinical rotation on the Minimally Invasive Surgery Service. Students will have the opportunity to act as a sub-intern on the floor and in clinic as well as the opportunity to participate in robotic and laparoscopic techniques in hernia, foregut and bariatric surgery in the operating room.

## **Course Faculty and Staff**

- <u>Jeff Friedman MD</u> (Other Faculty)
- Ashley Counts (Beavers) (Course Staff)

- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Contact the Surgery Education Office at 594-5116 for reporting instructions.

#### **Course Materials**

Provided during course

#### **Additional Information**

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

# **Neonatology - Pediatrics**

PED E 3 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatrics Neonatology

## **Prerequisites**

Grade of "B" or better in Pediatric Clerkship.

## **Course Description**

COURSE GOALS: This course will provide an introduction to newborn intensive care that will include, but not be limited to:

- 1. An organized approach to the total care of complex, sick newborn patients.
- 2. An understanding of common neonatal respiratory disorders.
- 3. An understanding of neonatal fluid, electrolyte and nutritional support.
- 4. Neonatal resuscitation and stabilization.
- 5. Neonatal invasive procedures.
- 6. Ethical issues in neonatal medicine.

## **Course Faculty and Staff**

- <u>David J Burchfield MD</u> (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

NICU, 7:30am.

#### **Course Materials**

Recommended: Avery's Neonatology, Pathophysiology, and Management of the Newborn.

#### **Additional Information**

In-house call one night per week (will follow the 80-hour rule as established in the Department of Pediatrics) as the intern. During this call, will carry the Labor and Delivery beeper, admit new patients and participate in procedures.

# **Nephrology - Pediatrics**

PED E 2 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Renal Clin Rotation

# **Prerequisites**

4th year medical student

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# **Course Description**

The student will evaluate new patients and/or interesting return patients during morning clinics each week. He/She will be asked to see the consultations on the Inpatient Service and to perform a literature search on the patient problem. All patients will be reviewed with the pediatric renal attending. The student will attend daily round and conferences with the pediatrics renal attending. At least one patient will be reviewed with the student daily. The student will be encouraged to review pertinent literature as related to each patient.

## **Course Faculty and Staff**

- Nirupama Gupta MD (Director)
- Meghan Lopez (Course Staff)

# **Meeting Place and Time**

Pediatric Clinic and Inpatient Service Areas 8:00am-5:00pm, Monday-Friday and 9:00am-12:00pm on weekends as assigned.

### **Course Materials**

Lectures and handouts. Core lectures.

Patient Care care conferences Renal pathology conferences every month.

# **Neurology - Pediatrics**

PED E 25 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Neurology

# **Prerequisites**

4th year medical student with successful completion of pediatrics as a 3rd year

## **Course Description**

The overall goal is to learn the skills needed to care for children with a wide range of neurological disorders.

### Goals and objectives

- 1. Participate in the management of in-patients under the direct supervision of more senior residents and attending physicians, both on the general Pediatric Neurology services and on the specialized services (Intensive Care Unit or Emergency Room). (Patient care)
- 2. Learn to obtain a comprehensive history and perform an appropriate general physical and neurological examination, localizing the neurological problem, generating an appropriate differential diagnosis, and developing a cost-effective plan for the further evaluation and management of the patient. (Patient care)
- 3. Master communication skills and appropriate medical knowledge for your level of expertise. (Patient care)
- 4. To have opportunity each week, as part of the Grand Rounds experience, to witness a staff physician interview and examine a patient, and discuss the differential diagnosis, and management of the case. (Patient Care)
- 5. During the rotation, the student will have opportunities available to learn neurosciences, focused on the full spectrum of neurological disorders, their management and the possibilities for related clinical research. The student may participate in didactic and clinical conferences, including Journal Club, research conferences, Neuroradiology conferences, Electrophysiology conferences, Clinical Case Conferences. One attending physician will present to the student live cases seen over the previous weeks to assess and mold the trainees' thinking processes. (Medical Knowledge)
- 6. Meet with the attending physician to hold patient-based clinical teaching rounds each day. (Medical Knowledge)
- 7. Expected to communicate with other team members to discuss the patients admitted to hospital. The medical students will be expected to read in detail about the disorders in patients for whom they have cared. Each medical student will also be expected to present a challenging neurological case at a monthly Friday Pediatric Neurology Conference. The live case-based rounds conducted each week, as part of the Neurology Grand Rounds, allows for vigorous group

interaction in order to optimize patient care. (Practice-based Learning)

8. Have the opportunity to observe attending physicians obtain histories, perform examinations, and discuss impressions and plans with families, such as in the live patient part of weekly Neurology Grand Rounds. This permits role modeling. Conversely, the students will be observed in their history taking and development of rapport with children/patients. They will be observed in the inpatient service, intensive care unit, emergency room, and consultation settings. The approach to patients also is emphasized to foster their sensitivity to young children. The importance of developing interpersonal skills and open communication is emphasized in an ongoing, daily basis by all staff member. (Interpersonal and communication skills) 9. Ethical issues and sensitivity to diverse patient populations are continually monitored by attending physicians, a point that cannot be overemphasized at a Center with as much patient population diversity as is seen at Shand's Hospital-University of Florida. The medical students will also be expected to treat with sensitivity and respect all physician extenders (Register nurses, Advanced Register Nurse Practitioners), nurses, para-professional personnel, secretaries on all the in-patient services and outpatient services. (Professionalism) 10. To review practice guidelines, found in part on the Child Neurology Society website and the American Academy of Neurology website, with child neurology staff physicians. (System-based practice)

Suggested textbooks and reading materials

- 1. Child Neurology: A Sign and Symptom approach. 6 Edition. Fenichel.
- 2. Neurology in Clinical Practice. 6 edition. Daroff, Fenichel, Jankovic, Mazziotta.
- 3. Localization in Clinical Neurology 6 edition. Brazis, Masdau, Biller
- 4. Neurological Differential Diagnosis. 2 edition. John Patten

### **Course Faculty and Staff**

- John Sladky MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Pediatric Neurology offices, Human Development Building Room 402 or 403, 8:30am on the first day of the rotation.

### **Course Materials**

Reading material will be recommended by the faculty

# **Neurosurgery Elective**

NSU E 1 | 4th Year Elective | Neurosurgery | Clinical Science

MDT 7650 | Neurosurgery Elective

## **Prerequisites**

Fourth year student.

## **Course Description**

During the four week rotation, students will function as an integral part of the faculty led team caring for patients on the neurosurgery service at Shands Hospital at UF and the Malcolm Randall VA Medical Center. Students will be given a weekly schedule, including call days.

Rotating students are expected to demonstrate an enthusiasm for their work and an active interest in learning the nuances of advanced neurosurgical care. Students will round each morning with the resident and attending teams, and will then be encouraged to spend time in the operating room. Students will be expected to learn about neurosurgical conditions, their diagnosis, and treatment. Students will spend the majority of their time in the operating room participating in a wide breadth of neurosurgical operations. Students will also assist the junior and senior residents in direct patient care, in the neuro-intensive care unit and the neurosurgical floor. Students will spend at least two days in outpatient clinic during their time on the service. Opportunity will also be given to spend time in subspecialty areas and clinics, such as endovascular neurosurgery and stereotactic radiosurgery.

Students will attend the department's daily teaching conference. Weekly lunches will be scheduled with the rotating student and selected Faculty. During these lunches didactic topics will be covered, as well as general mentoring regarding career development in Neurosurgery. Students will also be encouraged to participate in departmental functions and social activities on an ad hoc basis.

### **Course Faculty and Staff**

- Gregory Murad MD (Director)
- Jamie Dow (Course Staff)

## **Meeting Place and Time**

Daily @ 7:00 a.m. in Neurosurgery Conference Room, UBG-552 (Ground Floor HVN - East Tower)

#### Additional Information

#### COURSE GOALS AND OBJECTIVES

- 1. General Skills
- (a) Clinical examination To perform a competent neurological evaluation including relevant history and neurological examination.
- (b) Radiology To understand the fundamentals of x-ray and computerized (CT, MRI) imaging of the spine and head, including normal and common pathological entities.
- (c) Emergent management To understand the clinical manifestations of acute and chronic

intracranial hypertension, as well as other neurosurgical emergencies (infection, spinal cord compression, trauma, etc.) and principles of emergency management.

### 2. Intracranial Disease

- (a) Head injury To recognize the spectrum of mild, moderate and severe head injury and to diagnose and initiate its management.
- (b) Brain tumors To understand the broad categories, presenting symptoms and management principles of brain tumors, including indications for surgical intervention and adjuvant therapies.
- (c) Cerebrovascular disease To differentiate common headache syndromes with emphasis on recognition, diagnosis and management of subarachnoid hemorrhage. To recognize presenting symptoms and signs of occlusive cerebrovascular disease, and general diagnostic and treatment strategies including indication for carotid surgery.

## 3. Spinal Disease

- (a) Spinal trauma To diagnose and initiate acute management of spine fracture, dislocation and spinal cord injury.
- (b) Degenerative disease To evaluate and initiate management of spinal degenerative disc and spondylotic disease, and to recognize neural compression syndromes and indications for surgical intervention.

## 4. Hydrocephalus.

(a) To identify signs and symptoms of hydrocephalus and know the management options in children and adults.

### 5. Peripheral Nerve Disease

(a) To diagnose and initiate the management of peripheral nerve injury and common nerve entrapment syndromes.

## ACHIEVING THE GOALS AND OBJECTIVES

The goals and objectives of the medical student program are achieved in the 4 week rotation by: 1. Exposure to neurosurgery patients in the clinical care setting, 2. Daily departmental conferences, 3. Series of tutorials covering general neurosurgery topics, 4. Neurosurgery clinics,

5. Emergency call and 6. Operating room experience.

### 1. Clinical service

The neurosurgery service at Shands Hospital UF is divided into multiple services consisting of faculty, a senior resident, a junior resident and, on some services, an intern. Medical students will have the opportunity to work with all services over the 4 week rotation. The student will rotate through the services and will come under the direct mentorship of the senior resident for each service. The services are generally divided by subspecialty area, and allow a student to focus on one subset of neurosurgical disease, although all services also care for general neurosurgical patients.

During the rotation students may be assigned patients by the mentoring senior resident (usually 2 patients per week). The student is responsible for presenting these patients on morning rounds and is expected to complete all floor duties related to those patients including writing

orders/daily notes etc. It is expected that the student is in communication with the resident members of his or her team throughout the day to be sure that all tasks related to the service are completed.

### 2. Daily Departmental Conferences

Neurosurgical conferences are held daily, Monday through Friday, from 7:00am to 8:00 am.

2. Daily Departmental Conferences

Neurosurgical conferences are held daily, Tuesday through Friday, from 7:00am to 8:00 am.

- a) A review of the TTP cases is held the 1st and 3rd Tuesday morning (UBG-552).
- b) Preoperative conference is held the 1st, 3rd and 4th Tuesday (UBG-552). Cranial and spinal cases are emphasized each week.
- c) ABNS or ACGME Milestone conference is held the 1st Wednesday (UBG-552) and involves a resident presentation for ABNS Board review or Medical Knowledge milestone.
- d) Grand Rounds / Wellness conference is held the 3rd Thursday morning (UBG-552) and involves a topic review.
- e) Infection Task Force, Readmissions or Trended Outcomes / Didactic Seminar conference is held the 1st Thursday (UBG-552) and involves a detailed review of topic in alternating weeks.
- f) Journal Club is (UGB-552) held monthly. The student will be provided with an article to critique and present.
- g) Neuropathology conference is held the 3rd Friday morning of each month (UBG-552) and involves case presentations by the attending neuropathologist.
- h) Brain tumor board is held every Tuesday afternoon at 4:00 pm (L2-101) and involves a multidisciplinary discussion of all brain tumors operated the previous week.
- i) Epilepsy conference is held every Wednesday morning at 8:30 am (LG 116) and involves a detailed review of the preoperative data on epilepsy patients.
- 3. Tutorials

## 4. Neurosurgery Clinics

Students are expected to attend clinic on at least one Thursday at Shands, and one Tuesday at the VA. At this clinic the student will be assigned patients to interview, examine and present. Students are also invited to participate in any of the clinics listed on the timetable. During the final week of the rotation the student may be asked to interview a new patient for 45 minutes. The student will be assessed on clinical history and physical examination performance.

### 5. Emergency call

To obtain exposure to acute neurosurgical conditions it is expected that the student takes call on the same schedule as their senior resident mentor.

## 6. Operating room experience

Operating room attendance is encouraged and guidance as to which surgeries to attend should be obtained from the senior resident. All surgeries concerning patients for whom the student is responsible should be attended. Level of participation in the surgery is up to the attending present but where possible the student should be scrubbed in.

7. Oral presentation skills: The student is expected to perform a 15-minute presentation at morning conference in the final week of the 4 week rotation. This presentation may be about any neurosurgical or neuroscience topic. This is an opportunity for students to present research that

they may be working on during or prior to medical school. Other options include interesting case reports or brief topic reviews. Faculty from the department are available to help in preparing this presentation.

# **Otolaryngology - Surgical Elective**

OTOL E 1 | 4th Year Elective | Otolaryngology | Clinical Science

MDT 7590 | Otolaryngology Surgical Elect.

## **Prerequisites**

None

# **Course Description**

#### **COURSE GOALS:**

- 1. To acquaint students considering careers in otolaryngology with the management of the most common otolaryngologic disorders they will encounter in their practice.
- 2. To better prepare students to independently manage patients with routine otolaryngologic disorders by allowing them to evaluate and treat such conditions under the supervision of a faculty member.
- 3. To review and enhance the student's knowledge of head and neck anatomy and to train students in the performance of a complete head and neck exam.
- 4. To educate students as to the proper utilization of otolaryngologic consultation.
- 5. To provide a detailed understanding of the management of obstructive sleep disorders, otitis, allergic rhinitis, sinusitis, hoarseness, tonsillitis, common head and neck cancers, and hearing problems via small group discussions and direct patient care.

## **Course Faculty and Staff**

- <u>Tiffani Raulerson</u> (Course Staff)
- Deepa Danan MD (Director)

## **Meeting Place and Time**

ENT Academic Office (M2-228) on the first day of your rotation once you have completed orientation.

#### **Course Materials**

Ear, Nose, and Throat Diseases: A Pocket Reference by W. Becker, H.H. Naumann, & C.R. Pfaltz

#### **Additional Information**

- -Must return any and all materials borrowed during your rotation by the last Friday of your rotation.
- -4 week elective designed for students interested in pursuing otolaryngology as a career.

## **Pain and Addiction**

PSY E 10 | 4th Year Elective | Psychiatry | Clinical Science

**MDT 7840** 

### **Prerequisites**

None

# **Course Description**

## COURSE GOALS:

- 1. Know the signs and symptoms of the DSM substance related disorders.
- 2. Know the psychiatric and medical comorbidities typically found in patients with substance related disorders.
- 3. Be familiar with obtaining a complete history and performing a medical and neurologic examination.
- 4. Effectively communicate with patients with substance disorders, and be able to appropriately educate their family members.
- 5. Treat patients with substance abuse disorders with respect in a non-judgmental fashion.
- 6. Apply current scientific information and evidence-based data to the diagnosis and management of patients with substance use disorders.
- 7. Understand the importance and value the contributions of other health care providers involved in the collaborative treatment of the patient with a substance related disorder.

## **Course Faculty and Staff**

- <u>Jacqueline Hobbs MD, PhD</u> (Co-Director)
- William Hollifield MD (Director)
- Britany Ratliff (Course Staff)
- Bobbi Reynolds (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

UF Health Shands Hospital. Time: TBD.

### **Course Materials**

1. The Selfish Brain; Robert L. Dupont, M.D.

- 2. The Biochemical Basis of Neuropharmacology; Cooper, Bloom and Roth
- 3. Select journal articles and online readings associated with particular cases, patient experiences

### **Additional Information**

For more information please contact Britany Ratliff britanyg94@ufl.edu 352-265-2863.

# **Pancreas/Biliary Surgery**

SUR E 20 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Pancreas/Biliary Surgery

# **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

# **Course Description**

This course is a clinical experience on the Pancreatic Biliary Service, to include exposure to the operating room, floor, and clinic.

## **Course Faculty and Staff**

- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

### **Meeting Place and Time**

Please contact the Surgery Education Office at 594-5116 for reporting instructions.

### **Course Materials**

Textbooks and selective journal publications as assigned by attending during the rotation.

### **Additional Information**

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

# **Pediatric Diabetes Camp**

PED E 22 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Diabetes Camp

## **Course Description**

Students will live in cabins with campers with type 1 diabetes and experience a variety of activities with the campers. Students will shadow medical staff and participate in responsibilities include insulin dosing, helping with food choices at mealtimes, quality control of glucometers, troubleshooting insulin pump dosing and problems, as well as glucose checks during the day and overnight. Students will have hands-on experience with the daily management of diabetes in children and teens, and observe the importance of play and social attachment in children with chronic medical conditions. Students will learn a tremendous amount about the management of type 1 diabetes while having fun!

### **Course Faculty and Staff**

- Andelina Bernier MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

Brendan Rotary Fun Sports: June 6 - June 12

Winona Session 1: Orientation and Camp July 9-July 19 Winona Session 2: Orientation and Camp: July 23-August 1

#### **Course Materials**

Textbooks and reference materials will be available at medical facilities

# **Pediatric Surgery**

SUR E 1 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Pediatric Surgery

# **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

### **Course Description**

Cognitive Domain: 1. Evaluate and discuss common problems frequently seen in pediatric surgery; 2. Complete a written pediatric surgery History and Physical; 3. Briefly describe the operative management of basic pediatric surgical diseases, including but not limited to: pyloric stenosis, appendicitis, hernias, cryptorchidism, intussusception, congenital anomalies, neonatal bowel obstructions, trauma evaluation and resuscitation, and common childhood solid tumors. Psychomotor Domain: 1. Demonstrate proficiency in common intern-level duties including nasogastric tube insertion, excision of skin lesions, obtaining IV access and basic suturing. 2. Recognize the role of existing and emerging surgical technology and research in the field and practice of pediatric surgery. 3. Reliably use the Internet and electronic tools as a medical resource. Affective Domain; 1. Expand his/her exposure to and appreciation for a career in pediatric surgery and academic surgery. 2. Become more aware of the opportunities available to residents in surgery. 3. Appreciate the influence of research as it applies to pediatric surgical problems. The Division of Pediatric Surgery strives to provide the senior student an extensive exposure to major surgical problems in infants and children; including newborn anomalies, airway problems, solid tumors, acquired diseases, and trauma. General surgical principles and techniques, preoperative assessment, and postoperative care are emphasized with externship responsibility.

### **Course Faculty and Staff**

- <u>Saleem Islam MD</u> (Director)
- Adela Van Antwerp (Course Staff)
- Ashley Counts (Beavers) (Course Staff)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Department of Surgery (N6-10); Pediatric Surgery; 352-273-8825 Call office to obtain time and place to meet for the first day on the rotation.

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

### **Course Materials**

Prepared student syllabus; Selected readings from surgical texts (chapters on Pediatric Surgery)and additional readings from current journals will be assigned during the rotation for regular conferences and teaching.

### **Additional Information**

Pediatric Surgery is the last true bastion of General surgery and incorporates the added advantage of being able to care for children and neonates of all ages. The variety of cases we see are unparalleled and offer an insight into embryologic and other considerations. The Sub I will be allowed to function fully as an intern by seeing consults, taking care of floor patients and operating. The Sub I will take a week of night calls as well and at the end of this rotation will become well versed at time management and handling rapid patient turnover! As this is a very busy service, you can expect to be well trained in handling consults, taking care of floor patients

and ED consults as well. Research (clinical) opportunities are available as well. The student will be given an opportunity to present a clinical condition to the faculty before the end of the rotation.

Most of all -- its FUN!

# **Physical Medicine and Rehabilitation Elective**

ORTH E 3 | 4th Year Elective | Physical Medicine and Rehabilitation | Clinical Science

MDT 7570 | Phys Med & Rehab Elective

## **Prerequisites**

Satisfactory completion of third-year clerkships.

### **Course Description**

COURSE GOALS: To increase the student's knowledge of assessment and management of persons with severe impairment and disability following neurologic (e.g. stroke, traumatic brain injury, spinal cord injury) or musculoskeletal (e.g. multi-trauma, arthroplasty) injuries who will benefit from comprehensive inpatient rehabilitation. This course will emphasize medical aspects of managing a patient in rehabilitation over a course of time to improve the functional outcome and enhance community reintegration.

Additional time (up to 50%) may be spent working with PM&R faculty on an outpatient basis; the student will see patients with spine/neck conditions, concussion, and MSK/sports injuries, as well as observe and assist with electrodiagnostic and ultrasound-based studies and procedures.

This course is highly recommended for all students interested in physical medicine and rehabilitation; however, the rotation is also recommended for students with interests in fields with patients who are often referred for inpatient rehabilitation (e.g. neurology, surgery, orthopedics). Students with an interest in sharpening their neurology and MSK exam skills will also derive significant benefit. The rotations will be tailored to meet the interests and needs of the student, whether they are considering a career as a primary care physician or specialist.

## **Course Faculty and Staff**

- Kevin R. Vincent MD, PhD (Director)
- Jason Zaremski MD (Other Faculty)
- <u>Daniel Herman MD, PhD</u> (Co-Director)
- Kelli Craig Deas (Unknown)
- Jessica Pickering (Unknown)
- Alyson Willingham (Unknown)
- Terra Smith (Course Staff)

Shands Rehab Hospital, 4101 NW 89th Blvd., at 0800, Monday-Friday

Musculoskeletal clinics at the in the Orthopaedic and Sports Medicine Institute on Hull Road (if the student desires).

### **Course Materials**

Selected readings will be suggested by attending physicians based on the diagnosis of patients admitted at the rehabilitation hospital during the rotation and basic musculoskeletal injuries seen in the outpatient clinics.

### **Additional Information**

If you have any questions regarding the course, please contact Dr. Daniel Herman at hermadc@ortho.ufl.edu

## Plastic & Reconstructive Surgery UF&Shands/VAMC

SUR E 4 | 4th Year Elective | Plastic Surgery | Clinical Science

MDT 7600 | Plastic/Reconstr Sx Shands/VA

## **Prerequisites**

A third-year rotation in Plastic and Reconstructive Surgery is useful, but not required. We welcome all interested fourth-year medical students.

Non UF medical students interested in plastic surgery are also welcome.

### **Course Description**

COURSE GOALS: During a month long rotation, a student will perform as an extern under the supervision of the resident staff and the faculty. The emphasis will be on the principles of the diverse field that is Plastic and Reconstructive Surgery and the preoperative decision-making and postoperative care involved. The student will be expected to assist in surgeries and be exposed to variety of patients. There will also be an emphasis on basic surgical skills.

- Bruce A. Mast MD (Director)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)

• Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Please contact the Course Director prior to the start of the rotation.

### **Course Materials**

COURSE MATERIALS: Students will be given the Plastic and Reconstructive Surgery Essentials for Students packet, if they have not already received it. Learning will be from many sources - Core Curriculum, Morbidity & Mortality, Grand Rounds, Preoperative Conference, and Journal Club. Also the faculty and residents will be involved with teaching both in clinic and in the operating theater. The student will have the opportunity to learn from and participate in the care of patients with a variety of surgical problems. The student will be an active participant on the service.

#### Additional Information

If there are any questions regarding any aspect of the rotation, please do not hesitate to get in touch with us.

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

# **Primary Care in Otolaryngology**

OTOL E 2 | 4th Year Elective | Otolaryngology | Clinical Science

MDT 7590 | Primary Care in Otolaryngology

## **Prerequisites**

None

## **Course Description**

#### **COURSE GOALS:**

- 1. To acquaint students considering careers in primary care fields with the management of the most common otolaryngologic disorders they will encounter in their practice.
- 2. To better prepare students to independently manage patients with routine otolaryngologic disorders by allowing them to evaluate and treat such conditions under the supervision of a faculty member.
- 3. To review and enhance the student's knowledge of head and neck anatomy and to train students in the performance of a complete head and neck exam.
- 4. To educate students as to the proper utilization of otolaryngologic consultation.
- 5. To provide a detailed understanding of the management of obstructive sleep disorders, otitis,

allergic rhinitis, sinusitis, hoarseness, tonsillitis, common head and neck cancers, and hearing problems via small group discussions and direct patient care.

COURSE SETTING: Outpatient setting at the Hampton Oaks and Shands ENT Clinics. Inpatient and surgical care are not emphasized but available to the student desiring a wider perspective.

## **Course Faculty and Staff**

- <u>Deepa Danan MD</u> (Director)
- <u>Tiffani Raulerson</u> (Course Staff)

## **Meeting Place and Time**

ENT Academic Office (M2-228) on the first day of your rotation once you have completed orientation.

#### **Course Materials**

Ear, Nose, and Throat Diseases: A Pocket Reference by W. Becker, H.H. Naumann, & C.R. Pfaltz

#### **Additional Information**

- -Must return any and all materials borrowed during your rotation by the last Friday of your rotation.
- -Course content could be tailored to individual student's future career interests.

## **Psychiatry Consultation/Liaison**

PSY E 15 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Psychiatry Consult Liaison

### **Prerequisites**

Fourth Year Medical Student - students must contact the Course Director prior to the start of their rotation.

## **Course Description**

This rotation exposes students to the interface of Psychiatry with other medical specialties, especially as many inpatients have significant co-morbidities. The focus will be on the treatment of psychiatric emergencies and the management of the agitated patient. Students will help to evaluate and treat patients with psychiatric and medical/surgical Co-morbidities. Students will write notes into EPIC, the hospital electronic medical record. Students will also take part in

attending rounds and teaching conferences. The rotation can be tailored to the specific interests and needs of participating students, depending on what field choice they have made. Students can be assigned to take care of patients with specific co-morbidities or in particular settings (ie ICU, ER, etc. . .) that would best enhance their medical knowledge for their future residency.

## **Course Faculty and Staff**

- <u>Jacqueline Hobbs MD, PhD</u> (Co-Director)
- Britany Ratliff (Course Staff)
- Bobbi Reynolds (Unknown)
- Natalie Brown (Course Staff)
- Sheryl Fleisch MD (Director)
- <u>Ludmila De Faria MD</u> (Co-Director)

## **Meeting Place and Time**

Students must contact the Course Director prior to the start of their rotation.

Time: 8am at beginning of rotation

Place: Psychiatry Consultation/Liaison workroom. Please e-mail Britany Ratliff

britanyg94@ufl.edu prior to starting the rotation.

#### **Course Materials**

DSM-V Diagnostic and Statistical Manual of Mental Disorders Other handouts provided on course website.

### **Additional Information**

Faculty Participants - Sheryl Fleisch, MD; Brian Harlan, MD; Srinath Gopinath, MBBS; Ludmila De Faria, MD; others

# **Psychiatry Outpatient Clinics**

PSY E 7 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Psychiatry Outpatient Clinics

## **Prerequisites**

Satisfactory completion of third year clerkship in Psychiatry. Note, students from outside UF COM must obtain prior approval from Course Director.

#### **Course Description**

Senior medical students will receive training in the comprehensive evaluation and treatment of a wide variety of psychiatric conditions, managed in the outpatient setting. The Medical Office Building (MOB1) at Springhill Psychiatric Clinics (3rd floor) is the primary location for this rotation. However, students may also elect to complete some or all of the rotation at our Vero Beach Clinic. Clinic specialty areas include Addiction, Women's Mental Health, Neuropsychiatry and Movement Disorders, Deep Brain Stimulation (DBS), Adult Autism/PDD, Geropsychiatry, TMS clinic, psychotherapy, and more. Medical students will work either directly with faculty experts in specialty areas, or closely with psychiatry residents under the supervision of an attending. Students may also be involved in the mentoring and instruction of 3rd-year clerkship students currently rotating on psychiatry.

## **Course Faculty and Staff**

- Gary Kanter MD (Director)
- Jacqueline Hobbs MD, PhD (Co-Director)
- Britany Ratliff (Course Staff)
- Bobbi Reynolds (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

To be arranged. Please contact Britany Ratliff (britanyg94@ufl.edu) 265-2863 at least a few weeks prior to arrange specifics of the rotation.

### **Course Materials**

DSM-5 Pocket Companion Kaplan and Saddock's Synopsis of Psychiatry, Latest Edition

#### Additional Information

Please note, in the past, this rotation was selected for those interested in inpatient services (including Addictions) and consult rotations. These areas are now offered as distinct, separate courses.

# Psychiatry, Psychology Division: Cognitive Behavioral Therapy

PSY E 18 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Cognitive Behavioral Therapy

## **Prerequisites**

Medical students who are in their fourth year are eligible for enrollment. Students are responsible for contacting the Course Director or Co-Director prior to start of the rotation.

## **Course Description**

This rotation will offer medical students the opportunity to observe and participate in the delivery of psychological services using Cognitive Behavioral Therapy (CBT) and CBT with Exposure Response Prevention treatment within an outpatient setting. The Psychology Division is an internationally recognized treatment and training center for Obsessive Compulsive Disorder (OCD) and offers an intensive OCD program where treatment is delivered daily over the course of three weeks. Data for patients who have participated in the UF intensive program have shown significant improvements, with approximately 80 to 85 percent showing symptom reduction by at least 50 percent. The psychology division is also a prominent center for Parent-Child Interaction Therapy (PCIT), wherein therapist work with parents to improve behavior and relationships with young children. Medical students will also be able to observe other psychiatric conditions such as autism, Anxiety, Depression, ADHD, Tourette's, Trichotillomania, Behavior Disorders, and Tic Disorder. Additionally, Medical Students will have the opportunity to observe brief therapy within a psychiatric inpatient hospital. This rotation is tailored to the specific interests and needs of participating students. This rotation is well suited for students who want to learn more about psychopharmacological and behavioral treatments, particularly CBT, and are interested in primary care, Pediatrics, Family Medicine, or a Psychiatry residency in the future.

## **Course Faculty and Staff**

- <u>Joseph McNamara PhD</u> (Director)
- Andrea Guastello MD (Co-Director)
- Jacqueline Hobbs MD, PhD (Co-Director)
- Britany Ratliff (Course Staff)
- Bobbi Reynolds (Unknown)
- Natalie Brown (Course Staff)

### **Meeting Place and Time**

Students must contact Dr. McNamara or Dr.Guastello prior to the start of their rotation to make arrangements.

4197 NW 86th Terrace Gainesville, FL 32606 (Spring Hill 2)

Email:

Joseph McNamara: jpm2@ufl.edu Andrea Guastello: aguastello@ufl.edu

#### **Course Materials**

DSM 5

### **Additional Information**

If you have any questions, please contact Britany Ratliff (britanyg94@ufl.edu) 352-265-2863.

## **Pulmonary Medicine**

MED E 5 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Pulmonary Medicine

## **Prerequisites**

4th year medical student

## **Course Description**

Promote an understanding of clinical pulmonary physiology through he interpretation of pulmonary function testing.

Learn the evaluation and management of chronic obstructive pulmonary disease, asthma, lung masses, interstitial lung disease and sleep disorders

Be exposed to an overview of pulmonary diseases, i.e., tuberculosis and occupational lung disease.

Students will rotate with the Pulmonary consult service. Students are expected to do consults on their own and present these consults to the rest of the team for discussion. Students are also expected to follow their patients and report appropriate updates on the case. In the afternoon students will have the option to follow the attending on service to their clinic to be expose to outpatient management of pulmonary diseases.

## **Course Faculty and Staff**

- Ali Ataya MD (Director)
- Chris Pintado MPH (Unknown)
- Liz Cowart (Unknown)
- Bailea Gnann (Course Staff)

## **Meeting Place and Time**

Contact Bailea Gnann prior to the start of the rotation 352-273-8738 or via email bailea.gnann@medicine.ufl.edu.

### **Course Materials**

helpful website: https://pulmccm.org/ Articles of interest. COPD

## 1. http://www.annals.org/content/143/5/317.full.pdf+html

A large multi-center RCT of VA patients with moderate to severe COPD (mean baseline FEV1 36%) found tiotropium reduced the proportion of patients with 1 or more exacerbations during 6 months of treatment vs. placebo (27.9 % vs. 32.3 %). These results support using tiotropium in COPD patients with moderate to severe obstruction and frequent exacerbations.

## 2. http://www.nejm.org/doi/pdf/10.1056/NEJMoa021322

This study found a combination of BMI, FEV1, modified MRC dyspnea scale, and 6-minute walk (i.e. the BODE index) was a better predictor of mortality than FEV1 alone. The BODE index may prove to be a better guide than FEV1 for assessing the efficacy of new treatments and adjusting the aggressiveness of therapy.

## 3. http://www.nejm.org/doi/pdf/10.1056/NEJM200012283432601

The TORCH study randomized over 6,000 patients with baseline FEV1 < 60% predicted to placebo vs. salmeterol alone vs. fluticasone alone vs. a combination of salmeterol and fluticasone over 3 years. Compared to placebo, patients receiving combination therapy had a 0.9% annual reduction in mortality (p = .052). Use of salmeterol, fluticasone, or a combination of the 2 reduced the frequency of exacerbations, but p was > .10 for all 3 for reducing risk of COPD-related death. All-cause mortality and COPD-related death were lower with combination therapy than fluticasone alone (p = .007 and .008, respectively).

## 4. http://www.nejm.org/doi/pdf/10.1056/NEJM199906243402502

Multicenter, double blind, placebo- controlled study found modest benefit to use of high-dose intravenous steroids. Steroid group had fewer treatment failures (combined endpoint of death, need for intubation, readmission, or intensification of pharmacologic therapy), and shorter hospital stays, but the primary benefit was in decreasing the need to intensify therapy with use of open-label steroids. No benefit from steroids was present at 6 months of f/u, and 2 week and 8 week courses were equally effective.

### **ASTHMA**

## 1. http://www.nejm.org/doi/pdf/10.1056/NEJMoa042552

RCT of 466 patients of 6 months duration found PRN use of a single inhaler combination of beclomethasone and albuterol resulted in better peak flows and fewer exacerbations compared to PRN use of albuterol alone, as well as comparable peak flows, exacerbation rate, lung function, and symptoms to regular twice daily use of beclomethasone. The PRN beclomethasone group on average used < 125 mcg/day compared to 500 mcg/day in the regular twice daily groups. 2. http://www.nejm.org/doi/pdf/10.1056/NEJMoa042552

A year-long RCT of 225 adults with mild persistent asthma compared prn inhaled corticosteroids based upon symptom-based action plan vs. daily treatment with ICS vs. daily leukotriene inhibitor and found no difference in morning peak expiratory flow and the rate of asthma exacerbations despite the prn corticosteroid group using an average of only 0.5 week of steroid per year. The ICS group had superior asthma control scores and lower markers of airway

inflammation. Some attribute this relatively modest benefit of regular ICS use to the lower exacerbation rate in this study compared to its predecessors, which speaks to the challenge of identifying mild persistent asthmatics.

3. http://ajrccm.atsjournals.org/cgi/reprint/171/2/129

This study included 2,760 asthmatics with a history of at least one exacerbation in the previous year and regular need for rescue bronchodilators despite baseline use of, on average, moderate doses of inhaled corticosteroid. Patients randomized to budesonide/formoterol (80/4.5) bid and prn had prolonged time to exacerbations requiring medical intervention compared to combination therapy with terbutaline prn or higher dose steroid (budesonide 320 bid) plus terbutaline prn. Subsequent RCTs have also shown favorable outcomes with this approach.

4. http://ajrccm.atsjournals.org/cgi/reprint/164/8/S1/S12

Review summarizes several large RCTs studying the role of anti-IgE antibody in allergic asthma. The use of anti-IgE is associated with decreased frequency of exacerbations, reductions in corticosteroid dose, and improved quality of life in symptomatic patients with moderate to severe allergic asthma

#### CAP

1. http://jama.ama-assn.org/cgi/reprint/302/10/1059

359 patients with lower respiratory tract infections in 6 Swiss academic hospitals were randomized to a treatment algorithm based on procalcitonin (PCT) levels or to treatment based on current evidence based guidelines. PCT-guided therapy reduced total antibiotic exposure without any change in adverse outcomes. Controversy exists regarding the unusually high prevalence of "severe" pneumonia by PSI score, and that reduction in exposure was primarily due to reduced duration of antibiotics rather than avoidance.

### Lung Nodule/Lung Ca

- 1. http://chestjournal.chestpubs.org/content/132/3\_suppl/178S.full.pdf+html ACCP evidence-based clinical practice guidelines (2nd Edition) reviewing the evidence for staging of non-small cell lung cancer with CT and PET scanning.
- 2. http://chestjournal.chestpubs.org/content/132/3\_suppl/178S.full.pdf+html ACCP evidence-based clinical practice guidelines (2nd Edition) reviewing the sensitivity and specificity of various tissue sampling techniques: TTNA, TBNA, EBUS, EUS, VATS, Chamberlain procedure, mediastinoscopy and extended cervical mediastinoscopy.
- 3. http://chestjournal.chestpubs.org/content/132/3\_suppl/108S.full.pdf+html Guideline for how best to work up the incidental nodule(s) that nicely distills the large number of trials on this topic.

### PERIOPERATIVE PULM ASSESSMENT

- 1. http://chestjournal.chestpubs.org/content/132/3\_suppl/161S.full.pdf+html Updated summary of the use of PFTs, split function tests, and cardiopulmonary exercise tests in the assessment of lung resection candidates.
- 2. http://jama.ama-assn.org/cgi/reprint/293/5/589

Multi-center, unblinded RCT with concealed allocation on 209 consecutive patients who developed severe hypoxemia after major elective abdominal surgery. Patients received oxygen vs. oxygen plus CPAP. Use of CPAP resulted in lower intubation rates, lower risk of pneumonia and sepsis, and shortened ICU stays.

PE

1. http://www.annals.org/content/135/2/98.full.pdf+html

Large prospective cohort study using the SimpliRED d-dimer assay (which has sensitivity lower than, and specificity higher than, some other d-dimer tests) found the combination of a low clinical suspicion for PE and a negative d-dimer safely ruled out pulmonary embolism without additional testing.

PFT's

1. http://erj.ersjournals.com/cgi/reprint/26/3/511

An excellent comprehensive review of reference equations, types of ventilatory defects, PFT and DLCO interpretation, severity classifications, bronchodilator response thresholds, central and upper airway processes, and interpretation of changes in pulmonary function.

#### **PULM HYPERTENSION**

1. http://ajrccm.atsjournals.org/cgi/reprint/179/7/615

This prospective study of 65 patients undergoing right-heart catheterization for the diagnosis or management of pulmonary hypertension. Echo over or underestimated pulmonary artery pressure by > 10 mm Hg 52% of the time. The majority of patients had pulmonary arterial hypertension (WHO Group 1).

2. http://circ.ahajournals.org/cgi/reprint/119/16/2250

his document is noteworthy for containing the latest consensus statement on the classification, evaluation, treatment, and monitoring of patients with pulmonary hypertension.

#### **Additional Information**

A list of articles of interest will be email to you for your review before the course starts.

# **Pulmonology - Pediatrics**

## **Prerequisites**

4th year medical student

## **Course Description**

This elective is based on inpatient and outpatient experience with children followed by our service for chronic and acute respiratory problems. The student will attend the pediatric pulmonary clinic, see patients on the inpatient service, and in consultation with other clinical services. Based on the student's preferences, the time spent on each of these can be adjusted. There will be a wide variety of patients, including infants and children with cystic fibrosis, asthma, congenital lung malformations, and chronic lung disease of infancy. Students will be introduced to pulmonary diagnostic tests such as pulmonary function testing, flexible bronchoscopy, sleep studies and radiologic evaluation of lung disease. The student will participate in the regular conferences of the Pulmonary Division, where he/she will interact with a multi-disciplinary team involved in the care of children with lung disease.

### **Course Faculty and Staff**

- Meghan Lopez (Course Staff)
- <u>Dima Ezmigna MD</u> (Director)

# **Meeting Place and Time**

**TBD** 

# Radiology - Angio/Interventional

RAD E 4 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology Angio/Interventional

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

- Sarah Bloom (Course Staff)
- <u>Darren Postoak MD</u> (Other Faculty)
- Brian Geller MD (Other Faculty)
- Mariam Hanna (Director)
- <u>Mike Lazarowicz MD</u> (Other Faculty)
- <u>Hugh Davis MD</u> (Other Faculty)
- <u>Jeffrey D. Vogel MD</u> (Other Faculty)

Department of Radiology, Room G-515: 8AM to 5PM; Mon-Fri

#### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

# Radiology - Body Imaging

RAD E 3 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - Body Imaging

## **Prerequisites**

None

### **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

- Sarah Bloom (Course Staff)
- Eric K. Thoburn MD (Other Faculty)
- Ray A. LaRue III MD (Other Faculty)
- Patricia L Abbitt MD (Other Faculty)
- Patricia Moser MD (Other Faculty)

- <u>Joe Grajo MD</u> (Other Faculty)
- <u>Julia K Marshall</u> (Other Faculty)
- Mariam Hanna (Director)
- Gladys M Torres (Other Faculty)
- Priya Sharma MD (Other Faculty)
- <u>Linda Armstrong MD</u> (Other Faculty)
- Nupur Verma MD (Other Faculty)
- Abdullah Malkawi MD (Other Faculty)

Department of Radiology, Room G-515; 8AM-5PM, Mon-Fri

### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

## Radiology - Chest

RAD E 9 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - Chest

## **Prerequisites**

None

### **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

- Sarah Bloom (Course Staff)
- Eric K. Thoburn MD (Other Faculty)
- Rob Dubuisson MD (Other Faculty)
- Mariam Hanna (Director)

- Ray A. LaRue III MD (Other Faculty)
- <u>Tan-Lucien Mohammed MD</u> (Other Faculty)
- Nupur Verma MD (Other Faculty)
- Andrew Blum MD (Other Faculty)

Department of Radiology, Room G-515, 8AM to 5PM; Mon-Fri

### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

#### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

## Radiology - Diagnostic Imaging

RAD E 1 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - Diagnostic Imaging

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

- Patricia L Abbitt MD (Other Faculty)
- Julia K Marshall (Other Faculty)
- Gladys M Torres (Other Faculty)
- Sarah Bloom (Course Staff)
- <u>David Wymer MD</u> (Other Faculty)
- Walter E Drane MD (Other Faculty)
- Charles H Bush (Other Faculty)
- <u>Troy Storey MD</u> (Other Faculty)

- <u>Darren Postoak MD</u> (Other Faculty)
- Brian Geller MD (Other Faculty)
- Patricia Moser MD (Other Faculty)
- <u>Cooper Dean MD</u> (Other Faculty)
- Reordan DeJesus MD (Other Faculty)
- Rob Dubuisson MD (Other Faculty)
- Ray A. LaRue III MD (Other Faculty)
- <u>Eric K. Thoburn MD</u> (Other Faculty)
- Keith R Peters MD (Other Faculty)
- Anthony Mancuso MD (Other Faculty)
- Mariam Hanna (Director)
- Ivan Davis MD (Other Faculty)
- <u>Joe Grajo MD</u> (Other Faculty)
- Mike Lazarowicz MD (Other Faculty)
- Priya Sharma MD (Other Faculty)
- Ibrahim Tuna MD (Other Faculty)
- Nupur Verma MD (Other Faculty)
- <u>Tan-Lucien Mohammed MD</u> (Other Faculty)
- Mehmet Albayram (Other Faculty)
- <u>Ilona Schmalfuss</u> (Other Faculty)
- Linda Armstrong MD (Other Faculty)
- Tara Massini MD (Other Faculty)
- John Rees MD (Other Faculty)
- Andrew Blum MD (Other Faculty)
- Hugh Davis MD (Other Faculty)
- Hugh Davis MD (Other Faculty)
- Abdullah Malkawi MD (Other Faculty)
- Harold Hunt MD (Other Faculty)
- <u>Jeffrey D. Vogel MD</u> (Other Faculty)

Department of Radiology, Room G-515, 8AM-5PM, Mon-Fri

### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

## Radiology - Musculoskeletal System

RAD E 6 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - MSK System

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

## **Course Faculty and Staff**

- Charles H Bush (Other Faculty)
- Sarah Bloom (Course Staff)
- Troy Storey MD (Other Faculty)
- <u>Cooper Dean MD</u> (Other Faculty)
- Mariam Hanna (Director)
- <u>Ivan Davis MD</u> (Other Faculty)
- Harold Hunt MD (Other Faculty)

## **Meeting Place and Time**

Department of Radiology, Room G-515, 8AM-5PM, Mon-Fri

#### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

The MSK reading room is located at the Orthopaedic Institute. Students on this rotation will be required to travel back and forth between the Ortho Institute and the main hospital.

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

## Radiology - Neurologic

MDT 7760 | Radiology - Neurologic

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

## **Course Faculty and Staff**

- Sarah Bloom (Course Staff)
- <u>Keith R Peters MD</u> (Other Faculty)
- Reordan DeJesus MD (Other Faculty)
- Anthony Mancuso MD (Other Faculty)
- <u>Tara Massini MD</u> (Other Faculty)
- Mariam Hanna (Director)
- Ibrahim Tuna MD (Other Faculty)
- Mehmet Albayram (Other Faculty)
- <u>Ilona Schmalfuss</u> (Other Faculty)
- John Rees MD (Other Faculty)

## **Meeting Place and Time**

Department of Radiology, Room G-515, 8AM-5PM, Mon-Fri

#### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

#### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

# Radiology - Nuclear Medicine

RAD E 7 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - Nuclear Medicine

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; To become familiar with issues of cost containment

## **Course Faculty and Staff**

- <u>Sarah Bloom</u> (Course Staff)
- Walter E Drane MD (Other Faculty)
- Mariam Hanna (Director)
- Dhanashree Rajderkar MD (Other Faculty)
- <u>Linda Armstrong MD</u> (Other Faculty)

## **Meeting Place and Time**

Department of Radiology, Room G-515, 8AM to 5PM; Mon-Fri

### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

# **Radiology - Pediatric**

RAD E 8 | 4th Year Elective | Radiology | Clinical Science

MDT 7760 | Radiology - Pediatric

## **Prerequisites**

None

## **Course Description**

Course Goals: To provide exposure to a wide range of activities/procedures; To become familiar with imaging/clinical activities; To learn to use radiologists as consultants; to become familiar with issues of cost containment

## **Course Faculty and Staff**

- Sarah Bloom (Course Staff)
- Rob Dubuisson MD (Other Faculty)
- Dhanashree Rajderkar MD (Other Faculty)
- Mariam Hanna (Director)
- Priya Sharma MD (Other Faculty)
- Ibrahim Tuna MD (Other Faculty)

## **Meeting Place and Time**

Department of Radiology, Room G-515, 8AM-5PM; Mon-Fri

#### **Course Materials**

Students will be provided with access to select teaching files, suggested reading material, and websites (to include learning modules)

### **Additional Information**

Visiting Students: Applicant understands acceptance for visiting externship is not a guarantor of a formal interview, which is rewarded by independent review of scholarly and service merit.

# Reproductive Endocrinology and Infertility

OBG E 2 | 4th Year Elective | Obstetrics and Gynecology | Clinical Science

MDT 7160 | Repro Endocrine & Infertility

### **Prerequisites**

Successful completion of 3rd year OB/GYN rotation.

\*\*\*NOTE\*\*\* - Rotation must be approved and coordinated at least 2 weeks in advance with Dr. Alice Rhoton-Vlasak.

## **Course Description**

Course is appropriate for students planning on a future career in obstetrics and gynecology as well as students intersted in women's health issues relevant to future careers in family practice, internal medicine, pediatrics and surgery.

- 1. Exposure to the evaluation, diagnosis and treatment of a wide range of clinical endocrine problems in the female.
- 2. Exposure to principles used in the evaluation and treatment of infertile couples.
- 3. Exposure to the application of current methods available for family planning and their management in clinical practice.
- 4. Exposure to basic principles of gamete handling and sperm micromanipulation in the Human Gamete Laboratory.
- 5. Exposure to the role of endocrine factors in the management of abnormal uterine bleeding, endometriosis, osteoporosis, and uterine fibroids.

## **Course Faculty and Staff**

- <u>Alice S Rhoton-Vlasak MD</u> (Director)
- Stan Williams MD (Other Faculty)
- Gregory Christman MD (Other Faculty)
- Heather Ellis (Unknown)
- Melissa Cherry (Course Staff)

## **Meeting Place and Time**

Schedule tailored to the student. Various meeting places (transportation needed); 1. Reproductive medicine at Springhill

2. Women's Health Group at the Medical Plaza 3. FloridaSurgery Center and Shands at UF

### **Course Materials**

1. Speroff; Glass and Kase. Clinical Gynecologic Endocrinology and Infertility. Latest Edition. (From library or teacher provided)

#### Additional Information

Final grade is determined as follows:

Written evaluations from faculty and residents based on the competencies described below = 70%.

Oral presentation on REI Topic of your choice = 30%

## **Rheumatology - Pediatrics**

PED E 26 | 4th Year Elective | Pediatrics | Clinical Science

MDT 7400 | Pediatric Rheumatology

## **Prerequisites**

### Fourth year medical student

## **Course Description**

The student will evaluate pediatric patients in clinic and admitted to the inpatient service with immundeficiencies and autoimmune/rheumatologic problems as well as those patients for whom consultations are requested by other services. He/She will discuss the patients with the inpatient attending, review pertinent literature and write consultation or service notes.

Additional outpatient experience includes attendance in clinics held each Monday [Rheumatology], Tuesday [Immunology/Rheumatology], Wednesday [Rheumatology], and Friday [Rheumatology]. He/She will be expected to see new and return patients independently, including obtaining history and physical examination, and then present their findings to the clinic attending.

Review of the literature regarding interesting patients is expected. He/She is expected to read about common topics in these areas during the rotation.

## **Course Faculty and Staff**

- Renee Frances Modica MD (Director)
- Meghan Lopez (Course Staff)

## **Meeting Place and Time**

TBA:

Please call the main office at:

352-294-5252 to contact the on-service attending for the specific schedule and meeting times.

Clinic Location:

4th floor of shand's hospital infusion room for pediatric subspecialties.

Inpatient rounds:

4

### **Course Materials**

Textbook of Pediatric Rheumatology by Cassidy and Petty.

"PRINTO" website for educational materials for patients and families.

Up To Date website: section on pediatric rheumatology and immunology.

### **Additional Information**

### Please call the main office at:

352-294-5252 to contact the on-service attending for the specific schedule and meeting times.

#### Clinic Location:

4th floor of shand's hospital infusion room for pediatric subspecialties.

### Inpatient rounds:

4200 (green team rounding room).

Also, rounds with consultants on other services.

## Rheumatology and Clinical Immunology

MED E 8 | 4th Year Elective | Internal Medicine | Clinical Science

MDT 7200 | Rheumatology & Clin Immunology

### **Prerequisites**

Completion of Internal Medicine Core Rotation

## **Course Description**

Outpatient rheumatology is a two week long rotation. Students will spend each morning and afternoon rotating through various clinics in rheumatology and see a wide variety of disorders including but not limited to diseases such as osteoarthritis, rheumatoid arthritis, lupus, psoriatic arthritis, Sjogren's syndrome, ankylosing spondylitis, and gout. Students will also attend educational conferences through the division of rheumatology. Students will observe and assist in joint injections and aspirations under the supervision and guidance of fellows and attendings in rheumatology. The rotation may be tailored to match any specific area of interest, including participation in consultations.

## **Course Faculty and Staff**

- N. Lawrence Edwards MD (Other Faculty)
- Paulette C Hahn MD (Other Faculty)
- Michael R Bubb MD (Other Faculty)
- John Massini MD (Other Faculty)
- Christine Dortch (Course Staff)
- Eric S Sobel MD (Other Faculty)
- <u>Liz Cowart</u> (Unknown)
- Roland Staud (Director)

### **Meeting Place and Time**

Follow the emailed schedule. Call the Rheumatology Academic Office if you do not receive an email 352-294-8203.

### **Course Materials**

## Required Reading:

-Fanouriakis. 2019 Update of the EULAR Recommendations for the Management Systemic Lupus Erythematosus. Ann Rheum Dis 2019;78:736-745.

http://dx.doi.org/10.1136/annrheumdis-2019-215089

- -Smolen. EULAR Recommendations for the Management of Rheumatoid Arthritis with Synthetic and Biological Disease-Modifying Antirheumatic Drugs: 2016 Update. Ann Rheum Dis 2017;76:960-977. http://dx.doi.org/10.1136/annrheumdis-2016-210715
- -Melville. Brutal Toll of Osteoporotic Fractures Revealed in New ROF Report. Medscape Sep 20, 2019. https://www.medscape.com/viewarticle/918760 print
- -Kumar. How to investigate new-onset polyarthritis. Best Practice & Research Clinical Rheumatology. 2015.

http://www.sciencedirect.com.lp.hscl.ufl.edu/science/article/pii/S1521694215000212

#### **Additional Information**

Non-UF students must apply through VSAS.

# **Student Health - UF Infirmary**

CM E 2 | 4th Year Elective | Community Health and Family Medicine | Clinical Science

MDT 7100 | Student Health UF Infirmary

## **Prerequisites**

Fourth Year Medical Student

### **Course Description**

COURSE GOALS: To introduce students to the interesting field of Student Health Medicine, combining aspects of Family Medicine, Adolescent Medicine, Sports Medicine, Urgent Care, and Preventive Medicine.

## **Course Faculty and Staff**

• Ronald L Berry MD (Director)

## **Meeting Place and Time**

Student Health Care Center, Infirmary Building, Main Campus. Work Schedule Monday through Friday, 8:00am to 5:00pm.

### **Course Materials**

Selected readings in Student Health.

### **Additional Information**

Student may contact Dr. Berry for more information at 352-294-7475 or rberry@ufl.edu

# **Surgical Intensive Care Unit Elective**

ANS E 3 | 4th Year Elective | Anesthesiology | Clinical Science

MDT 7700 | Surgical Intensive Care Unit

## **Course Description**

Opportunities exist in several different ICU venues including Cardiac, Neurological, Trauma, and General Surgical. During this rotation the student will participate as an active member of the Critical Care team. This includes management of patients and presentation on daily rounds. The core educational concepts will focus on cardiovascular and respiratory pathophysiology, management of undifferentiated shock, recognition and treatment of sepsis, point of care ultrasound, fluid and electrolyte balance, pharmacology, acid-base, and nutrition. During the rotation, ample opportunity is provided for multiple procedures.

Medical Students may be required to take call (including nights and weekends).

## **Course Faculty and Staff**

- <u>Christopher Giordano MD</u> (Co-Director)
- Ricky McHugh (Unknown)
- Morgan Anderson (Course Staff)

## **Meeting Place and Time**

TBA depending on ICU location

#### **Course Materials**

Critical Care Ultrasonography Learning Modules which can be found at: http://anest.ufl.edu/clinical-divisions/critical-care-medicine/critical-care-ultrasonography/didactics/

Recommended textbook: Civetta, Taylor, and Kirby's Critical Care, 4th edition (available in the library and upon request from Dr. Kiley).

Students are encouraged to review modules that are offered during the Anesthesiology / Critical Care Clerkship

### **Telemedicine Elective**

PSY E 19 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Telemedicine Elective

## **Prerequisites**

Students must contact the course director prior to starting the course.

## **Course Description**

COURSE GOALS: This course will provide:

- 1. An opportunity to witness the practice of telemedicine (psychiatry)
- 2. Review and discuss the differences between telehealth and telemedicine
- 3. Learn about the prerequisites for the practice of telemedicine with respect to technology, regulatory and licensure.
- 4. Learn the differences between evaluating and treating patient's in-person vs remotely.
- 5. Appreciate the importance of team communication and collaboration with other agencies to provide the best treatment.
- 6. Review the technological standards (hardware and software) needed for successful patient care.

## **Course Faculty and Staff**

- Kishan Nallapula MD (Director)
- Britany Ratliff (Course Staff)
- <u>Bobbi Reynolds</u> (Unknown)
- Jacqueline Hobbs MD, PhD (Co-Director)
- Natalie Brown (Course Staff)
- Kitty Leung MD (Other Faculty)
- Sorna Michael MD (Other Faculty)
- Peter Clagniz MD (Other Faculty)

## **Meeting Place and Time**

UF Child and Adolescent Psychiatry clinic. MOB II on 39th ave.

### **Course Materials**

https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/telepsychiatry-toolkit-home

## Thoracic and Cardiovascular Surgery

SUR E 8 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Thoracic/Cardiovasc Surgery

## **Prerequisites**

4th year medical student - completion of 3rd year rotation on General Surgery

## **Course Description**

COURSE GOALS: At the completion of this rotation the student will be able to:

- 1. Perform detailed admission histories and physical examinations specific to patients who have pulmonary and cardiac disease that require surgical therapy.
- 2. Identify the indications and potential complications for thoracic and cardiac surgical procedures.
- 3. Identify the appropriate tests and medications required for assigned patients throughout their course of therapy.
- 4. Second or first assist in general thoracic and open heart surgical procedures.
- 5. Correlate the findings from the physical, hemodynamic, laboratory, and other diagnostic tests performed before and after cardiac surgery.
- 6. Evaluate and predict patient outcomes in response to surgical interventions and pharmacologic manipulations performed in the postoperative period.

Student activities include: Daily patient rounds and conferences, assisting in surgery, diagnostic work-ups, and direct patient care.

## **Course Faculty and Staff**

- Thomas Beaver MD (Other Faculty)
- <u>Tiago Machuca MD</u> (Other Faculty)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Please contact the Surgical Education Office at 594-5116 one week before your start date for reporting instructions.

### **Course Materials**

Current textbooks in thoracic, adult cardiac, and congenital heart surgery. Selected reprints from specialty journals.

### **Additional Information**

Student Course Coordinator: Mandi Lamonda - carolyn.lamonda@surgery.ufl.edu

## **Transcranial Magnetic Stimulation**

PSY E 22 | 4th Year Elective | Psychiatry | Clinical Science

MDT 7840 | Transcranial Magnetic Stim

## **Prerequisites**

Completion of third-year clerkship. Students should contact Britany Ratliff britanyg94@ufl.edu prior to starting the course.

### **Course Description**

This 4th year rotation introduces the student to Transcranial Magnetic Stimulation. Students learn basic concepts behind electromagnetic induction and TMS device design. The student will actively participate in chart reviews and screening evaluations. Will evaluation for meds versus neuromodulation for patients in the various stages of treatment resistant depression. With work with various TMS attendings and learn to determine patient motor threshold, work with TMS staff to become efficient in proper TMS techniques, and participate in daily TMS sessions with patients and TMS staff. Will familiar in the operation of both Neurostar and Brainsway TMS devices. And actively track their patients' responses. Assigned readings will explore further off label uses for TMS, and current TMS research at UF. Select students who have demonstrated excellence during their rotation will, at the discretion of the faculty, be offered the opportunity to sit for the Brainsway TMS Certification exam (typically once per year).

## **Course Faculty and Staff**

- Brent Carr MD (Director)
- Britany Ratliff (Course Staff)
- Richard Holbert MD (Co-Director)
- Jacqueline Hobbs MD, PhD (Co-Director)
- Bobbi Reynolds (Unknown)
- Natalie Brown (Course Staff)

## **Meeting Place and Time**

ECT Suites: Springill MOB

### **Additional Information**

For more information please contact Britany Ratliff britanyg94@ufl.edu or (352) 265-2863.

## **Transplantation Surgery**

SUR E 3 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Transplantation Surgery

## **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

### **Course Description**

COURSE GOALS: Introduction to scientific principles and clinical measures of dealing with general surgical problems with special focus on surgical diseases of the liver and bile ducts. The service focuses mainly on surgery of the liver and neoplasms of the pancreas and on liver, kidney and pancreas transplantation. It is our intent that the students occupy a position of responsibility commensurate with their ability. They will participate in patient evaluations in the clinics, patient care on the surgical wards, in the operating room, and post-operative care on the wards and in the clinic. They will also be expected to come to conferences during the week.

## **Course Faculty and Staff**

- <u>Kenneth Andreoni MD</u> (Other Faculty)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Contact the Surgery Education Office at 265-0916 one week before the start of the rotation for reporting instructions.

#### **Course Materials**

Textbooks and selective journal publications.

### **Additional Information**

There is also an opportunity to participate in clinical research that is ongoing in the division. Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

# Trauma; Surgical Critical Care; and Emergency Surgery

SUR E 14 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Trauma/Surg Crit Care/EM Surg

## **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

## **Course Description**

Four week course in which student will rotate on the Trauma/Emergency Surgery Service and act as a sub-intern. Students will participate in daily rounds with residents and attending, bedside surgical procedures in the SICU, operative cases in the OR, and the initial management and resuscitation of the severely injured trauma patient.

## **Course Faculty and Staff**

- <u>Chasen Croft MD</u> (Director)
- Ashley Counts (Beavers) (Course Staff)
- Adela Van Antwerp (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

5:30 AM in Shands (S), 5W.

### **Course Materials**

As assigned by attending physicians.

## **Additional Information**

Excellent experience for student interested in general surgery, orthopaedic surgery, critical care, or anesthesia as a career.

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

## **Urology Surgery - Elective**

SUR E 10 | 4th Year Elective | Urology | Clinical Science

MDT 7600 | Urology Surgery Elective

## **Prerequisites**

Senior medical student status.

## **Course Description**

This course will provide the senior student with a basic understanding of clinical urology as a surgical subspecialty. Student will: 1) participate as a member of the urological team providing inpatient, outpatient and surgical care to patients referred to the urological service; 2) participate in urological teaching conferences; 3) interact with urological residents and faculty on a daily basis. Psychomotor Domain: 1) Demonstrate proficiency in common intern-level duties including Genitourinary Exam (including male and female exam), DRE, Catheter insertion, basic urological endoscopic techniques and basic suturing skills; 2) Recognize the role of existing and emerging technology and research in the field and practice of urology; 3) Reliably use the Internet and electronic tools as a medical resource. Affective Domain: 1) Expand his/her exposure to and appreciation for a career in urology; 2) Become more keenly aware of the opportunities available to residents in urology; 3) Appreciate the influence of translational research as it applies to urology. LEARNING ACTIVITIES: The students who choose this rotation as an elective will participate as a member of a very busy and academic urological service at the University of Florida. He or she will become aware of the daily responsibilities of a urology resident, including education of 3rd year medical students and perioperative care of the surgical patient. Students will be expected to attend all urology related conferences including Didactic resident lectures, GU Tumor Board, Morbidity and Mortality Conference, Urological Imaging Conference, Basic Science Conference and Mortality Conference, Pathology Conference and Journal Club. Furthermore, the student will be assisting in the Operating Rooms and seeing patients in clinic. Although the curriculum is flexible, it is expected that the student will prepare for cases and conferences as any other member of the team and will be held accountable for these. During the 4-week rotation, the student will present a 20-minute slide presentation on some aspect of Urology in the didactic format to the residents. He or she should choose a faculty mentor who will assist in the assimilation and delivery of this lecture. This lecture should be evidence-based and articles from accredited journals should be referenced.

## **Course Faculty and Staff**

- Louis Moy MD (Director)
- <u>Stephanie Stenner</u> (Course Staff)

## **Meeting Place and Time**

The first day, you will meet Stephanie Stenner on the 2nd Floor of the Health Science Center, Department of Urology, Rm N-203. During the elective rotation, you will meet residents for morning rounds (Chiefs will direct you).

#### Course Materials

No specific text is required. Recommended texts include; 1) Campbell's Urology (4 volumes) - Available for reference in the Div. Library; 2) Hinman's Atlas of Urologic Surgery (useful in preparing for individual surgical cases) - Available in the Div. library; 3) Smith's General Urology (a urologic overview readable in the four week rotation); 4) AUA Update Series (an up to date; concise comprehensive review of selected urologic topics) - Available in the Div. library 5)Students are asked to complete or show evidence of prior completion of the online national medical student curriculum in urology available at www.auanet.org (under the Education tab click Educational Programs then Medical Student Information then CORE Content)

### **Additional Information**

Stephanie Stenner is the Residency Coordinator for the Department of Urology and can be reached at (352) 273-8634, Fax: (352) 273-8604, or email Stephanie.Stenner@urology.ufl.edu.

Start/End dates for all rotations are flexible. Please contact Stephanie Stenner, if you need alternate start/end dates and we will do our best to accommodate.

## **Vascular Surgery**

SUR E 21 | 4th Year Elective | Surgery | Clinical Science

MDT 7600 | Vascular Surgery

## **Prerequisites**

Successful completion of third year Medicine Clerkship - Active enrollment as a 4th year UF medical student.

### **Course Description**

COURSE GOALS: At the completion of this rotation the student will be able to: 1. Perform detailed admission histories and physical examinations specific to patients with vascular disease who require surgical and/or medical therapy. 2. Identify the indications and potential complications for vascular surgical procedures. 3. Identify the appropriate tests and medications required for assigned patients throughout their course of therapy. 4. Second or first assist in general vascular surgical procedures. 5. Correlate the findings from the physical, hemodynamic, laboratory, and other diagnostic tests performed before and after vascular surgery. 6. Evaluate and predict patient outcomes in response to surgical interventions and pharmacologic

manipulations performed in the postoperative period. Student activities include: Daily patient rounds and conferences, assisting in surgery, diagnostic work-ups, and direct patient care.

## **Course Faculty and Staff**

- Adela Van Antwerp (Course Staff)
- Ashley Counts (Beavers) (Course Staff)
- Christiana Shaw MD (Director)
- Mandi Lamonda (Course Staff)

## **Meeting Place and Time**

Please contact the Surgical Education Office at 265-0916 one week prior to your rotation for reporting instructions.

Student Course Coordinator: Mandi Lamonda (carolyn.lamonda@surgery.ufl.edu)

#### **Course Materials**

Material will be provided from the following:

Rutherford's Vascular Surgery. 7th Edition. Eds. Cronenwett and Johnston. Saunders - Elsevier, Inc. Publishers. Copyright 2010.

Mastery of Vascular Surgery and Endovascular Therapy. Eds. Zelenock, Huber, Messina, Lumsden, and Moneta. Lippincott Williams and Wilkins Publishers. Copyright 2006. Selected readings from Journal of Vascular Surgery and other vascular specialty journals.

#### **Additional Information**

The Shands Vascular surgery service is a busy, tertiary care service with a heavy operative load. The 4th year student rotating on the service will function as a junior resident, including operating with the faculty and fellows as well as supervising the 3rd year medical students and assisting the interns.