



UNIVERSITY OF CENTRAL FLORIDA  
College *of* Medicine

**FOURTH YEAR (M4)**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

*2020-2021 Academic Year*

<b>Rotation/Block</b>	<b>Rotation Month</b>	<b>Rotation Dates</b>
<b>1</b>	June	June 1, 2020- June 26, 2020
<b>2</b>	July	June 29, 2020 – July 24, 2020
<b>3</b>	August	July 27, 2020 – August 21, 2020
<b>4</b>	September	August 24, 2020 – September 18, 2020
<b>5</b>	October	September 21, 2020 – October 16, 2020
<b>6</b>	November	October 19, 2020 – November 13, 2020
<b>7</b>	December	November 16, 2020 – December 11, 2020
<b>Holiday Break</b> December 12, 2020 – January 3, 2021		
<b>8</b>	January	January 4, 2021 – January 29, 2021
<b>9</b>	February	February 1, 2021 – February 26, 2021
<b>10</b>	March	March 1, 2021 – March 26, 2021
<b>11</b>	April	March 29, 2021 – April 23, 2021
<b>Capstone</b> <b>(requirement for M4)</b> April 26- April 30, 2021		

M4 includes one (1) required 4 week Acting Internship, one (1) required 4 week Emergency Medicine/Critical care rotation, six (6) required 4 week electives, and three (3) four week rotations to be used for additional electives, research, independent study, residency interviews, make-up or vacation.

*Graduation May 21, 2021*

**Note: Dates subject to change. Students will be notified.**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Fourth Year Requirements - 2019-2020**

The fourth year is divided into eleven, four week blocks. All students are required to complete and pass the following eight blocks:

- One Acting Internship in any core area - Family Medicine, Internal Medicine, Emergency Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, Psychiatry, Critical Care, or Surgery (can be taken at an affiliated hospital or an away hospital)
- One 4 week Emergency Medicine or Critical Care rotation (can be taken at home or away)
- Electives (all six electives must be completed; up to four electives may be taken at approved extramural institutions; up to four electives may be used to do independent study; up to two electives may be used to do a research study; and **no more than four electives may be taken in the same core area**)
- Students may take a maximum of 12 weeks of non-clinical care rotations. Courses that are considered to be non-clinical are: **MDE 8040 Medical Spanish, MDE 8900 Aquifer, MDE 8048 Narrative Medicine, MDE 8097 Wiki Project, MDE 8105 Culinary Medicine, MDE 8147 Geriatric (academic), MDE 8227 Advanced ECG, MDE 8520 Advanced Clinical Anatomy, MDE 8093 Clinical Anatomy Teaching, MDE 8533 Forensic Pathology, MDE 8534 Surgical Pathology, MDE 8535 Autopsy Pathology, MDE 8530 Pathology and Laboratory Medicine, MDE 8900 Medical Ethics and any Research that does not include clinical duties or patient interaction.**
- Students must complete at least 4 weeks of clinical rotations in blocks 8-11

The three remaining blocks of the fourth year may be used for other electives, independent study, further research, residency interviews, or remediation (if needed). Students finish the fourth year with a Capstone Experience that provides specialty-specific preparation for internship, leadership training and teaching experience.

- **ONE ACTING INTERNSHIP**
- *NOTE: STUDENTS CANNOT REPEAT THE SAME ACTING INTERNSHIP AT ANOTHER LOCATION. ACTING INTERNSHIPS CAN BE TAKEN IN BOTH AN INPATIENT AND OUTPATIENT SETTING.*

<b>Internal Medicine</b>	MDI 8300 9 (PO) MDI 8340 3 (VA) MDI 8340 E (Naples) MDI 8340 5 (HCA)	<b>Neurology</b>	MDI 8470 7 (NCH) MDI 8802 9 (PO)
<b>Surgery</b>	MDI 8570 1 (NCH) MDI 8490 7 (NCH) MDI 8571 3 (VA) MDI 8661 9 (PO)	<b>Pediatrics</b>	MDI 8400 7 (NCH)
<b>Emergency Medicine</b>	MDI 8710 5 (HCA)	<b>Psychiatry</b>	MDI 8835 3 (VA) DOM MDI 8840 3 (VA) MDI 8841 (VA) MDI 8843 (VA)
		<b>Critical Care</b>	MDI 8344 3 (VA) MDI 8344 5 (HCA) MDI 8461 7 (NCH) MDI 8463 7 (NCH)



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Things Every Medical Student Should Know About Electives

- Students should use the elective program to increase their knowledge in fields which they have particular interest, to correct deficiencies in fields of importance to their overall medical education, and to explore areas of medicine outside the area of special interest to the student. **ELECTIVE TIME IS NOT FREE TIME.** It is to be used productively in amplification of the undergraduate medical education.
- Electives are taken for credit and students must perform satisfactorily in their required and elective work in order to be promoted and recommended to graduate. A program of electives should be selected by consultation with a faculty advisor and must be approved by the Associate Dean for Students.
- Students should discuss their proposed coursework with the faculty member who will supervise and evaluate their performance.
- Students may not be paid for work performed as part of their elective or required coursework for credit. Students may not be supervised by a parent or relative.
- Please note that all sites listed in this course catalog are considered home hospitals even though some require you to apply through VSLO. The only exceptions are MDX 8011 and MDR 8900, which are the course numbers used in scheduling away rotations and away research.

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**Important:** Most 4<sup>th</sup> Year Clerkships, Acting Internships, and Electives are available in all blocks. Exceptions are noted with individual course listing. Enrollment limitations are noted in course information.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Attendance Policy

##### Excused Absences

Students are expected to attend all scheduled hours of clinical responsibilities and didactic instruction. Mandatory clerkship participation requirements and remediation due to absence are determined by the Clerkship Director. The student will be held responsible for any material covered during the excused absence, but will be permitted a reasonable amount of time to complete any missed work. Recognizing that situations may arise which require students to miss time from their clerkship responsibilities, the procedures presented below will be followed when absence is necessary:

- Students on both required and elective rotations in the fourth year will be allowed to miss no more than one day for a 2 week rotation and 2 days for a 4 week rotation as excused absences for the following:
  - a. Personal illness
  - b. Family emergency
  - c. Presentation at professional meetings
  - d. Residency interviews
- Absences due to illness or family emergencies should be reported to the clerkship director or site director, clerkship coordinator and supervising physician/chief resident on service on the first day of any absence.
- Approval for anticipated leave, including residency interviews and student presentations at professional meetings:
  - Requests must be submitted in writing prior to the start of the affected rotation, and at least six weeks in advance of the scheduled event. Requests must be approved by the Clerkship or Elective Director.
  - Once approved, the student must inform their supervising physician/chief resident and their team of the anticipated absence.
  - Approved student absence form will be completed and forwarded to the Office of Student Affairs by the clerkship coordinator.
- Excused absences exceeding the max will require make-up, the nature of which will be determined by the Clerkship or Elective Director. Examples include the taking of additional call or weekend shift. Make-up time will be scheduled **at the convenience of the site.**
- Excused absences do not include:
  - Vacations, personal days or social events, including weddings, graduations or birthdays
  - Routine doctor/dental appointments
  - Taking Step 2 exam
  - Missing Orientation or Capstone or LCT Session



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Unexcused Absences

- In the event of an absence from the clerkship without permission from the clerkship director, the student will lose 5 points per unexcused absence from their final clerkship grade.
- Additional remediation may be required at the clerkship director's discretion (e.g., the taking of extra call).

**Important:** Blocks 6, 7, and 8 (Nov-Jan) is a busy time for Residency interviews and may result in you exceeding the number of excused absences allowed in a block. You should take this into consideration when planning your 4<sup>th</sup> year schedule and consider taking these blocks off or scheduling a rotation that can work around the amount of time needed to attend interviews.

The attendance policy can be found on M4 GPS here: <https://med.ucf.edu/media/2020/03/Attendance-Policy.pdf>



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Scheduling Away Electives and Independent Studies

### Away Electives

- All students are encouraged to participate in at least one away rotation.
- Students may not participate in more than **four** away electives.
- All petitions for away rotations must include a description of the course, including schedule, duties, learning outcomes, etc.
- It is the student's responsibility to provide their supervising faculty with an evaluation for each away rotation and to have the supervising faculty complete it and turn in to the Registrar's Office in a timely manner. Students will not receive a grade for an away rotation in which no evaluation is completed.

### VSLO Institution

Visiting Student Learning Opportunities® is an AAMC application designed to streamline the application process for senior "away" electives at U.S. LCME medical schools and independent academic medical centers that are members of the Council of Teaching Hospitals and Health Systems (COTH). The service requires only one application for all participating institutions, effectively reducing paperwork, miscommunication, and time. VSLO also provides a centralized location for managing offers and tracking decisions.

### How to Apply to VSLO

Once you have determined that you will be using VSLO, the following steps outline the application process. Note that hosts typically begin accepting applications in March for the upcoming academic year.

#### Step 1. Receive Email Invitation

You will receive a "VSLO: New User Instructions" e-mail containing the information you need to sign in to VSLO.

#### Step 2. Complete Application Profile

Provide contact information and the dates on which you have *or will* have finished your core clerkships.

#### Step 3. Review Host Institution Information

Review the VSLO *Institutions* tab for host-specific requirements and dates on which applications will be accepted.

#### Step 4. Upload and Assign Documents

Upload and assign required documents to a specific host institution or elective request.

- Photo, CV, and immunization records are often required
- Additional documentation is required by some hosts
- Transcripts may only be uploaded by the COM



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### **Step 5. Search for Electives**

Browse electives by keyword, specialty, institution name, state, and/or elective start month. Save electives to apply for later.

#### **Step 6. Apply to Electives**

Select saved electives (with preferred dates) for which you are applying and -

- arrange elective requests in order of preference
- review, edit, and upload required documentation
- pay VSLO fees and submit your application
- The COM will then add additional data about you before 'releasing' your applications to host institutions.

#### **Step 7. Track Offers**

Review application statuses and host decisions through the *VSLO Tracking* tab.

- Accept or decline offers before offers expire
- Withdraw pending applications, or drop accepted offers, if necessary

#### **VSLO Tip. Read E-Mails**

Make sure the e-mail address on your *Application* tab is current, as you will receive e-mails notifying you of:

- offers for electives and offers soon to expire
- electives applied for but which are not available
- scheduling conflicts between scheduled electives

Once approved by the host institution, students will need to complete the Petition for Special Clinical Study Credit for Extramural Clerkship form and have approved in order to receive credit for the elective.

#### **Non-VSLO Institution**

Students may also apply for away electives at non-VSLO institutions. It is entirely the student's responsibility to locate and apply for these electives. Once approved by the host institution, students will need to complete the Petition for Special Clinical Study Credit for Extramural Clerkship form and have approved in order to receive credit for the elective.





# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Independent/Research Studies

- The opportunities for use of elective time in the fourth year include research in clinical or basic science areas of UCF College of Medicine or other institutions. The flexibility of fourth year curriculum gives students maximum opportunity for individual development.
  1. A student may do no more than **8 weeks** of research.
  2. A student may do no more than **16 weeks** of independent study.
  3. Students may be registered for the same independent or research study for no more than two rotations, but the objectives for each rotation must be different.
  
- Independent/Research Studies must be supervised by a UCF faculty member. Students should work with the Faculty Supervisor to determine the topic of study and the deliverable.
  
- Students must complete a Petition for Independent/Research Study prior to the start of the rotation. The petition must include a description of the study or research being conducted, and must be signed by the faculty supervisor, the Assistant Dean for Medical Education, and the Associate or Assistant Dean for Students. Failure to turn in the Petition for Independent/Research Study by the deadline may result in No Credit.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Making Changes to Your Schedule

- Enrollment in a required course or elective is considered a commitment. Changes must be requested **at least 6 weeks** in advance prior to the beginning of the elective. After 6 weeks, all requests to add/drop/withdraw from an elective will require the approval of the Associate Dean for Students.
- Fourth year students' course changes must be made far enough in advance to:
  1. Notify Instructor of Record;
  2. Obtain confirmation of availability from the site;
  3. Allow call schedules to be modified; and
  4. Complete any training and/or screenings required by the site

**\*\*Changes must be made at least 6 weeks in advance prior to the beginning of the elective. No change may be made within 6 weeks of the beginning of the elective or after the elective has begun, except under extenuating circumstances and only with the approval of the Associate Dean for Students.**

**\*\*Under NO circumstances will changes be approved for requests made less than 60 days before the start of a rotation for any courses offered at the Veteran's Hospital.**

- All requests for schedule changes should be emailed to Christie Hasegawa in the M.D. Registrar's Office at [christie.hasegawa@ucf.edu](mailto:christie.hasegawa@ucf.edu). Students should never make schedule requests directly with the preceptor.
- When availability of a course is confirmed by Christie Hasegawa and a request for a change has been approved, students must complete a Clerkship/Elective Change Request form and have it signed by their Academy Leader. The completed form must be turned in to the M.D. Registrar's Office prior to the start of the rotation.
- No updates or changes to a student's registration will be made in OASIS until a completed Clerkship/Elective Change Request form has been received by the Registrar's Office. Failure to turn in a Clerkship/Elective Change Request form on time may result in No Credit. Students may not report to a site until their registration has been updated, as you must be registered in order for liability coverage to be in effect.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Course Key

#### Acting Internships, Clerkships, and Elective Training Locations

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- **(UCF COM)** University of Central Florida College of Medicine - A
  
- **(AH)** Advent Health – 1
  - *Advent Health Orlando - 1*
  - *Advent Health East Orlando - 2*
  - *Advent Health Altamonte - 3*
  - *Advent Health Celebration Health - 4*
  - *Winter Park Memorial Hospital - 5*
  - *Advent Health Flagler - 6*
  - *Advent Health Kissimmee - 7*
  
- **(OH)** Orlando Health – 2
  - *Orlando Regional Medical Center - 1*
  - *Arnold Palmer Hospital for Children - 2*
  - *Winnie Palmer Hospital for Women & Babies - 3*
  - *UF Health Cancer Center – 4*
  - *Health Central Hospital- 5*
  - *South Seminole Hospital- 6*
  
- **(VA)** Veterans Hospital and various VA sites in Florida -3
  - *VAMC-Orlando VA Medical Center – 1*
  - *VA Health Care System- Bay Pines VA Health Care System – 2*
  - *VA Lake Nona - 3*
  
- **(TH)** True Health -4
  
- **(HCA)** Hospital Corporation of America – 5
  - *Osceola Regional Medical Center- 1*
  - *Ocala Regional Medical Center- 2*
  - *North Florida Regional Medical Center- 3*
  - *Central Florida Regional Hospital- 4*
  
- **(PV)** Pasadena Villa -6



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Course Key**

**Acting Internships, Clerkships, and Elective Training Locations**

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- **(NCH)** Nemours Children’s Hospital -7
  - *Nemours Children’s Clinic – Orlando – 1*
  - *Nemours Children’s Hospital – Orlando -2*
- **(PO)** Private physician’s office, clinic or externship location -9
- **(SCG)** State/County/Municipal Government Agencies – B
- **(HoF)** Heart of Florida – C
- **(FLG)** Flagler Hospital – D
- **(NCH)** NCH Healthcare System – E
  - *NCH Baker Hospital Downtown-1*

THE FIRST TWO DIGITS IN THE COURSE SECTIONS DENOTE SPECIFIC SITE LOCATION:  
(EXAMPLE, MDE 8336 **11**XX ADVENT HEALTH ORLANDO **OR** MDE 8336 **24**XX UF  
HEALTH CANCER CENTER)

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**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Course Key**

**Structure of Special Studies Clinical/Research @ UCF COM**

**Special Studies/Research/Independent Study**

**MDE 8900/MDR 8900**

- The Independent Study/Research elective permits 4<sup>th</sup> year medical students to pursue, under the sponsorship of UCF College of Medicine faculty members, areas of study/research that are not included among regular elective offerings. Arrangements for these electives are made between the student and the faculty member; they will require administrative approval prior to registration.

**Structure of Visiting Elective/Externship Outside of UCF COM**

**Extramural Clerkship**

**MDX 8011**

- This elective offers students the opportunity to gain extramural experience in approved programs to gain further training and experience in “off-campus” settings—hospital, medical schools or other practice areas.

**Structure of Special Studies Clinical/Research for Away Clerkship**

**Special Studies/Research/Independent Study**

**MDX 8900**

- The Independent Study/Research elective permits 4<sup>th</sup> year medical students to pursue areas of study/research outside of UCF. Arrangements for these electives are made between the student and the away location supervising faculty member. Students must obtain administrative approval prior to registration.

**Structure of Special Clinical Study Credit for International Clerkship**

**Special Studies/Research/Independent Study**

**MDE 8072**

- Students interested in completing an elective outside of the United States should contact the Office of Student Affairs. Additional information may be available from the Director of International Health Programs.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

# **ACTING INTERNSHIPS**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Emergency Medicine**

**Clerkship Director: Dr. Jose Rubero**

**MDI 8710 5**

**Must be scheduled through Clinician Nexus**

**Full-time (4 weeks)**

**(HCA)**

**Grading Basis: P/F**

**First Day: Osceola Graduate Medical Education, 720 West Oak St, Suite 201,  
Kissimmee, FL at 8:30am (Generally the first Tuesday of the block, subject to change)**

**Primary Faculty Supervisor: Dr. Jose Rubero,**

**[josearubero@aol.com](mailto:josearubero@aol.com)**

**Contact person: Berliza Cruz, GME Coordinator, (407) 518-3347,**

**[Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)**

**Maximum Enrollment: 5 per block**

This four week acting internship introduces the student to initial evaluation, workup, diagnostic ordering and treatment of patients presented to the emergency department

**Objectives:**

1. Students are expected to develop basic diagnostic skills in emergency medicine. These basic skills include performing a detailed history and physical exam, the collection of appropriate cost-effective laboratory data and radiographs, the performance of appropriate procedures, and the formulation of relevant differential diagnosis and treatment plans.
2. Students will develop basic skills and understanding of wound repair, abscess drainage, and ultrasound usage as well as developing skills in central line insertion, lumbar puncture, joint aspiration, slit lamp exam, dental blocks, and airway interventions through either direct supervision by residents, fellow, or attendings or by assisting residents, fellows, and attendings in these procedures.
3. During the 4 week rotation, the students will achieve competence in six areas listed below (based on ACGME core competencies:
  - ✓ Patient care
  - ✓ Medical Knowledge
  - ✓ Practice-based Learning and Improvement
  - ✓ Interpersonal and communication skills
  - ✓ Professionalism
  - ✓ System-based practice



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Medical Critical Care**

**MDI 8344 5**

**Must be scheduled through Clinician Nexus**

Full-time (4 weeks)

(HCA)

Grading Basis: P/F

First Day: Report to 720 W. Oak St, Kissimmee, FL GME office at 8:00 am

Primary Faculty Supervisor: Dr. Rami Hanna, [docramius@yahoo.com](mailto:docramius@yahoo.com)

Contact person: Berliza Cruz, GME Coordinator, (407) 518-3347, [Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)

Maximum Enrollment: 1 per block

**MDI 8344 3**

Full-time (4 weeks)

(VA Lake Nona)

Grading Basis: P/F

First Day: Report to VA ICU 3 west at 7:00 am

Primary Faculty Supervisor: Dr. Feroza Daroowalla,

[Feroza.daroowalla@ucf.edu](mailto:Feroza.daroowalla@ucf.edu)

Contact person: Feroza Daroowalla, [Feroza.daroowalla@ucf.edu](mailto:Feroza.daroowalla@ucf.edu)

Maximum Enrollment: 1 per block (Not available in block 7)

The critical care clerkship immerses the student in the care of ICU patients by focusing technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness. The University of Central Florida College of Medicine M4 Critical Care Clerkship is designed to make the transition from basic clinical sciences to acute care of patients with life-threatening conditions and who need advanced life support technology and personnel. The clerkship is based in the hospital intensive care unit and the educational experience will come from a multidisciplinary team of hospital-based intensivists, critical care fellows and residents, consulting physician specialists, critical care nurses, pharmacists, respiratory therapists, dieticians, physical therapists, rehabilitation specialists, social workers, other health care professionals, and most importantly, the patients and their families who are cared for by this team. The practice of critical care medicine is based upon sound physiological principles, evidence-based practices, and application of cutting-edge technology, meticulous attention to details, and a compassionate, humanistic approach to severely ill or injured patients and support of their families at their time of crisis.

**Objectives:**

The educational philosophy of the critical care clerkship is to provide the matrix upon which to develop a scientifically sound approach to the management of critically ill patients. Additionally, the program is designed to allow individuals to become familiar with the clinical aspects of critical care and acute care medicine.

1. Show an understanding of a comprehensive approach to patients with multi-system critical illness.
2. List the indications and complications of invasive hemodynamic monitoring.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Medical Critical Care continued**

3. Demonstrate understanding of the techniques for arterial, central venous, and pulmonary arterial catheterization.  
List and prioritize means for increasing cardiac output.
4. Define, in physiologic terms, the adequacy of cardiac output.
5. Reproduce and utilize the formulae for SVRI, PVRI, LVSWI, RVSWI, CI, SV, CPP and MAP.
6. List major risk factors for acute respiratory failure.
7. Discriminate between oxygenation, ventilation, and airway support.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Acting Internship

### Acting Internship in Pediatric Critical Care

**MDI 8463 7**

**Full-time (4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Kareen Jones**

**Contact Person: Maria Kierulf, [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org) ;**

**Dr. Heather Fagan, [heather.fagan@nemours.org](mailto:heather.fagan@nemours.org)**

**Maximum Enrollment: 2 per block**

**First Day: Report to Nemours Children's Hospital  
lobby @ 8:30 am for a tour and brief orientation.**

#### Program Overview:

Students will rotate in the state of the art Pediatric Intensive Care Unit (PICU) and Pediatric Special Care Units at Nemours. Students will work under the supervision of the pediatric critical care attending and the PICU team to care for children in critical or serious condition.

#### Objectives:

- Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a physician caring for critically ill children; demonstrate the ability to acquire, critically interpret and apply this knowledge in pediatric critical care.
- Succinctly present an ICU patient on rounds, formulate a coherent assessment of a patient's problems and present an appropriate therapeutic/diagnostic plan. Further, effectively communicate this plan to nurses, respiratory therapists, and sub-specialists/ consultants.
- Recognize and appropriately respond to acute life threatening events. The student should observe and be able to describe the necessary skills to resuscitate and describe the initial stabilization of the critically ill child particularly airway management, volume replacement and resuscitative pharmacology.
- Demonstrate competence in basic airway skills (appropriate implementation of oxygen delivery devices and demonstration of bag-mask ventilation) and placement of peripheral intravenous catheters. Advanced airway skills (intubation) and advanced intravenous access skills (central venous catheter placement and arterial line placement) may be observed.
- Understand the pathophysiology and treatment of common medical disorders in the PICU: respiratory failure (apnea, bronchiolitis, asthma, ARDS), shock (septic, cardiogenic, hypovolemic), neurologic critical care (status epilepticus, traumatic brain injury, brain death), renal failure, as listed on the Pediatric Critical Care Required Encounters list
- Understand the different monitoring techniques in pediatric critical care: vascular hemodynamics, intracranial devices, blood pressure, arterial saturations, end-tidal CO<sub>2</sub>, and a variety of common laboratory tests.
- Utilize common diagnostic tests and imaging studies appropriately in the pediatric intensive care unit, obtaining consultation as indicated for interpretation of results.
- Understand pediatric critical care pharmacology: inotropes and vasoactive agents, basic antibiotic therapy, common sedatives and analgesics, drug pharmacokinetics and monitoring of side effects.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Pediatric Critical Care continued**

- Understand techniques for enteral and parenteral nutritional supplementation in the PICU patient.
- Understand the ethical and legal issues which emerge during the care of critically ill and/or dying children (do not resuscitate orders, withholding and withdrawing life support, right of patients).
- Understand the importance of psychosocial issues related to the care of critically ill or dying children. Learn to provide support and deliver difficult information to the family of a critically ill child. Recognize the health care challenges of a child with a critical or chronic disease. Appraise the impact of a child's critical illness on his or her family.
- Apply evidence based principles of pediatric critical care to compare and contrast available treatment options with regard to efficacy, risk, benefit, cost-effectiveness.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

Acting Internship

**Acting Internship in Internal Medicine**

Clerkship Directors: Magdalena Pasarica, M.D.

**MDI 8340 5**

**Must be scheduled through ClinicianNexus**

Full-time (4 weeks)

(HCA)

Grading Basis: P/F

First Day: Medical Arts Building, 720 West Oak St, Suite 201, Kissimmee, FL at 7:30am

Primary Faculty Supervisor: Dr. Ghaffar

Contact person: *Berliza Cruz, GME Coordinator, (407) 518-3347, [Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)*

Maximum Enrollment: Varies

**MDI 8340 E**

Full-time (4 weeks)

(Naples)

Grading Basis: P/F

First Day: Graduate Medical Ed Building, 311 9<sup>th</sup> Street N, Suite 201, Naples, FL at 8:00am

Primary Faculty Supervisor: Dr. Alimer Gonzalez

Contact person: *Bonnie Simmons, GME Coordinator, (239) 624-0030, [bonnie.simmons@nchmd.org](mailto:bonnie.simmons@nchmd.org)*

Maximum Enrollment: 2. Housing may be available.

**MDI 8340 E**

Full-time (4 weeks)

(VA Lake Nona)

Grading Basis: P/F

First Day: 4F800 Hospitalist Hallway @8am

Primary Faculty Supervisor: Dr. Adam Earhart

[adam.earhart@va.gov](mailto:adam.earhart@va.gov)

Contact person: *Tammy Burk; [Tamara.Burk@va.gov](mailto:Tamara.Burk@va.gov)*

Maximum Enrollment: 2

Goals are advanced training and responsibility in the care of acutely ill hospitalized adult patients. The student will assume intern level responsibility for his/her patients and will care for 3-5 patients at one time.

**Objectives:**

1. Demonstrate ability to assess and care for ill hospitalized adult patients, initially and in an ongoing fashion.
2. Demonstrate appropriate communication skills, with colleagues (oral and written presentations), patients and families.
3. Demonstrate professional behavior at all times.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in General Pediatrics, Inpatient**

**Clerkship Director: Colleen Moran-Bano, M.D.**

**MDI 8400 7**

**Full-time (4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Rebecca Gill,**

**[Rebecca.Gill@nemours.org](mailto:Rebecca.Gill@nemours.org)**

**Contact person: Maria Kierulf, (407) 567-3877;**

**[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)**

**Maximum Enrollment: 2 each block**

**First Day: Report to Nemours Children's  
Hospital lobby @ 8:30 am**

This acting internship is designed to acquaint the student with the management of acute pediatric illness in the hospital setting. The student will learn to manage the severely ill child, including fluid and electrolyte management, ordering and interpretation of appropriate diagnostic tests and procedures, as well as strategies to manage the complexities of dealing with the hospitalized child and the psychosocial issues surrounding the hospitalization. The student will also learn to become an effective part of the health care team.

**Objectives:**

1. Demonstrate proficiency in the management of the severely ill child, including fluid and electrolyte management.
2. Order and interpret appropriate diagnostic tests and procedures.
3. Demonstrate proficiency in the performance of basic pediatric procedures.
4. Demonstrate proficiency in counseling ill children and their families, including patient education.
5. Describe strategies for managing the complexities of dealing with the hospitalized child and psychosocial issues surround the hospitalization.
6. Demonstrate effective collaboration skills in a health care team.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Pediatric Neurology and Epilepsy**

**Clerkship Director: Stephen Berman, M.D.**

**MDI 8470 7**

**Full-time (4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Monduy,**

[Migvis.Monduy@nemours.org](mailto:Migvis.Monduy@nemours.org)

**Dr. Richard Finkel, [Richard.finkel@nemours.org](mailto:Richard.finkel@nemours.org)**

**Contact person: Maria Kierulf, (407) 567-3877;**

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

**Maximum Enrollment: by permission only**

**First Day: Report to Nemours Children's  
Hospital lobby @ 8:30 am**

Evaluate the treatment of inpatient & outpatient Pediatric Neurology patients, with exposure to acutely ill patients in ICU to evaluations of Epilepsy/Seizures, Movement Disorders, and Headache. Exposure and instruction in reading and interpreting EEGs, MRIs, CTs, and Long Term EEGs. Exposure to pre-surgical Epilepsy evaluations and outcome reflections in OR.

**Objectives:**

1. Obtain appropriate/focused Neurologic history.
2. Provide complete Neurologic & Mental Status Exam.
3. Evaluate and form Treatment Plan for new and follow up patients both inpatient & outpatient settings, including ICU patients.
4. Learn basic EEG reading/interpretation
5. Provide support via phone to ER & around region inpatients who present with Neurologic issues.
6. Learn how to select and work up patient for Epilepsy surgery.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Neonatal ICU**

**Clerkship Director: Colleen Moran-Bano, M.D.**

**MDI 8461 7**

**First Day: Report to Nemours Children's Hospital**

**Full-time (4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Caroline Chua,**

**[caroline.chua@nemours.org](mailto:caroline.chua@nemours.org)**

**Contact Person: Maria Kierulf, [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org) ;**

**Maximum Enrollment: 2 per block**

This acting internship is designed to expose the student to normal physiology and a wide variety of diseases that affect the term and pre-term infant. Patient care activities will take place in the Neonatal Intensive Care unit, where the student will learn to become an integral part of the healthcare team. Skills learned during the rotation will include evaluation, diagnosis and treatment of the critically-ill newborn, proper use of ventilator management, and understanding the factors that contribute to a "high-risk" pregnancy. The student will also learn counseling skills and discussion of ethical issues that arise in the care of the critically-ill newborn.

**Objectives:**

1. Demonstrate proficiency in healthcare principles for the care of the critically-ill newborn (e.g., evaluation, diagnosis, and treatment).
2. Explain or demonstrate the proper use of ventilator management.
3. List the factors that contribute to a "high-risk" pregnancy.
4. Demonstrate proficiency in assisting in the performance of specialized procedures.
5. Demonstrate counseling skills in care conferences with parents regarding their critically-ill newborn.
6. Discuss ethical issues that arise in the care of the critically-ill newborn.
7. Demonstrate team skills in the neonatal intensive care unit.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Psychiatry**  
Clerkship Director: Martin Klapheke, M.D.

**MDI 8840 3**

**Full-time (4 weeks)**

**(VA) Lake Nona VA**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Roopa Chavda;**

**[Roopa.Chavda@va.gov](mailto:Roopa.Chavda@va.gov)**

**Contact person: Tamara Burk (407) 631-4035;**

**[tamara.burk@va.gov](mailto:tamara.burk@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to the Lake Nona VA Walk-In Clinic  
on the 2<sup>ND</sup> floor in the Mental Health Clinic @ 8:00  
am**

Increased level of responsibility for clinical assessment and treatment planning in Walk-In/Triage Clinic at V.A. Additional responsibilities for teaching 3<sup>rd</sup> year medical students.

**Objectives:**

1. Perform and document a complete psychiatric diagnostic evaluation in a patient population with a high level of acuity of treatment needs, identifying psychopathology, and developing appropriate biopsychosocial evaluation (laboratory, radiologic, and psychological testing) and treatment plans.
2. Appropriately utilize the indications for psychiatric hospitalization, considering presenting problem and its acuity, risk of danger to patient or others, community resources, and family support; when necessary, help implement the process of involuntary hospitalization.
3. Demonstrate the ability to appraise and assimilate scientific evidence, utilizing relevant databases of psychiatric evidence-based medicine, to improve patient care and teach 3<sup>rd</sup> year medical students rotating in Psychiatry.
4. Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals and students.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Psychiatry V.A. Residential Care at Domiciliary**

**Clerkship Director: Martin Klapheke, M.D.**

**MDI 8835 3**

**Full-time (4 weeks)**

**(VA) VA Lake Nona**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Abimael Rivera-Garcia**

**[Abimael.RiveraGarcia@va.gov](mailto:Abimael.RiveraGarcia@va.gov)**

**Contact person: : Tamara Burk (407) 631-4035;**

**[Tamara.Burk@va.gov](mailto:Tamara.Burk@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Lake Nona DOM @ 8:00am**

**Meet with Dr. Rivera-Garcia for orientation. Please**

**review the First Day Reporting Instructions document**

**found on the M4 GPS site. Students should email**

**Medical Education Coordinators to get computer access codes.**

Goal is to assume increased responsibility for Psychiatry intake assessments and treatment planning and delivery for patients in residential care at the V.A. Domiciliary. This patient population has high rates of homelessness, PTSD, and substance-related disorders, and the student will gain valuable clinical experience in these and other psychiatric conditions. No on-call. No weekend duties.

**Objectives:**

1. Perform and document complete psychiatric diagnostic evaluations in a residential care patient population with high levels of homelessness, PTSD, and substance-related disorders, and developing appropriate biopsychosocial evaluation and treatment plans.
2. Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals.
3. Know the clinical features of, and help implement treatment for, intoxication with, and withdrawal from alcohol and drugs.
4. Demonstrate the ability to monitor and document patients' clinical progress, and alter diagnostic formulation and management in response to changes.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Consultation Liaison Psychiatry**

**Clerkship Director: Martin Klapheke, M.D.**

**MDI 8841 3**

**Full-time (4 weeks)**

**(VA) VA Lake Nona**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Bonet-Pagan**

**Contact person: Tamara Burk (407) 631-4035;**

**[Tamara.Burk@va.gov](mailto:Tamara.Burk@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Lake Nona Consult/Liaison Office @ 8:00am. Meet with the physician for orientation. Please review the First Day Reporting Instructions document found on the M4 GPS site. Students should email Medical Education Coordinators to get computer access codes.**

Students will gain progressive clinical responsibilities for the psychiatric assessment and management of patients hospitalized on medical and surgical wards that have concomitant psychiatric conditions. Students will be expected to gain the knowledge and develop the clinical skills necessary to provide effective consultation for medical surgical patients and their treatment teams. It is anticipated that clinical conditions that students will encounter will include:

- Delirium with multifactorial etiologies including psychiatric reactions to medications
- Mood disorders including major depressive disorder and bipolar disorder
- Posttraumatic stress disorder
- Anxiety disorders including generalized anxiety disorder and panic disorder
- Substance use disorders
- Psychotic disorders including schizophrenia
- Patients with potential dangerousness to self or others
- Patients with possible lack of decision making capacity
- Personality disorders
- Neurocognitive disorders including Dementia

**Objectives:**

1. Perform and document a psychiatric diagnostic evaluation in a patient population with comorbid acute medical and surgical conditions, and develop recommendations for appropriate biopsychosocial evaluation (including laboratory, radiologic and psychological testing) and treatment plans.
2. Recognize the indications (when medically stable) for transfer for psychiatric hospitalization, considering the presenting problem and its acuity, and any risk of danger to the patient or others; when necessary, help implement the process of involuntary hospitalization.
3. Conduct literature reviews of current evidenced-based treatments for a range of psychiatric conditions seen in the acutely ill medical and surgical patient population.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Inpatient Psychiatry**

**Clerkship Director: Martin Klapheke, M.D.**

**MDI 8843 3**

**Full-time (4 weeks)**

**(VA) VA Lake Nona**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Torres-Miranda**

**[Jose.Torres-Miranda@va.gov](mailto:Jose.Torres-Miranda@va.gov)**

**Contact person: Tamara Burk (407) 631-4035;**

**[Tamara.Burk@va.gov](mailto:Tamara.Burk@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Lake Nona VAMC, Inpatient Psych unit 2W @ 8:00am. Meet with the physician for orientation. Please review the First Day Reporting Instructions document found on the M4 GPS site. Students should email Medical Education Coordinators to get computer access codes.**

Students will gain insights into the specialty of Psychiatry. Students will gain progressive clinical responsibilities for the psychiatric assessment and management of patients requiring inpatient treatment for acute psychiatric symptoms. During this rotation students will be assigned to an individual faculty mentor to guide them and be responsible for their daily clinical activities. By the end of the rotation it is expected that medical students will have developed a knowledge base and clinical skills allowing them to conduct a full inpatient psychiatric disorders. There will be a focus on the following clinical skills: diagnostic interviewing and development of a therapeutic alliance in the acute setting; crisis intervention and management; and effective communication with the patient's multidisciplinary team. It is anticipated that clinical conditions that students encounter will include:

- Mood disorders including major depressive disorder and bipolar disorder
- Posttraumatic stress disorder
- Anxiety disorders including generalized anxiety disorder and panic disorder
- Substance use disorders
- Psychotic disorders including schizophrenia
- Personality disorders
- Neurocognitive disorders including Dementia

**Objectives:**

1. Perform and document a psychiatric diagnostic evaluation and develop recommendations for appropriate biopsychosocial evaluation (including laboratory, radiologic and psychological testing) and treatment plans.
2. Recognize the indications for psychiatric hospitalization, considering the presenting problem and its acuity, and any risk of danger to the patient or others; when necessary, help implement the process of involuntary hospitalization.
3. Conduct literature reviews of current evidenced-based treatments for a range of psychiatric conditions.

Acting Interns will also have the opportunity to assist in the teaching of 3<sup>rd</sup> year medical students rotating in Psychiatry.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Pediatric Orthopedic Surgery**

**MDI 8570**

**Full-time (4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Alec Stall,**

[Alec.Stall@nemours.org](mailto:Alec.Stall@nemours.org)

**Contact Person: Maria Kierulf, (407) 567-3876;**

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

**Maximum Enrollment: 1 per block**

**First Day: Report to Nemours Children's Hospital lobby @  
8:30 am**

This rotation is intended for the student with interest in Orthopedic Surgery. The student will function at the level of a junior house officer and be expected to perform clinical activities with independence and procedures under direct supervision. The medical student will be expected to be involved in the workup, diagnosis, treatment, and follow up of patients with a wide variety of pediatric orthopedic surgical diseases. The student will be involved with the patient evaluation in the emergency department, outpatient clinic, and inpatient setting. He/She will also be involved in daily inpatient rounds, outpatient clinic, minor procedures, as well as major operations. The student will be expected to present in the pediatric orthopedic surgery education conference weekly, attend grand rounds, journal clubs, and morbidity and mortality conference. Call will be 1 day per week and 1 weekend day per rotation.

**Learning Objectives**

**Patient Care:**

1. Recognize common pediatric orthopedic surgical problems and emergencies in children.
2. Recognize orthopedic surgical complications in children.
3. Assist with the workup of new patients in the emergency department, outpatient clinic, and inpatient settings.
4. Assist in preparing patients for discharge.

**Medical Knowledge:**

1. Learn the fundamentals of basic science in pediatric orthopedic surgery.
2. Learn pediatric orthopedic common diagnoses and their management.
3. Read for the operative cases and be prepared for the operating room.
4. Understand the pathology of pediatric orthopedic disease.
5. Understand diagnostic tests commonly used in pediatric orthopedic patients.
6. Practice evidence-based medicine in reviewing the literature.

**Practice-Based Learning and Improvement:**

1. Utilize a pediatric orthopedic surgery textbook and journal articles to study pediatric orthopedic diseases.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship in Pediatric Orthopedic Surgery continued**

2. Document patient care activities in the medical chart in a timely fashion.
3. Utilize electronic educational resources.

**Interprofessional and Communication Skills:**

1. Learn to communicate well with families and children.
2. Learn to interact with surgical team.
3. Work well with other members of the health care team.

**Professionalism:**

1. Continue life-long learning.
2. Maintaining confidentiality of patient information.
3. Maintain sensitivity to others' cultures, age, gender, and disabilities.
4. Maintain accountability for personal actions and decisions.

**Systems-Based Practice:**

1. Learn to communicate appropriately with families under the direction of Faculty.
2. Learn to communicate with the health care team members about the surgical patients.

**Learning Activities:**

The medical student will present in the weekly pediatric orthopedic surgery education conference. He/She will present in daily inpatient rounds, attend pediatric surgery clinic, and participate in the surgeries. He/She will also practice evidence-based medicine by performing literature searches on the pediatric orthopedic surgery diseases of their patients.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Acting Internship

### Acting Internship Pediatric Surgery

Clerkship Director: Andrew Taitano, M.D.

#### MDI 8490 7

Full-time (4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: P/F

Primary Faculty Supervisor: Dr. Tamarah

Westmoreland,

[tamarah.westmoreland@nemours.org](mailto:tamarah.westmoreland@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital  
lobby @ 8:30 am

The University Of Central Florida College Of Medicine M4 Acting Internship in Pediatric Surgery will further expose the student to the workup, diagnosis, treatment and follow up of a wide variety of pediatric surgical diseases. Evidence based practices will be emphasized. The student will spend 4 weeks on the pediatric surgical service. Students will be responsible for the evaluation and workup of patients in the emergency room and wards as well as in the outpatient setting. Participation in daily inpatient multidisciplinary ward rounds will be emphasized as well as active participation in a wide array of bedside surgical procedures and major operative interventions under general anesthesia. In hospital call will be a requirement and will occur no more than twice per week and may include weekend call. The student will also be responsible for regular attendance at weekly didactic conferences, grand rounds, journal club conferences and morbidity and mortality conferences and simulator/animal lab experiences when offered.

#### Objectives:

##### Medical Knowledge

1. Learn the fundamentals of basic science as applied to pediatric surgery. *Examples include embryologic development of the peritoneal cavity, normal rotation and fixation of the abdominal viscera, the physiologic changes of birth, fluid, and electrolyte requirements by weight, normal physiologic parameters in newborns and children, and major physiologic differences of babies and children compared to adults.*
2. Recognize common surgical problems and emergencies in newborns. *Examples include: omphalocele, gastroschisis, imperforate anus, meconium ileus, Hirschsprung's disease, pyloric stenosis, and undescended testis.*
3. Recognize common surgical problems and emergencies in children. *Examples include: inguinal hernia, hydrocele, intestinal intussusception, and appendicitis.*
4. Utilize appropriate diagnostic laboratory procedures as applied to pediatric surgery patients ex: *arterial blood gas analysis, hematologic profiles and coagulation assessment, hepatic function tests, and serum chemistries.*
5. Utilize appropriate diagnostic imaging studies in infants and children ex: *chest radiographs, abdominal ultrasonography, and contrast studies of the esophagus, stomach, intestine, and colon.*
6. Understand the physiology, fluid and electrolytes, nutrition, pulmonary function and hemodynamics of children.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship Pediatric Surgery—Continued**

7. Understand the pathology of pediatric disease, pediatric anatomy and special pharmacology aspects of pediatrics.
8. Assist in the management of the pediatric trauma patient.

**Patient Care**

1. Recognize surgical complications (i.e. post-operative fever, abdominal pain, airway distress, GI obstruction and bleeding).
2. Assist in the workup of new admissions, including history and physical examination appropriate for age, calculation of fluid requirements, and development of a plan.
3. Assist in the care of all inpatients on the pediatric service, including daily assessment, evaluation of new problems, and preoperative preparation.
4. Assist in the initial evaluation of all consults in the emergency department and on other hospital services.
5. Arrive in the OR prepared for the procedure.
6. Assist in the process of discharging patients.

**Interpersonal and Communication Skills**

1. Work effectively with the health care team and/or other professional groups.
2. Present all patients in a concise, organized, logical and knowledgeable manner.
3. Utilize input from collaborative interactions with those contributing to patient care.
4. Exhibit the ability to interact as part of the surgical team.
5. Exhibits honesty, reliability, good communication skills, and appropriate judgment.

**Practice-Based Learning and Improvement**

1. Use textbooks, journal articles, internet access, and other available tools to learn about diseases of infants and children.
2. Effectively and promptly documents practice activities.

**Systems-Based Practice**

1. Communicate with families, under the supervision and guidance of the senior resident and attending.
2. Communicate with nurses, physician extenders, social workers, and allied health care personnel about the care of pediatric surgery patients.
3. Appreciate the specific needs of infants and children that are different from those of adults.

**Professionalism**

1. Demonstrate respect, compassion and integrity and a dedication to professionalism and life-long learning.
2. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
3. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
4. Demonstrate accountability for actions and decisions.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Clinical Neurological Ophthalmology**

**MDI 8802 9**

**Full-time (4 weeks)**

**(PO) Medical Eye Associates**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Mont Cartwright**

**[rockerdoc@aol.com](mailto:rockerdoc@aol.com)**

**Contact person: Anita Miller, (407) 933-7800 ext. 130;**

**[amiller@medeyedoc.com](mailto:amiller@medeyedoc.com); Peter Sefcik,**

**[marketing@medeyedoc.com](mailto:marketing@medeyedoc.com)**

**Maximum Enrollment: 1 per block**

**First Day: Contact Anita Miller 2 weeks before the**

**start of the rotation. On the first day report to**

**Medical Eye Associates at 921 N Main St., Kissimmee,**

**FL 34744 @ 8:00 am.**

The neuro-ophthalmology rotation is designed for medical students who are interested in ophthalmology as a specialty. This course introduces students to neuro-ophthalmology. Students will observe patients with Dr. Mont Cartwright, and gain exposure to Humphrey and Goldmann visual fields, optical coherence tomography, fundus photography, and the neuro-ophthalmologic exam. The rotation offers direct one-on-one teaching with Dr. Cartwright. As opposed to other ophthalmic rotations, no particular additional skill other than those already possessed by a typical medical student (e.g., handlight, direct ophthalmoscope, confrontation visual fields and mortality assessment) are required for the rotation. The rotation also might be suitable for medical students interested in neurology, neurosurgery, neuroradiology, or interventional radiology, as there is considerable overlap in these fields with neuro-ophthalmic patients.

**Learning Activities:**

The student time commitment shall be from Monday to Friday, 8:00 am to 5:00 pm. There is no mandatory student call, night, after hours, or weekend responsibility. Journal club weekly, hospital rounds, clinic outpatients, hospital/ambulatory surgery assistance/observation, one-on-one interaction with instructor. No pre-requisite readings are required but students may be asked to research small case vignettes or present at ophthalmology grand rounds during the rotation.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Oculo-Facial Plastic and Reconstructive Surgery**

**MDI 8661 9**

**Full-time (4 weeks)**

**(PO) Medical Eye Associates**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. Mont Cartwright**

[marketing@medeyedoc.com](mailto:marketing@medeyedoc.com)

**Contact person: Anita Miller, (407) 933-7800 ext. 130;**

[amiller@medeyedoc.com](mailto:amiller@medeyedoc.com); [marketing@medeyedoc.com](mailto:marketing@medeyedoc.com)

**Maximum Enrollment: 1-2 per block**

**First Day: Contact Anita Miller 2 weeks before the start of the rotation. On the first day report to Medical Eye Associates at 921 N Main St., Kissimmee, FL 34744 @ 8:00 am.**

This rotation will provide greater exposure to diagnosis, management and surgical correction of ophthalmic and reconstructive disorders.

**Goals of the rotation:**

- The overall goal and objective is to complement the basic knowledge gained in the ophthalmology program and to provide greater exposure to the diagnosis, management, and surgical correction of ophthalmic plastic and reconstructive disorders.
- During this rotation, the students will be responsible for the day-to-day management of patients. The rotation will provide education in the care and management of patients. The student will have the opportunity to become knowledgeable about the procedures in oculo-facial plastic and reconstructive surgery.
- The focus of patient care will be on all aspects of patient's that are treated by oculo-facial plastic and reconstructive surgery. The student will be actively involved with teaching rounds, clinical care conferences, journal club, radiology conferences, follow up clinic, and multidisciplinary planning. The student is expected to make a case presentation or journal club at the end of their rotation.
- Provide a well-rounded experience with emphasis on basic principles, techniques, patient selection and patient management. Students will participate in outpatient settings with the emphasis on outpatient experience.

**Learning Objectives:**

The medical student is expected to provide family-centered patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, and treatment of disease. The medical student will interact with the oculo-facial plastic and reconstructive surgeon using evidence based decision-making and problem-solving skills. Acting interns should have experience in the following specific areas

- (a) Anatomy and physiology of the orbit, eyelids, lacrimal system, nose, sinuses, and head and neck
- (b) Common orbital disorders of adults including orbital cellulitis, thyroid orbitopathy, idiopathic orbital inflammation, vasculitis, congenital tumors, vascular tumors, neural tumors, lacrimal gland tumors, fibro-osseous tumors, histiocytic diseases, lymphoid tumors, metastatic tumors, blunt and penetrating trauma, orbital and facial fractures, an ophthalmic socket problems and skull base disease



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship in Oculo-Facial Plastic and Reconstructive Surgery  
Continued**

- (c) Eyelid including congenital syndromes, inflammation, trauma, ectropion, entropion, trichiasis, blepharoptosis, eyelid retraction, dermatochalasis, blepharochalasis, eyelid tumors, blepharospasm, facial nerve palsy, eyebrow, midface and lower face function and aesthetics, and histology and pathology of the facial skin including medical and surgical management of these conditions
- (d) Regional anatomy including graft donor sites frequently used such as cranial bone, ear, nose, temporal area, mouth and neck, abdomen, buttocks, legs, supraclavicular area and arm.
- (e) Fundamentals of ocular and orbital anatomy, chemistry, physiology, microbiology, immunology, and wound healing;
- (f) Experience in neuroradiology for radiologic interpretation of images (CT, MRI, MRA, arteriography, ultrasound)
- (g) Ocular Pathology to interpret ocular and periocular pathology and dermatopathology
- (h) Understanding and interpreting imaging techniques;
- (i) The principles of plain films, CT, MRI, and ultrasound imaging relating to the head and neck with particular emphasis on the orbit;
- (j) The type of scan/imaging to order, given the clinical setting and be able to read the film or scan; and,
- (k) Skills in the use of information technology for study of reference material, including electronic searching and retrieval of relevant articles, monographs, and abstracts.
- (l) Demonstrate consistent skill in gathering accurate, essential information from all sources, including medical interviews, medical records, and diagnostic/therapeutic procedures
- (m) Gain competence in the physical examination of oculo-facial plastic and reconstructive surgical candidates



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Acting Internship

### Acting Internship in Clinical Ophthalmology

#### MDI 8900 3

Variable Duration (4 weeks)  
(VA)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Saad Shaikh

Contact person: Dr. Saad Shaikh  
(407) 266-1105; [saad.shaikh@ucf.edu](mailto:saad.shaikh@ucf.edu) ; Kate Knowles,  
[kate@ucf.edu](mailto:kate@ucf.edu);

[VHAORLMedicalEducationCoordinators@va.gov](mailto:VHAORLMedicalEducationCoordinators@va.gov)

Maximum Enrollment: 1 each block (Blocks 1-4 only)

First Day: Report to Lake Nona Eye Clinic Room 2B  
@ 8:00 a.m. Report to the Retina Resident/Dr.  
Shaikh. Students should email Medical Education  
Coordinators to get computer access codes. Course  
documents can be found on the M4 GPS site and  
should be reviewed prior to starting the rotation.

The overall goal is for students to perform an ophthalmology-targeted history and physical exam techniques and receive greater exposure to the diagnosis, management and surgical correction of ocular diseases. During the rotation, the student will learn to do the primary work up for patients including intraocular pressure check, visual acuity, and pupillary examination, and improve ability to perform slit lamp examinations, dilated fundus examinations, indirect ophthalmoscopy, and refraction. Students will rotate through the general, retina, cornea, glaucoma, and oculoplastic clinics to receive a well-rounded experience on patient care and management in order to identify ophthalmologic emergencies and urgencies and learn the basic therapies that should be initiated prior to referral. Students will have the opportunity to see multiple imaging techniques such as OCT, OPTOS, IVFA, outpatient laser procedures, and retinal injection treatments. Opportunity to practice on a surgical simulator.

#### Learning Activities:

Student schedules for the 4 week rotation will be determined by Dr. Shaikh along with out of house call schedule. Each week will consist of general clinic, retina clinic and OR days. Students are expected to present to general clinic at 7am after the first day. In the first week, students will work to develop ocular work-up skills (pressure, pupil, visual acuity, and necessary drops\_ learning closely from technicians, and practice using the slit lamp and visualizing the eye with the residents via teaching scope during each patient examination. Students should plan to be in the OR once every weekend should talk to the participating attending and resident for preparation for cases and start time. OR days can consist primarily of cataract surgeries, along with cornea, glaucoma, retina and oculoplastic surgeries. During the first week, the student will start from working up a patient, practice slit-lamp examination skills, and refraction. Students will work in the retina and uveitis clinics to practice dilated fundus exams and indirect ophthalmoscopy. By the end of the 4<sup>th</sup> week, students should have an understanding of all the above physical exam maneuvers. Every Monday from 12:30pm-2pm is noon conference led by Dr. Shaikh. Each month there is a morbidity and mortality conference. Students are required to participate in all conferences.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Acting Internship

### Acting Internship in Adult Orthopaedic Surgery

**MDI 8571 9**

**Full-time (4 weeks)**

**(VA) Lake Nona VA**

**Grading Basis: P/F**

**Primary Faculty Supervisor: Dr. John Kirkpatrick**

[John.kirkpatrick2@va.gov](mailto:John.kirkpatrick2@va.gov)

**Contact person: Sarafina Croft;**

[vhaorlmeducaleducationcoordinators@va.gov](mailto:vhaorlmeducaleducationcoordinators@va.gov)

**Maximum Enrollment: 1**

**First Day: On the first day report to VA East clinic wing 3F811 @ 8:00 am.**

This rotation is structured to develop clinical skills in the six ACGME competencies.

#### Goals of the rotation:

- Students will develop competence in the care of orthopaedic emergencies; evaluation of joint, back and neck pain; ordering of tests and interpretation of radiographs and advanced imaging; prioritizing of clinical care based upon diagnoses and associated comorbidities; and the fundamentals of physiology as they relate to orthopaedic surgery. Students will strengthen their skills in history and physical examination, oral and written communication with patients and staff, documentation of patient care using an electronic medical record, splinting and cast application, and basic positioning and surgical techniques. Students will provide patient care in the out-patient clinic, emergency department, operating room, and in-patient rooms.

#### Learning Objectives:

The medical student is expected to provide family-centered patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, and treatment of disease. Perform musculoskeletal history and physical examinations; educate patients about their diagnoses; and assist in surgical and bedside procedures.

- (a) Describe the diagnostic criteria and initial intervention for successful treatment of orthopaedic emergencies; integrate information about the criteria for diagnosis, natural history, risks and surgical approach for orthopaedic surgical cases; and understand the risks associated with comorbidities and how these affect the development of treatment plans.
- (b) Identify the deficiencies in their knowledge base, clinical skills or interactive behavior with staff and patients and develop a plan to address these weaknesses; utilize electronic media, peer and mentor resources to effect improvement.
- (c) Communicate openly and respectfully with staff, patients and families; and utilize the medical record appropriately.
- (d) Protect the confidentiality of patient information and demonstrate sensitivity to the diversity of our patient population and our workforce.
- (e) Identify appropriate solutions for specific patient needs within the VA system and understand



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Adult Ortho Care continued**

differences in processes to identify patient care solutions in contrasting health systems.

**Learning Activities:**

Students will participate in the admission and out-patient history and physical examinations, daily in-patient rounds and clinic follow up care in a variety of orthopaedic specialties including hand surgery, joint replacement, spine surgery, ligament reconstruction and arthroscopic procedures. Some students will develop and initiate research projects, report cases of special interest, or provide a literature review on a selected topic. Reading in preparation for cases will be expected; supplemental reading about some special topics may also be assigned.

Students will be assessed based on their preparation for surgical cases, their interest in learning about cases seen in clinic, their documentation of information in the medical record (when appropriate) and their performance in undertaking patient care tasks. Assessments will be by the mentoring surgeon and the supervising preceptor. Feedback will be provided during clinical experiences by mentoring surgeons.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Acting Internship**

**Acting Internship in Allergy / Asthma / Immunology**

**MDI 8300**

**Full-time (4 weeks)**

**(PO) Anderson Allergy & Asthma**

**Grading Basis: P/F\*\***

**Primary Faculty Supervisor: Dr. Michael Anderson**

**Contact Person: Brendan, 407-872-1110 ext. 111;**

**[brendan@andersonallergy.com](mailto:brendan@andersonallergy.com)**

**Maximum Enrollment: 1 per block**

**First Day: Report to Anderson Allergy & Asthma, 63 W.  
Underwood St., Orlando 32806 at 9:00 am.**

This rotation will expose the student to commonly encountered problems in allergy such as sinus illness, skin disorders, asthma & immune deficiencies. The student will do initial work ups including history and physical to present patients to myself and nurse practitioner. They will then learn how to manage these problems.

**Goals Objectives:**

- Recognize clinical patterns of common allergic disease such as allergic rhinitis & asthma. Learn the proper methods of work ups & evaluations.

**Learning Activities**

The student will each day interview new patients then present their history and physical, suggest testing options, then therapeutic options. He will then discuss these options with the MD and help explain these options to the patient. Follow up appointment with his patient will be arranged for continuing care.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

# **ELECTIVES**

# **INTERNAL**

# **MEDICINE**



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

**ELECTIVES**

**Internal Medicine**

**Emergency Ultrasound Elective**

**MDE 8773**

**First Day: Refer to directions from site.**

**Must be scheduled through ClinicianNexus**

**Part-time (2 weeks)**

**(HCA) Osceola Regional Medical Center**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Javier Rosario;**

[javirosariomd@gmail.com](mailto:javirosariomd@gmail.com)

**Contact Person: Berliza Cruz; [Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)**

**Maximum Enrollment: 1 per block**

The primary goal for the emergency ultrasound point of care elective is to provide the knowledge, skill, and experience to perform focused bedside ultrasound (US) examinations as a means to provide immediate information and answer specific questions about patients' physical conditions and care.

**Objectives:**

**Patient Care:** Gather accurate, essential information in a timely manner from all sources, including medical interviews, physical examinations, medical records, and diagnostic/therapeutic procedures. Integrate diagnostic information and generate an appropriate differential diagnosis.

**Medical Knowledge:** Understand the basic principles of medical ultrasonography with the potential risks and benefits to the patient. Demonstrate the ability to appropriately use the ultrasound machine to obtain basic images. Demonstrate the ability to identify basic ultrasound anatomy. Understand the appropriate use of ultrasound in the diagnosis of common medical problems. Demonstrates adequate foundation of knowledge in US applications: FAST, Aorta, Renal, First Trimester Bleeding, Echo, Gallbladder, and Procedural ultrasound.

**Practice Based Improvement:** Locate, appraise, and assimilate evidence from scientific studies related to the health problems of their patients. Use information technology to manage information, access online medical information, and support their own education.

**Interprofessional and Communication Skills:** Demonstrate the ability to respectfully, effectively, and efficiently develop a therapeutic relationship with patients and their families. Demonstrate effective participation in and leadership of the health care team.

**Professionalism:** Arrive on time and prepared to work. Demonstrate appropriate use of symptomatic care. Treat patients/family/staff/paraprofessional personnel with respect. Protect staff/patient's interests/confidentiality. Accept responsibility/accountability for patient care activities.





# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### ELECTIVES

#### Internal Medicine

#### Orthopaedic Research Elective

**MDE 8900**

**First Day: Students should contact Kerri Drylie.**

**Full-time (4 weeks)**

**(UCF) UCF College of Medicine**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Thomas Kean; 407-266-7006**

[Thomas.Kean@ucf.edu](mailto:Thomas.Kean@ucf.edu)

**Contact Person: Kerri Drylie; [Kerri.Drylie@ucf.edu](mailto:Kerri.Drylie@ucf.edu)**

**Maximum Enrollment: 6 per block (December and April)**

This rotation is designed to provide medical students with insights into the specialty of orthopaedic research. Ortho research, addressing the musculoskeletal limitations experienced across the breadth of society, encompasses many tissues and conditions. This course will focus on the current clinical approaches in cartilage, bone, tendon and muscle. Ortho implants are successful in improving quality of life by reestablishing mobility and reducing pain. Due to an increasingly aging population and awareness of new technologies, better implants and therapies are desired. Tissue engineering, smart and customized, 3D printed implants all have potential to improve patient outcomes.

Musculoskeletal disorders represent one of the greatest healthcare challenges of today. In order to achieve a world free of musculoskeletal limitations, significant research efforts must be expended. This course will highlight some of the challenges, approaches and current research in orthopaedic medicine.

Course Guiding Questions:

1. What are the current orthopaedic treatments for cartilage, bone, tendon and muscle?
2. How are we falling short?
3. What is the role of orthopaedic research in patient care?
4. What are the current approaches under research?
5. How do we evaluate that research?
6. What are the next steps?

This module will train students in the main areas of orthopaedic research. We will delineate current clinical approaches to trauma and diseases of the musculoskeletal system, tissue engineering, biomaterial, physiotherapy and pharmaceutical research, integration of those approaches and the future of clinical orthopaedics. When combined the course broadly covers orthopedic research with a deep dive into treatment, assessing current, developmental and future technologies. We will teach principals of Ortho treatment approaches, why they're used and some of the research being done to improve patient outcomes. No clinical responsibilities. The students will be given an assignment on a current/recent news or journal article. They will build a brief, patient oriented, video presentation centered around the use of orthopaedic research for this medical problem or disease connected to a key concept covered in the class (20% of the grade). At the end of the course, they will integrate their findings and forecasts to write a term paper that demonstrates their acquired knowledge (20% of the grade). In addition to scientific questions, they will also be trained how to improve their presentation skills. For participation in reviewing and commenting, they will be assigned to a group. They will review each other's work, make comments and respond to comments. This ensures that they will also learn how to serve as a reviewer.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## ELECTIVES

### Internal Medicine

### Nanomedicine Elective

#### MDE 8900

First Day: Students should contact Kerri Drylie.

Full-time (4 weeks)

(UCF) UCF College of Medicine

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Medhi Razavi; 407-266-0000

[Mehdi.Razavi@ucf.edu](mailto:Mehdi.Razavi@ucf.edu)

Contact Person: Kerri Drylie; [Kerri.Drylie@ucf.edu](mailto:Kerri.Drylie@ucf.edu)

Maximum Enrollment: 5 per block (October-January only)

This rotation is designed to provide medical students with insights into the specialty of Nanomedicine. The nanomedicine course provides a thorough overview of the exciting and emerging discipline of nanomedicine which is already starting to transform the way that medical and healthcare solutions are developed and delivered. The course will focus on the impact that nanotechnology has in the advance of medicine and healthcare including its role in delivery of therapy, tissue engineering and biosensing/diagnosis techniques and will discuss how to progress this area to meet future needs.

#### Course Guiding Questions:

1. What are the potential benefits and challenges of nanomedicine?
2. How is nanomedicine currently being used to treat patients?
3. What are the building blocks of nanomedicine? How do they provide unique & distinctive functions in the body?
4. How can we customize nanomedicine solutions for specific diseases?
5. How do we demonstrate that nanomedicine is both safe and effective?

#### Course Goals:

1. To introduce students to the emerging field of nanomedicine and to give an overview of present and future applications of nanotechnologies and nonmaterial in medicine and healthcare and their limitations.
2. To provide an understanding of the scientific and regulatory obstacles in implementation of nanomedicine.
3. To provide an environment in which students can share their ideas in group discussions and learn presentation skills.
4. To enable students to make informed decisions about applications of nanotechnologies in their own field of work.

The students will be given an assignment which is structured in such a way to help them build content and ideas centered around the use of nanomedicine for a medical problem or disease that they are interested in and also highlights a key concept covered in the class. In the second half of the course, students will work to create a 10-15 minute presentation about their assignment. At the end of the course, they will integrate their findings and forecasts to write a term paper. The assignment including presentation and term paper make up 40% of the grade.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### ELECTIVES

#### Internal Medicine

#### Urology Elective

#### MDE 8675

Full-time (2-4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Pamela Ellsworth,

[Pamela.Ellsworth@nemours.org](mailto:Pamela.Ellsworth@nemours.org),

Contact person: Maria Kierulf,

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Contact site for details.

After completing the urology rotation you will have improved your ability to evaluate urology patients and formulate a treatment plan. Additionally, you will improve your operative skills and exposure to urologic procedures.

#### Objectives:

1. The medical students along with the mid-level providers are expected to take primary responsibility for all patients on the in-patient and consultation urology service.
  - Mid-level providers (Physician Assistants and Nurse Practitioners) work on the urology service. The medical students are encouraged to communicate often with the appropriate resident, fellow, or mid-level providers in regard to specific patient care. The attending, resident, fellow, or mid-level providers will assign the medical student tasks.
  - Students will be assigned in-patients and consults to follow. Prior to going to the OR or clinic in the morning the students are expected to round on their patients along with the urology team. Students should write a progress note but not put it into the patient's chart. The note should be reviewed with the attending, resident, fellow, or mid-level providers who will write the note in the patient's chart. This note should include but not be limited to: report on significant events from the previous day/night, laboratory studies, vital signs, intake (oral and IV) and output of fluids (including drains) and physical exam for the past 24 hours. The student should show their progress note to the attending for feedback.
  - The medical student, resident, fellow, and mid-level providers will be encouraged by each attending physician to work together as a team and divide tasks appropriately in order to better complete the morning's work.
2. The medical student is expected to experience and participate in the full spectrum of perioperative patient care. The priorities of medical student assignment after completion of morning "rounds" are as follows in order of importance.
  - **Surgical Procedures:** Specifically the medical student in conjunction with the resident, fellow, and mid-level providers is expected to evaluate emergency and inpatient consultations, form a diagnosis and initial plan, and discuss each with the attending urologist on call. All consultations are to be filled out on the written comprehensive forms complete with review of systems, physical, pmh, psh,... The mid-level providers, resident, fellow, or attending will dictate formal consultation note.
3. The medical student is expected to read on the medical condition of the inpatient and consults and the upcoming OR cases. In addition, the student should be familiar with the patient's history and physical exam, operative indication, and surgical steps proposed for the case being discussed.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Clinical Cardiology Elective**

**MDE 8220**

Full-time (4 weeks)

(PO/HoF) Florida Cardiology

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Karan Reddy

Contact Person: Karan Reddy, 407-467-0829;

[karangreddy@gmail.com](mailto:karangreddy@gmail.com);

[Jaykirti.Patel@adventhealth.com](mailto:Jaykirti.Patel@adventhealth.com)

[LaQusia.Jackson@heartofflorida.com](mailto:LaQusia.Jackson@heartofflorida.com)

Maximum Enrollment: 1-2 per block (Not available block 3)

First Day: Report to Florida Cardiology, 483 N. Semoran Blvd., Suite 102, Winter Park @ 8:00 am

Will need to attend orientation prior to going to HoF. Provided Monday at 8am. Depends on start date.

**MDE 8220**

Full-time (4 weeks)

(PO) Heart & Vascular Institute of Florida

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Ifran Siddiqui, D.O.

[drsiddiqui@myheartdoc.org](mailto:drsiddiqui@myheartdoc.org)

Contact Person: Aury Gonzalez, (863) 585-4306;

[aury.gonzalez@myheartdoc.org](mailto:aury.gonzalez@myheartdoc.org)

Maximum Enrollment: 1 per block

First Day: Report to Heart & Vascular Institute of Florida 405 Lionel Way, Davenport, FL @ 8:30 am

**MDE 8220**

Full-time (2-4 weeks)

(AH) Advent Health

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Milind Parikh

Contact Person: Dr. Milind Parikh, (407) 841-7151;

[mparikh@cfcg.com](mailto:mparikh@cfcg.com)

Maximum Enrollment: 1 per block (Not available block 1)

First Day: Report to Advent Health 1745 N. Mills Ave. Orlando, FL @ 8:00 am

Students enrolled in this course will get a basic understanding of common cardiovascular conditions such as CAD, CHF, Dyslipidemias, HTN, Arrhythmias, Dizziness & Syncope, PAD and Venous Disorders. Basic interpretation of Cardiovascular tests like EKG, 2DEcho, Nuclear Stress Test, Carotid Doppler, Arterial Doppler, Holter Monitor, Cardiac CTA. Students get to scrub in cardiac procedures such as diagnostic cath, peripheral angiography, coronary and peripheral interventions performed in the cath lab.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Clinical Cardiology Elective continued**

**Learning Activities:**

Seeing patients on all week days 8:30-4:00 pm at the office or at the hospital with the attending. Work up 1-2 new patient consults/day and see 5 F/U visit patients/day. Presentation and discussion of every patient you see and do pertinent literature research on the patient diagnosis you have encountered.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Ambulatory Elective in Cardiology**

**MDE 8222 8**

Part-time (2-4 weeks)

(HF) MIMA

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Khalid Sheikh,

[Khalid.Sheikh@health-first.org](mailto:Khalid.Sheikh@health-first.org)

Contact person: Lorilynn Moore;

[Lorilynn.moore@health-first.org](mailto:Lorilynn.moore@health-first.org); 321-434-6650

Maximum Enrollment: 1 each block

First Day: Report to 255 Borman Drive, 2<sup>nd</sup> floor  
Merritt Island, FL 32952 @ 8:00 a.m.

This rotation will provide a typical experience in a community cardiology practice. The practice is staffed by cardiologists with expertise in management of typical cardiovascular conditions encountered in ambulatory cardiology, including congestive heart failure, atherosclerotic cardiovascular disease and arrhythmias. Students will develop and refine clinical skills of obtaining a focused CV history, conducting a CV physical examination, and formulating a differential diagnosis. The student will be introduced to CV laboratory evaluation, ekg interpretation and fundamentals of advanced cardiovascular imaging that are used in CV assessment and formulation of a treatment plan. The student will also have the opportunity to participate in the hospital evaluation of patients admitted to the consultative cardiology service, and may observe and participate in invasive CV procedures including cardiac catheterization, coronary interventions, transesophageal echocardiography and CV electrophysiology procedures.

**Learning Activities:**

While in the hospital, students will participate in daily teaching rounds on wards and the ICU. Students will prepare a literature review on a specialty topic and give a brief presentation to the cardiology team as requested by the attending physician. When students are scheduled to be in the cath lab, the first case starts at 7:30am. Students will participate in the monthly CV imaging conference and may be expected to present a case and be prepared to discuss relevant literature and practice standards.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Ambulatory Elective in Hematology/Oncology**

**MDE 8281 3**

**Full-time (4 weeks)  
(VA) Lake Nona VA**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Allison Carilli,**

**[Allison.carilli@va.gov](mailto:Allison.carilli@va.gov), 407-242-2833**

**Contact person: Sarafina Croft;**

**[vhaorlmeducaleducationcoordinators@va.gov](mailto:vhaorlmeducaleducationcoordinators@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Heme/Onc Clinic 2F at Lake  
Nona VA @ 8:00 a.m.**

Goals are advanced training and responsibility in the care of adult hematology/oncology patients. The student will assume intern level responsibility for his/her patients and will be expected to see/provide care for approximately eight or more patients daily.

**Objectives:**

1. Demonstrate ability to assess and care for adult patients in the outpatient setting, initially and in an ongoing fashion.
2. Demonstrate appropriate communication skills, with colleagues (oral and written presentations), patients and families.
3. Demonstrate professional behavior at all times.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

Internal Medicine

**Nephrology, Inpatient/Outpatient**

Clerkship Director: Magdalena Pasarica, M.D.

**MDE 8350**

Part-time (2 weeks)

Grading Basis: Pass/Fail  
(FLG) Flagler Hospital

\*This site is more than 50 miles from the COM

Primary Faculty Supervisors: Dr. Amir Malik;

[malikmd@bellsouth.net](mailto:malikmd@bellsouth.net); 904-829-8300

Contact person: Chelsea Cancel, (904) 829-8300;

[Chelsea.Cancel@flaglerhospital.org](mailto:Chelsea.Cancel@flaglerhospital.org); Brittany Bohler,  
(904) 819-4284; [Brittany.Bohler@flaglerhospital.org](mailto:Brittany.Bohler@flaglerhospital.org)

Maximum Enrollment: 1 each block (By permission  
only)

First Day: Report to Flagler Hospital, St. Augustine,  
FL, 6<sup>th</sup> floor Medical Library @ 12:00 pm. See M4 GPS  
for housing information.

This course provides an in-depth exposure to the diagnosis and treatment of renal disease in the hospital and outpatient setting through bedside teaching, didactic lectures, conferences and Grand Rounds. After completion of the course, the student will be familiar with the various diagnostic and therapeutic modalities that are used in the treatment of patients with renal disease.

**Objectives:**

1. After completion of the course, the student will be familiar with the various diagnostic and therapeutic modalities that are in the treatment of patients with renal disease.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Wound Care**

**Clerkship Director: Robert Phillips, DPM**

**MDE 8345 3**

**Full-time (2 or 4 weeks)**

**(VA) VA Lake Nona**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisors: Dr. Lisa Panariello,**

**[lisa.panariello@va.gov](mailto:lisa.panariello@va.gov)**

**Contact person: (407) 631-4727**

**[VHAORLMedicalEducationCoordinators@va.gov](mailto:VHAORLMedicalEducationCoordinators@va.gov)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Module 3F at the VA Lake Nona Clinic, 3<sup>rd</sup> floor @ 8:00 a.m. Please review the First Day Reporting Instructions document found on the M4 GPS site. Students should email Medical Education Coordinators to get computer access codes.**

The student will be exposed to patients with all types of wounds. Most of the wounds will be located on the lower extremity. Diabetic ulcers will be heavily emphasized, though all types of wounds will be encountered, including decubitus ulcers, venous stasis ulcers, arteriosclerosis ulcers, surgical wounds and complications. In addition, the student will be exposed to the patient at high risk for developing ulcers as well as those who have finished healing a wound and are now being monitored for reoccurrence.

**Objectives:**

1. Demonstrate the ability to assess and care for adult patients in the outpatient setting, initially and in an ongoing fashion.
2. Demonstrate appropriate communication skills, with colleagues (oral and written presentations), patients and families.
3. Demonstrate professional behavior at all times.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Dermatology Elective**

**Clerkship Director: James A. Solomon, M.D.**

**MDE 8250 9**

**Full-time (2 or 4 weeks) (4 weeks)  
(PO) Advanced Dermatology & Cosmetic Surgery  
\*This site is more than 50 miles from the COM**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisors: Dr. James Solomon  
[drjsolomon@ameridermresearch.com](mailto:drjsolomon@ameridermresearch.com)**

**Contact person: Sandra Davis, Office Manager  
(386) 523-0768; [sdavis@ameridermresearch.com](mailto:sdavis@ameridermresearch.com)**

**Maximum Enrollment: 1 each block (no blocks 7 and 10)**

**First Day: Report to 725 West Granada Blvd., Suite 44, Ormond Beach, FL 32174 @ 9:00 a.m.**

This elective will allow the student to be exposed to all areas of dermatology, including general, surgical, cosmetic, and dermatology pathology. The student will be an active member of the office team and will have additional exposure to the office management.

**Objectives:**

1. The student will gain his/her dermatology basic clinical knowledge and ability to communicate, discuss cases and interact with staff, patient in an intelligent and thoughtful way, and responds to clinical questions appropriately as knowledge of the field increase.
2. The student learns about skin and sun safety as well as the importance of evaluating the whole patient and discussing risk-taking behaviors.
3. The student learns to assist in basic dermatologic surgery procedures as well as gains understanding of more complex surgical procedures (Moh's surgery and cosmetic closures), and laser surgery.
4. The student is exposed to the broad spectrum of dermatology specific medications and completes the rotation with a basic dermatology treatment armamentarium.
5. The student gains an understanding in which cosmetic dermatology is used as a methodology to enhance the appearance of the skin by repairing damage done through sun, trauma and/or skin disease.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Advanced Dermatology Elective**  
Clerkship Director: James Solomon, M.D.

**MDE 8254 9**

Full-time (4 weeks)

(PO) Advanced Dermatology & Cosmetic Surgery,  
Grading Basis: Pass/Fail

Primary Faculty Supervisors: Dr. Jere Mammino

Contact person: Kara Lockcuff, Office Manager

(407) 359-2100; [kara.lockcuff@adcclinics.com](mailto:kara.lockcuff@adcclinics.com)

Maximum Enrollment: 1 each block (none blocks 7 and 10)

\*\*Student must complete MDE 8250 before taking this course and submit CV

First Day: Report to 1410 W. Broadway  
Suite 205 Oviedo, FL 32765 @ 8:00 a.m.

**MDE 8254 9**

Full-time (4 weeks)

(PO) Florida Dermatology Associates

Grading Basis: Pass/Fail

Primary Faculty Supervisors: Dr. Michael Gutierrez

Contact person: Jennifer Londono, (407) 299-7333 ext. 1218;

[Jennifer.mfda@gmail.com](mailto:Jennifer.mfda@gmail.com)

Maximum Enrollment: 2 each block

First Day: Report to 100 W. Gore St.,  
Orlando 32806 @ 8:00 a.m.

The student is exposed to one of the largest group dermatology practices in the country. The practice has over 50 office sites in 50 cities in Florida. Opportunities to work in several offices will expose the student to almost all aspects of diagnosis and treatment within general dermatology (pediatric to geriatric), surgical dermatology (routine, Moh's, laser), cosmetic dermatology (lasers, fillers, cosmetic surgery, hair transplantation, aesthetic services), and dermatopathology. In addition, the student will be able to participate in or observe ongoing clinical research studies (phase II-IV). Furthermore, the student may choose to be instructed in centralized, multiple office management. Emphasis is placed on treating the patient's current problem while repairing the underlying skin abnormalities to reduce risks of further problems. The student is expected to function as a member of the office team. The student, with the help of the office manager, will arrange weekly rotations through several offices to provide the broadest experience possible.

**Objectives:**

1. The student increases his/her basic clinical knowledge and ability to communicate, discuss cases and interact with staff, patients, and research subjects in an intelligent and thoughtful way and responds to clinical questions appropriately as knowledge of the field increases.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Advanced Dermatology Elective continued**

2. The student learns about skin and sun safety as well as the importance of evaluating the whole patient and discussing risk-taking behaviors.
3. The student learns to assist in basic dermatologic surgery procedures as well as gains understanding of more complex surgical procedures (Moh's surgery and cosmetic closures) and laser surgery.
4. The student is exposed to the broad spectrum of dermatology specific medications and completes the rotations with a basic dermatology treatment armamentarium.
5. The student gains an understanding in which cosmetic dermatology is used as a methodology to enhance the appearance of the skin by repairing damage done through sun, trauma, and/or skin disease.
6. The student is exposed to the complexities of the business aspects of a medical practice.
7. The student is exposed to new drug development as well as studies which expand the use of current medications and/or retest the safety profiles.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Ambulatory Elective in Rheumatology**

**MDE 8310 3**

**Full-time (4 weeks)**

**(VA) VA Lake Nona**

**Grading Basis: P/F**

**First Day: Report to the Lake Nona VA, Clinic 1B – Valor Clinic @ 9:00 a.m. Please review the First Day Reporting Instructions document found on the M4 GPS site.**

**Students should email Medical Education Coordinators to get computer access codes.**

**Primary Faculty Supervisor: Dr. Sujatha Vuyyuru, Dr. Seema Frosh, and Dr. Ashwini Komarla**

**Contact person:**

**[VHAORLMedicalEducationCoordinators@va.gov](mailto:VHAORLMedicalEducationCoordinators@va.gov)**

**Maximum Enrollment: 1 each block**

Goals are advanced training and responsibility in the care of adult rheumatology patients. The student will assume intern level responsibility for his/her patients and will be expected to see/provide care for approximately eight or more patients daily.

**Objectives:**

1. Demonstrate ability to assess and care for adult patients in the outpatient setting, initially and in an ongoing fashion.
2. Demonstrate appropriate communication skills, with colleagues (oral and written presentations), patients and families.
3. Demonstrate professional behavior at all times.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Pulmonary Elective**

**Clerkship Director: Magdalena Pasarica, M.D.**

**MDE 8245 3**

**Full-time (4 weeks)**

**(VA) Veteran's Affairs Hospital Lake Nona**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisors: Dr. N. Rajagopalan**

**[Natarajan.Rajagopalan@va.gov](mailto:Natarajan.Rajagopalan@va.gov) ; 407-631-2020**

**Contact person: Sarafina Croft**

**[vhaorlmedicaleducationcoordinators@va.gov](mailto:vhaorlmedicaleducationcoordinators@va.gov)**

**Maximum Enrollment: 1-2 each block (No blocks 3-4)**

**First Day: Contact preceptor for reporting instructions.**

At the end of the 4 week rotation the student will have an understanding of pulmonary physiology and common pulmonary diseases that are seen in the VA population. He or she will have an opportunity to visit the Pulmonary lab and learn basic tests.

**Objectives:**

1. The student will learn to read pulmonary function tests. He or she will learn to read X ray chest and CT scans. Will be able to take history from veterans with various pulmonary disorders and will also be able to watch major procedures. There will be opportunities to present articles in journal club, take part in lung cancer clinic and Chest X ray meetings.
2. Student will see patients with the preceptor for the first week and then be allowed to do history taking and examination by themselves and formulate a diagnosis and generate differential diagnosis and management.
3. The student will be encouraged to call other specialty providers as the case may be and document in the electronic notes.
4. The student will learn the best way to respect and interact with veterans.
5. A lot of emphasis will be made on prevention of pulmonary diseases and multidisciplinary care.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

**Internal Medicine**

**Advanced ECG Self-Study Program**

**MDE 8227**

**First Day: UCF COM room 406P at 8:00 am.**

**Part-time (2 weeks)**

**(UCF COM) UCF COM and UCF Health Clinic**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Bernard Gros**

**Contact Person: Dr. Bernard Gros, 407-266-1180;**

**[bernard.gros@ucf.edu](mailto:bernard.gros@ucf.edu)**

**Maximum Enrollment: 2 per block (November through April only)**

**Note: This course requires some in person sessions with the instructor.**

**Please communicate your availability to the instructor at least 2 weeks before the start of the rotation.**

The primary goal of this rotation will be mastering the art and practice of clinical ECG interpretation. This will focus on the following areas: 1) The basics, 2) Myocardial abnormalities, 3) Conduction abnormalities, 4) Arrhythmias, 5) Narrow & wide complex tachycardias, 6) Paced rhythms, channelopathies and electrolyte disturbances.

Upon completion of this 2 week session, the students will have reviewed 400-600 case studies. This will provide them with a broad and in-depth understanding of ECG analysis and diagnosis.

**Learning Activities:**

1. Self study case reviews by student (Using Podrid's ECG Series)
2. Additional literature review ECG topics.
3. Weekly presentations to faculty on assigned ECG/Cardiovascular topics.
4. Weekly conference/faculty discussions to assist in instruction and understanding of ECG interpretation.

**Required Texts:**

- 1) Podrid's Real World ECG - Volume 1-4 (Volume 5-6 once released)-*Available electronically in the library.*
- 2) Marriott's Practical Electrocardiography 12th edition-*Available electronically in the library.*



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**ELECTIVES**

Internal Medicine

**Dermatology Research Elective**

Clerkship Director: James Solomon, M.D.

**MDR 8250 9**

Full-time (4 weeks)

(PO) Advanced Dermatology & Cosmetic Surgery

\*This site is more than 50 miles from the COM

Grading Basis: Pass/Fail

Primary Faculty Supervisors: Dr. James Solomon

[Drjsolomon@ameridermresearch.com](mailto:Drjsolomon@ameridermresearch.com)

Contact person: Kara Lockcuff, Office Manager

(407) 359-2100; [kara.lockcuff@adcsclinics.com](mailto:kara.lockcuff@adcsclinics.com)

Maximum Enrollment: 1 each block (no blocks 5, 7, 10 or 11)

First Day: Report to 725 West Granada  
Blvd., Suite 44, Ormond Beach, FL 32174  
@ 8:00 a.m.

The student is exposed to one of the largest group dermatology practices in the country. The practice has over 50 office sites in 50 cities in Florida. Opportunities to work in several offices will expose the student to almost all aspects of diagnosis and treatment within general dermatology (pediatric to geriatric), surgical dermatology (routine, Moh's, laser), cosmetic dermatology (lasers, fillers, cosmetic surgery, hair transplantation, aesthetic services), and dermatopathology. The student with the help of the office manager, will arrange weekly rotations through several offices to provide the broadest possible. No night call or weekends required.

**Objectives:**

1. The student increases his/her basic clinical knowledge and ability to conduct clinical research within dermatology, to communicate, discuss protocols, and data. The student will interact with staff, investigators and industry representatives throughout the world, in an intelligent and thoughtful way, and responds to clinical questions appropriately as knowledge of the field increases.
2. The student learns about the import of Good Clinical Practices and maintaining patient safety throughout any clinical field.
3. The student learns to create protocols, enter data and develop reports.
4. The student is exposed to new drug development as well as studies which expand the use of current medications and/or retest the safety profiles.
5. The student is exposed to the complexities of the business aspects of a clinical research and medical practice.
6. The student gains an understanding in which cosmetic dermatology is used as a methodology to enhance the appearance of the skin by repairing damage done through sun, trauma, and/or skin disease.





UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

**ELECTIVES**  
**OBSTETRICS &**  
**GYNECOLOGY**  
**/**  
**ONCOLOGY**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Obstetrics & Gynecology/Oncology**

**Elective in Gynecology**

**MDE 8165**

**Full-time (4 weeks)**

**(PO) Family Practice of Celebration**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Aileen Caceres**

**[Caceres.aileen@gmail.com](mailto:Caceres.aileen@gmail.com)**

**Contact Person: Janet Silva, [janet@caceresgyn.com](mailto:janet@caceresgyn.com) ;**

**Ann Kennedy, [ann.kennedy@ucf.edu](mailto:ann.kennedy@ucf.edu)**

**Maximum Enrollment: 1 per block**

**First Day: Report to 1178 Cypress Glen Circle,  
Kissimmee, FL 34741 @ 9:00 am**

The Gynecology Elective focuses on all aspects of gynecologic care of the patient. The student will evaluate and propose course of treatment for commonly encountered gynecologic health issues. The student will develop differential diagnosis and propose treatment plans that are appropriate. Expected conditions to be encountered include management of abnormal cervical cytology, abnormal uterine bleeding across all age groups, vulvar disorders, fibroids, adenomyosis, endometriosis, and complex gynecological surgical procedures. Students will work team Nurse Practitioners in completing well-women examinations and evaluating breast disease. The student will be expected to have learned basics of gynecologic outpatient procedures such as endometrial biopsy, intrauterine device placements for contraception, colposcopy basics, and performance of breast and pelvic examination, including collection of specimens for cytology. The student will also be expected scrub and assist with all surgical cases.

**Learning Activities**

Student will be an active team member of all patient encounters. The student will assist with admissions, round pre-op and post op on all surgical patients. The student will prepare 2 presentations to be delivered to the team regarding gynecologic care of patients. These presentations will incorporate literature reviews and case-based presentations with a discussion.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Obstetrics & Gynecology/Oncology

**Obstetrics and Gynecology Ambulatory Elective**

**MDE 8160**

Full-time (4 weeks)

(HoF) Heart of Florida

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Lareesa Ferdinand

Contact Person: Marci Harris, (863) 421-7600, ext. 235;

[marcihofobgyn@hotmail.com](mailto:marcihofobgyn@hotmail.com); Jackie Patel, (863) 419-2298;

[Jaykirti.Patel@adventhealth.com](mailto:Jaykirti.Patel@adventhealth.com)

[LaQusia.Jackson@heartofflorida.com](mailto:LaQusia.Jackson@heartofflorida.com)

Maximum Enrollment: 1 per block

First Day: Report to Heart of Florida Ob/Gyn Associates,  
40100 US 27 Davenport, FL 33837 @ 8 am. Will need to  
attend orientation Monday 8am.

The Ob/Gyn Ambulatory Elective focuses on all aspects of obstetric and gynecologic care of the patient. The student will evaluate and propose course of treatment for commonly encountered obstetric and gynecology patients. The student will develop differential diagnosis and propose treatment plans that are appropriate. Expected conditions to be encountered include management of normal and abnormal labor, prenatal care, abnormal cervical cytology, abnormal uterine bleeding and participate in all obstetrical and gynecologic surgical procedures.

**Learning Activities**

Student will be an active team member of all patient encounters. The student will assist with admissions, round pre-op and post op on all surgical patients. The student will prepare 2 presentations to be delivered to the team regarding ob/gyn patients. These presentations will incorporate literature reviews and case-based presentations with a discussion.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Obstetrics & Gynecology/Oncology

**Advanced Prenatal Diagnosis Clinic Elective**

**MDE 8182**

Full-time (4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Armando Fuentes, 407-487-6902;

[Armando.fuentes@nemours.org](mailto:Armando.fuentes@nemours.org)

Contact Person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 2 per block (Not available in December)

First Day: Report to 13535 Nemours Parkway, Orlando, FL  
@ 8 am

The rotation is a hands-on rotation and illustrates the role of the provider of Maternal-Fetal Medicine in the ambulatory clinical setting. During the rotation students will be working directly with Dr. Fuentes, who will guide them and be responsible for their daily clinical activities. The goals are for the student to gain appreciation for the impact of pregnancy or normal physiology, increase understanding of various pathophysiologic processes in pregnancy, observe firsthand the effect of pregnancy on many common medical problems, observe and participate in new approaches to fetal diagnosis and therapy including chorionic villi sampling and amniocentesis, gain experience with Level II ultrasonography, gain experience in the presentation of conferences, and gain exposure to genetics counseling. The course is designed to assist in prenatal diagnosis, identifying genetic abnormalities, and managing medical complications that can negatively affect pregnancy. Maternal clinical conditions include hypertensive disorders in pregnancy, cardiovascular and pulmonary disease, diabetes mellitus in pregnancy, urinary tract infections in pregnancy, autoimmune disorders complicating pregnancies, abnormal fetal growth, multiple gestation and Rh disease. Fetal conditions include omphaloceles, gastroschisis, neural tube defects and cardiac anomalies.

**Learning Activities**

Students will participate in daily clinical care and work closely with Dr. Fuentes. Students will participate in prenatal consultation with other pediatric sub-specialists. Students will spend a day a week with the genetics counselor. Students will prepare a case presentation based on a clinical encounter and present at the Fetal Board Conference held on the third Monday of each month.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

**ELECTIVES**  
**OPHTHALMOLOGY**  
**/**  
**PEDIATRICS**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Clinical Ophthalmology Elective**  
Clerkship Director: Mont Cartwright, M.D.

**MDE 8550 9**

Full-time (4 weeks)

(PO) Medical Eye Associates

Grading Basis: Pass/Fail

First Day: Report to 921 N. Main St., Kissimmee, 34744  
@ 8:00 am. Contact Anita Miller at least 2 weeks before  
the start of the rotation.

Primary Faculty Supervisor: Dr. Mont Cartwright

Contact Person: Anita Miller,

(407) 933-7800 x127; [amiller@medeyedoc.com](mailto:amiller@medeyedoc.com);

Peter Sefcik, [marketing@medeyedoc.com](mailto:marketing@medeyedoc.com)

Maximum Enrollment: 1 per block

A 4 week rotation will be developed by the elective faculty and the student based on individual student goals. Core competencies to be achieved during the elective include general eye examination and ophthalmoscopic examination skills and exposure to ophthalmic surgery. For more advanced students or those available for longer time commitments, students will assist in ophthalmic surgical procedures, workup and presentation of ophthalmic cases to faculty and have the opportunity to present and or write a case report for publication. There are no weekend clinics outside of call. Call will be limited to accompanying staff to after-hours emergency evaluations (rare).

**Objectives:**

1. Achieve proficiency in the evaluation of patients with ocular disorders.
2. Establish familiarity within common eye conditions and their treatment.
3. Recognize ocular manifestations of systemic disease.
4. Become familiar with the clinical procedure ophthalmology.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Nephrology Elective**

**Clerkship Director: Robert Mathias, M.D.**

**MDE 8445 7**

**Full-time (2-4 weeks)**

**(NCH) Nemours Children's Hospital & Nemours  
Associated Clinics**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Robert Mathias**

**Contact person: Maria Kierulf, (407) 567-3876;**

**[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am**

This two or four-week elective rotation, open to fourth year medical students, will provide a broad learning experience in pediatric Nephrology. Learning will occur through direct provision of care to children requiring Nephrology consultation. Learning will also occur through formal and informal didactic presentations, bedside teaching, and through directed and undirected reading. The medical student will serve as an integral part of the care team, providing direct patient care as appropriate under the supervision of the Nephrology attending.

The overall goal of the Nephrology elective is to acquire an in-depth knowledge and experience with commonly encountered renal problems of infants and children. This elective also includes adequate time to pursue readings that focus on pathophysiology of disease processes. With this information as a background, the Medical student will acquire a good understanding of the management and long-term outcomes of common renal disorders in children.

During the rotation, the medical student will, under the guidance of a supervising Nephrology physician, evaluate, examine, discuss, treat, and follow hospital inpatients and outpatients with proven or suspected Nephrologic diseases, including, but not limited to, those with hematuria, proteinuria, hypertension, urinary tract infections, kidney stones, nephrotic syndrome, acute kidney injury, chronic kidney disorder, and kidney transplantation.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Endocrinology Elective**

Clerkship Director: Colleen Moran-Bano, M.D.

**MDE 8430 7**

Full-time (2-4 weeks)

(NCH) Nemours Childrens Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Shilpa Gurnurkar

(407) 567-3855, [Shilpa.gurnurkar@nemours.org](mailto:Shilpa.gurnurkar@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital lobby  
at 8:30 am

Learn the basics of Pediatric Endocrinology. Provide in depth exposure and experience in the diagnosis and treatment of endocrine disorders with a focus on the multidisciplinary care of the diabetic child. Also growth disorders, disorders of puberty, and obesity and its complications.

**Objectives:**

1. Diagnosis and treatment of Type 1 & 2 diabetes.
2. Differential diagnosis and treatment of growth disorders.
3. Differential diagnosis and treatment of pubertal disorders.
4. Recognition of obesity and complications.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Hematology/Oncology**

Clerkship Directors: Dorothea Douglas, M.D.

**MDE 8440 7**

Variable (2-4 weeks)

(NCH)

First Day: Report to 13535 Nemours Parkway, Orlando, FL @ 9:00 a.m.

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Dorothea Douglas; [dorothea.douglas@nemours.org](mailto:dorothea.douglas@nemours.org)

Contact person: Maria Kierulf,

(407) 567-3877; [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

Pediatric hematology and oncology including bone marrow transplant. On this rotation the student will be exposed to a wide spectrum of pediatric hematology and oncology diseases. Patient care and consultation experience will be provided primarily in the pediatric hematology/oncology clinic, as well as through inpatient consults, and inpatient experience can be obtained if desired. The student will observe lumbar puncture and bone marrow examination procedures. Students will spend approximately one day with the hematopathologist examining normal and abnormal peripheral blood smears and bone marrow slides.

**Objectives:**

1. Learn how to diagnose and treat hematologic problems in children.
2. Understand mechanisms of immune manipulation in pediatric BMT.
3. See and understand common childhood malignancies.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**General Outpatient Pediatrics with Nursery**

**MDE 8900 9**

Full-time (2-4 weeks)  
(PO)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Sharon Dicristofaro

[Sharon.DiCristofaro@nemours.org](mailto:Sharon.DiCristofaro@nemours.org); 407-542-1733

Contact person: Maria Kierulf

[Maria.kierulf@nemours.org](mailto:Maria.kierulf@nemours.org)

Maximum Enrollment: 1 each block (no December)

\*must have specific interest in pediatrics

First Day: Report to NCPC Oviedo, 7455 Pinemire Drive  
Oviedo, FL @ 8:00 a.m.

This rotation will provide medical students a broad exposure with insights into the specialty of Pediatrics focusing on newborn nursery care and outpatient primary care. In the newborn nursery, the students will be exposed to routine newborn care and common neonatal illnesses such as hyperbilirubemia, suspected sepsis, and respiratory distress. In the outpatient clinic, the student will encounter a wide variety of acute and chronic illness, simple trauma/injury care, and well child care from 0-18 years with an emphasis on normal development, preventative medicine, and immunizations.

The student will participate in daily rounds in the nursery and see sick and well visits in the primary care office. The student will be responsible for all components of the visit (including history, physical examination, assessment/plan, and counseling) under the guidance of their faculty preceptor.

Additionally, the student and faculty will mutually agree upon a topic to be presented to office staff as a formal presentation prior to the end of the rotation. The student may participate in phone communication with families, giving immunizations after training, and other procedures as opportunity arise at the discretion of their preceptor.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**General Outpatient Pediatrics Clinic**

**MDE 8409 9**

Full-time (2-4 weeks)  
(PO)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Participating CHA  
Providers

Contact person: *Maria Kierulf*

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block (no December)

\*must have specific interest in pediatrics

First Day: Report to NCPC locations (including central florida area, Winter Haven, Vero Beach, Palm Bay, and the Villages) @ 8:00 a.m. Housing will not be provided.

This rotation will provide medical students a broad exposure with insights into the specialty of Pediatrics focusing on outpatient primary care. The student will encounter a wide variety of acute and chronic illness, simple trauma/injury care, and well child care from 0-18 years with an emphasis on normal development, preventative medicine, and immunizations.

The student will participate in sick and well visits in the primary care office. The student will be responsible for all components of the visit (including history, physical examination, assessment/plan, and counseling) under the guidance of their faculty preceptor. Additionally, the student and faculty will mutually agree upon a topic to be presented to office staff as a formal presentation prior to the end of the rotation. The student may participate in phone communication with families, giving immunizations after training, and other procedures as opportunity arise at the discretion of their preceptor.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Ultrasound**

Clerkship Director: Monica Epelman, M.D.

**MDE 8775 7**

Full-time (2-4 weeks)  
(NCH)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Monica Epelman

[Monica.epelman@nemours.org](mailto:Monica.epelman@nemours.org)

Contact person: Maria Kierulf  
(407) 567-4301-1509; [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to 13535 Nemours Parkway, Orlando,  
FL @ 9:00 a.m.

This rotation is designed to provide medical students with insights into the specialty of Pediatric Ultrasound. Ultrasound is a widely used diagnostic modality in pediatric care. During this rotation, students will have the opportunity to enhance their ultrasound scanning and interpretation skills with hands-on practice and focused mentoring. Students will work individually with Nemours radiology faculty and staff to build their ultrasound experience and develop an understanding of how ultrasound is utilized when caring for pediatric patients. By the end of the rotation students will have gained exposure to the role of ultrasound in the diagnostic process for pediatric cases and they will be better equipped to acquire and interpret pediatric ultrasound images.

**Objectives:**

1. Enhance ultrasound scanning and interpretation skills
2. Develop an understanding of how ultrasound is utilized when caring for the pediatric patient
3. Gain exposure on the role of ultrasound in the diagnostic process for pediatric cases
4. Apply up to date evidence based information to address clinical questions and to guide medical therapy as it related to ultrasound imaging
5. Evaluate their own performance, identifying gaps in their knowledge base, and target their self directed learning to improve performance and address knowledge gaps
6. Provide, request and accept and incorporate feedback from all colleagues and from patients and their families
7. Work with all members of the health care team to enhance team and knowledge.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Pulmonary Elective**

Clerkship Director: Floyd Livingston, M.D.

**MDE 8425 7**

Full-time (2-4 weeks)

(NCH) Nemours Childrens Hospital

Grading Basis: Pass/Fail

First Day: Report to Nemours Children's Hospital Lobby @ 8:30 am

Primary Faculty Supervisor: Dr. Floyd Livingston and Dr. Shatha Yousef

(407) 567-3868, [flivings@nemours.org](mailto:flivings@nemours.org) and [shatha.yousef@nemours.org](mailto:shatha.yousef@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877; [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

This clinical course will be based on basic respiratory physiology and will include a variety of clinical pulmonology experiences such as infectious disease of the lungs, hypersensitivity lung disease, cystic fibrosis, asthma, pulmonary reactions to chemical injury and trauma, radiologic evaluation of lung disease, pulmonary pathology, flexible bronchoscopy, pulmonary function testing, exercise physiology, sleep disordered breathing, apnea of prematurity/infancy, congenital disorders of the respiratory tract, home ventilation and chronic lung disease of infancy. Patient care and consultation experience will be gained on the inpatient services, intensive care units, and in the pediatric pulmonology clinic. In addition, the student will spend time in the pediatric pulmonary function and sleep laboratories.

**Objectives:**

1. Describe normal patterns of breathing in infants and children.
2. Demonstrate proficiency in the examination of the respiratory system.
3. Diagnose and treat asthma according to national guidelines.
4. Demonstrate proficiency in the management of children with cystic fibrosis.
5. Describe strategies for managing the complexities of the treatment of BPD.
6. Interpret basic pulmonary function testing in children.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Cardiology**

Clerkship Director: Colleen Moran-Bano, M.D.

**MDE 8420 7**

**Full-time (2-4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Eva Nunlist**

**Contact person: Maria Kierulf, (407) 567-3876;**

**[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Nemours Children's Hospital lobby**

**@ 8:30 am**

The overall goal of this rotation is to provide a comprehensive program toward the recognition and management of major/common pediatric cardiology problems. Emphasis will be on the pathogenesis, pathophysiology, diagnosis and management principles of congenital and acquired heart disease in the young. Additional time will be spent on the understanding, recognition and management of pediatric cardiac rhythm disturbances and general pediatric cardiology issues.

**Objectives:**

1. Elicit a thorough and accurate history and performing comprehensive cardiovascular examination of neonates, infants, children and adolescents.
2. Detect significant heart disease through history and physical exam.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Gastroenterology Elective**

Clerkship Director: Colleen Moran-Bano, M.D.

**MDE 8433 7**

Full-time (2 or 4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Jolanda Denham,

[Julia.denham@nemours.org](mailto:Julia.denham@nemours.org)

Contact Person: Maria Kierulf, 407-567-3876;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 per block

First Day: Report to Nemours Children's Hospital  
lobby @ 8:30 am

On this rotation the student will be exposed to a wide spectrum of pediatric gastrointestinal and liver diseases. Patient care and consultation experience will be provided in the pediatric gastroenterology clinic, inpatient service and intensive care units. The student will participate in a full range of endoscopic, monomeric and biopsy procedures.

**Objectives:**

1. Describe normal feeding patterns from infancy through adolescence.
2. Explain how differential diagnosis and work-up is used for the evaluation of chronic recurrent abdominal pain in the pediatric patient.
3. Evaluate a child with abnormal liver function tests.
4. Evaluate a child with gastroesophageal reflux.
5. Manage a child with gastroesophageal reflux.
6. Describe a diagnostic approach for the child with vomiting or hematochezia.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Basics of Adolescent Medicine**

**MDE 8900 7**

Full-time (4 weeks)  
(NCH)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Lonna Gordon

Lonna.gordon@nemours.org

Contact person: Maria Kierulf,

(407) 567-3882; [maria.kierulf@nemours.org](mailto:maria.kierulf@nemours.org)

Maximum Enrollment: 1 each block (No block 2, 7 or 8)

First Day: Report to Nemours @ 9:00 a.m. for orientation then to adolescent clinic afterwards.

This rotation is a hands on experience that illustrates the role of the physician in specialty of Adolescent medicine. During the rotation the student will be provided with opportunities to work as a part of the multidisciplinary team that provides care to adolescent patients in the outpatient setting. Adolescents are in a complex time of transition and thus their needs are physical as well as psychological and social. Students will learn how to provide care in a biopsychosocial context. By the end of the rotation it is expected that medical students will have developed a knowledge base and clinical skills allowing them to understand the following concepts: 1) The developmental tasks of each stage of adolescence and how they impact biopsychosocial functioning 2) The underlying premise and rationale for adolescent risk taking on a neurocognitive level 3) How to utilize motivational interviewing to create behavior change 4) How to proficiently take an adolescent social history known as HEADDSS 5) Basic work up and management of common menstrual concerns, gynecologic problems, contraception counseling, as well as STI testing and treatment in adolescents.

Students are expected to attend grand rounds, morning report, and resident learning sessions. Additionally, the student will learn about special populations of adolescents by visiting community partners that provide services to them. The student is also expected to complete a 15 minute oral presentation on an adolescent biopsychosocial topic inspired by a patient seen in clinic. They must submit their proposed topic by end of week 2 and the presentation will be given during week 4.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Infectious Diseases**

Clerkship Director: Colleen Moran-Bano, M.D.

**MDE 8454 7**

Full-time (2-4 weeks)  
(NCH)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Adriana Cadilla  
[adriana.cadilla@nemours.org](mailto:adriana.cadilla@nemours.org); (407) 567-6724

Contact person: Maria Kierulf,  
[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am

This two or four week elective rotation, open to fourth year medical students, will provide a broad learning experience in pediatric infectious diseases. Learning will occur through direct provision of care to children requiring infectious diseases consultation at the Nemours Children's Hospital and at Nemours-associated clinics. Learning will also occur through formal and informal didactic presentations, bedside teaching, and through directed and undirected reading. The medical student will serve as an integral part of the care team, providing direct patient care under the supervision of the infectious diseases attending.

This rotation will emphasize diagnostic assessment through a detailed history, a careful physical examination, and appropriate use of laboratory studies. The rotation also emphasizes appropriate use of antimicrobial therapy, the understanding of post pathogen relationships, and the importance of social, emotional, physical, and medical legal issues that impact children with infectious diseases.

During the rotation, the medical student will, under the guidance of a supervising infectious disease physician, evaluate, examine, discuss, treat, and follow hospital inpatients and outpatients with proven or suspected infectious diseases, including, but not limited to, those with nosocomial infections, postoperative infections, trauma-related infections, septicemia, pneumonia, peritonitis, and infections in immunocompromised hosts, including patients with primary immunodeficiency syndromes, patients undergoing immunosuppressive therapy, and children and adolescents with HIV infection.

**Objectives:**

Medical students will demonstrate compassionate scientifically guided and effective care for the promotion of health, prevention of illness, and treatment of disease. Medical students must:

1. Demonstrate the ability to acquire and evaluate new information needed for the care of each patient.
2. Demonstrate the ability to perform meticulous physical examination of children across the age spectrum.
3. Demonstrate the ability to create comprehensive differential diagnoses that include both infectious and noninfectious etiologies for the patient's illness.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### **Pediatric Infectious Diseases continued**

4. Analyze accurately and apply available information to make appropriate diagnostic decisions and therapeutic plans.
5. Demonstrate the ability to create and evaluate patient management plans for children with infectious diseases.

#### **Medical Knowledge**

Medical students must demonstrate proficiency and obtaining new knowledge through didactic lectures discussions on rounds, a signed and unguided readings, use of the internet, and consultation with colleagues. Students will apply an open-minded, analytical approach to acquire a new knowledge, and will assess their knowledge critically through continued use of the medical and scientific literature. Students will also apply new knowledge to clinical problem solving and to clinical decision making.

1. Describe the pathogenesis, clinical presentation diagnostic approaches to infections encountered in children in the inpatient and outpatient settings.
2. Describe the appropriate use of diagnostic procedures and laboratory tests to evaluate and monitor children with suspected or proven infections.
3. Demonstrate competence for the selection of appropriate antibiotics, and demonstrate the ability to provide appropriate recommendations for antimicrobial use and monitoring.
4. Demonstrate knowledge and skill in the critical assessment of complex clinical infectious diseases problems
5. Demonstrate knowledge of the appropriate, evidence-based management of inpatient and outpatient children with infectious diseases.
6. Demonstrate knowledge of approaches for diagnosis and management of proven and suspected infections in immunocompromised children.
7. Demonstrate an understanding of the rationale for and nature of infection control policies.
8. Demonstrate understanding of the variation in epidemiology of infectious diseases among different age groups, states 4 immune function, socio-demographic groups, and geographic locations.

#### **Practice Based Improvement:**

Medical students are expected to evaluate and critically assess patient care practices, as well as appraise and disseminate clinical information. Students will also demonstrate an ability to learn from their own and others' mistakes

- Demonstrate proficiency in the use of the pediatric infectious diseases literature
- Apply up-to-date evidence-based information to address clinical questions and to guide medical therapy
- Evaluate their own performance, identifying gaps in their knowledge base, and target their self directed learning to improve performance and address knowledge gaps.
- Provide, request, and accept and incorporate feedback from all colleagues and from patients and their families
- Work with all members of the health care team to enhance team and knowledge and esprit de corps.

#### **Interprofessional and Communication Skills:**

Medical students are expected to demonstrate consistent interpersonal and communication skills that result in effective information exchange and support of families and colleagues.

- Demonstrate effective communication with the entire health care team
- Demonstrate effective communication with patients and their families



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Pediatric Infectious Diseases continued

- Demonstrate the ability to communicate crucial and appropriate information through written medical records and patient case presentations
- Demonstrate appropriate use of cultural and language interpreters as needed
- Demonstrate the ability to counsel and educate patients and their families in a comprehensive, supportive, and culturally-appropriate manner

**Professionalism:** Medical students are expected to practice consistently high-quality healthcare that is cost effective and beneficial to the patient within the context of the health care system.

- Always act in the best interest of the patient
- Demonstrate a caring and respectful demeanor when interacting with patients and their families
- Maintain patient and family confidentiality
- Demonstrate sensitivity to ethical principles, culture, age, gender, religious belief, sexual orientation, and a disability
- Be punctual, reliable, and conscientious

**Systems Based Practice:** Medical students are expected to practice consistently high-quality healthcare that is cost effective and beneficial to the patient within the context of the health care system.

- Advocate for patients and their families as they navigate the complexities of the healthcare system
- Describe a role of the subspecialist in consultation
- Participate in multidisciplinary patient care activities
- Participate actively and regularly in educational and case management conferences
- Demonstrate knowledge of restrictions in public and private insurance and the ramifications of these restrictions in the care of patients



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Ophthalmology/Pediatrics

**Pediatric Orthopaedics Elective**

Clerkship Director: Alec Stall, M.D.

**MDE 8485 7**

Full-time (2-4 weeks)

(NCH) Pediatric Emergency Department

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Alec Stall,

[Alec.Stall@nemours.org](mailto:Alec.Stall@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital @  
8:30 am

Time will be divided between outpatient clinics, inpatient rounds and surgery. Weekly preoperative and post-operative clinics are held, as are didactic conferences. Call is encouraged but not required.

**Objectives:**

1. Upon completion of the course, the student should be able to perform a complete pediatric orthopaedic examination.
2. Be able to treat simple fractures and be aware of the dangers and possible complications of the more complicated fractures.
3. He/She should be able to apply a cast and able to use traction.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

Ophthalmology/Pediatrics

### Pediatric Otolaryngology Elective

Clerkship Director: Colleen Moran-Bano, M.D.

#### MDE 8592

Full-time (2-4 weeks)

(NCH) Nemours Childrens Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Cynthia Chen

(407) 414-1348, [Cynthia.chen@nemours.org](mailto:Cynthia.chen@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Contact Kallie Lowery

[Kallie.lower@nemours.org](mailto:Kallie.lower@nemours.org) a week before the start to confirm your start date, receive assignments for the rotation and for specific first day instructions. Report to Nemours Children's Hospital lobby @ 8:30 am for a tour and brief orientation.

This rotation is intended for students interested in but not excluding Pediatric Otolaryngology, Pediatrics, Family Medicine, Emergency Medicine, Critical Care, Allergy subspecialties, and Pulmonary subspecialties. Pediatric otolaryngologists are NOT pediatricians, but surgeons who completed 5 years of otolaryngology-head and neck surgical training, followed by surgical fellowship in pediatric otolaryngology. The rotation provides students opportunity to see children in clinic setting with common conditions such as snoring, sleep disordered breathing, nasal symptoms like congestion, runny nose, understand that "sinusitis" is over-diagnosed, learn about acute versus chronic otitis media, conductive versus sensorineural hearing loss and their impact on speech development, congenital anomalies of the head and neck, swallowing dysfunction, tracheostomy dependent children, and all ENT issues for healthy and medically complex children. Students will gain understanding of how Otolaryngologists work with primary care physicians to evaluate, diagnose, determine surgical candidacy, provide surgical risk and complication counseling, and treat these common conditions. Students will also have opportunity to see complex Otolaryngology care involving Neuro-otologic procedures such as cochlear implantation, airways procedures, and head and neck surgeries.

Otolaryngologists are also frequently involved in the care of children with complex medical conditions, so students will be exposed to children with Downs syndrome and other craniofacial syndromes and abnormalities and participate in complex medical decision making.

Students will be expected to become familiar with guidelines for medical treatment and surgical candidacy as set forth by national societies such as the AAP and AAO-HNS.

The student will be expected to attend educational conferences such as surgical grand rounds, journal clubs, morbidity and mortality conference, and aerodigestive multidisciplinary conference. The student will be expected to give an 8-10 minute case and topic presentation at least once during the rotation. We hope that by the end of the rotation, the student will become comfortable and competent with basic clinical skills specific to ENT, such as using otologic equipment with the microscope, performing nasal and laryngeal endoscopy, and understanding wound care.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

# **ELECTIVES PSYCHIATRY/ NEUROLOGY**



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

Psychiatry/Neurology

### Psychiatry Elective

**MDE 8836 6**

Full-time (4 weeks)

(PV) Pasadena Villa (Residential)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Myrtho Mompoin-Branch

[drbranch@pasadenavilla.com](mailto:drbranch@pasadenavilla.com)

Contact Person: Jessica Cuadros,

(407) 246-5254; [Jessica.cuadros@pasadenavilla.com](mailto:Jessica.cuadros@pasadenavilla.com);

[karay.perkins@pasadenavilla.com](mailto:karay.perkins@pasadenavilla.com); [drbranch@pasadenavilla.com](mailto:drbranch@pasadenavilla.com)

Maximum Enrollment: 1 per block (Except September and November)

First Day: Report to 119 Pasadena Place, Orlando, FL  
32803 @ 9:00 am

Goal is to assume responsibility for psychiatric intake assessments for Pasadena patients who have a wide variety of psychiatric disorders. Become familiar with the transitional program at Pasadena Villa which helps patients work on life skills. No on-call. No weekend duties.

#### Objectives:

1. Perform and document complete psychiatric diagnostic evaluations in a residential care setting. The patient population has a variety of various psychiatric disorders including Autism Spectrum Disorders.
2. Identify psychopathology and develop appropriate biopsychosocial evaluation and treatment plans.
3. Demonstrate good interpersonal and communication skills that results in effective exchange of information with patients, families, and the treatment team.
4. Demonstrate ability to review professional literature and utilize evidence-based medicine to improve patient care.
5. Demonstrate and apply knowledge of psychopharmacology topics in treatment planning and management.
6. Demonstrate an ability to monitor and document patient's clinical progress and update recommendations for treatment plan as indicated.

#### Learning Activities:

1. The student will present a topic in medication group to help the patients understand medications, side effects or mechanisms of actions.
2. The student will attend the transitional living and learning groups at Pasadena.
3. The student will participate in multidisciplinary treatment team meetings to provide feedback on assigned patients.
4. The student will prepare an in-service didactic presentation on relevant topic in Psychiatry to present to staff.
5. Informal discussions Dr. Branch of assigned readings.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

## Electives

Psychiatry/Neurology

### UCF RESTORES Treatment Center for PTSD

**MDE 8844**

Full-time (4 weeks)

(UCFM) UCF Main Campus

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Deborah Beidel;

[Deborah.Beidel@ucf.edu](mailto:Deborah.Beidel@ucf.edu)

Contact Person: Sandra Neer, (407) 823-1668;

[Sandra.neer@ucf.edu](mailto:Sandra.neer@ucf.edu)

Maximum Enrollment: 1 per block (September, October, November,  
January, February, March and April only)

First Day: Report to UCF Main Campus Psychology  
Building, UCF RESTORES 2<sup>nd</sup> Floor @ 9:00 am.  
Parking decal required.

This rotation will provide the student with the opportunity to learn, and implement, pharmacological and behavioral interventions for posttraumatic stress disorder, acute stress, and anxiety disorders. The student will participate in group and individual therapies, assist with biological procedures such as transcranial magnetic stimulation (if appropriate patients are available). A major emphasis of the Center is the use of technologies (tables, apps, virtual reality) to augment existing interventions. Furthermore, the student will learn about resilience and preventative strategies as they relate to posttraumatic stress disorder and acute stress.

#### **Objectives:**

**Patient Care:** The medical student is expected to provide patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness and treatment of disease.

**Medical Knowledge:** Provide individual behavioral treatment for PTSD. Provide Group treatment for PTSD. Assist in provision of biological treatments such as transcranial magnetic stimulation.

**Practice Based Improvement:** Identify areas for improvement based on assessment using standardized diagnostic interviews. Learn how to apply single case design strategies to assess efficacy of interventions with respect to patient improvement. Participate in ongoing research protocols to develop new, empirically supported interventions.

**Interprofessional and Communication Skills:** Provide effective consultation to behavioral health care team and to patients. Document intervention efforts in the electronic medical record. Discuss patient progress in group and individual supervision in behavioral and empirical terms.

**Professionalism:** The medical student will display compassion and respect for patients, understand and respect diversity, display professionalism toward patients, colleagues and supervisors.

**Systems Based Practice:** The student will demonstrate knowledge of the multi-disciplinary nature of behavioral health and utilize evidence based practices to treat psychiatric disorders.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Post-Traumatic Stress Disorder continued**

**Learning Activities:**

The student will learn to use virtual reality and virtual environments to provide evidence based treatments. The student will be responsible for presenting at journal clubs, research meetings and weekly supervision. Given the student's interest and activities of the clinic, the student may participate in ongoing research activities.

The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic and participation in educational conferences. There will be a formal feedback session at mid term and at the end of the rotation.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Psychiatry/Neurology**

**Academic Psychiatry Elective**

**MDE 8890**

**Full-time (4 weeks)**

**(VA) Lake Nona VA**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Anuja Mehta**

**[Anuja.mehta@ucf.edu](mailto:Anuja.mehta@ucf.edu)**

**Contact Person: Anuja Mehta,**

**(407) 266-1165; [anuja.mehta@ucf.edu](mailto:anuja.mehta@ucf.edu)**

**Maximum Enrollment: 1 per block. By permission only.**

**First Day: Report to 4<sup>th</sup> floor COM Room 411F**

**@ 9:00 am. Reach out to Dr. Mehta in advance  
to discuss scholarly topic.**

In this elective, students will develop a scholarly project, do clinical and classroom teaching of junior medical students and help deliver residents as teacher didactics to residents. No weekend or call duties.

**Objectives:**

1. Obtain thorough history in a psychiatry patient, develop differential diagnoses, know the management of common psychiatric diseases.
2. Identify areas for improvement and implement strategies to enhance knowledge, skills and process of care, develop and maintain a willingness to learn from errors, demonstrate ability to use technology or other available methodologies to access and manage information, to support patient care decisions. Specifically, student will be asked to bring at least 3 specific questions related to patient care each week during journal club and the course director will demonstrate how to use evidence based tools to improve their care
3. Provide effective and professional consultation to other physicians and health care team, effectively document the patient history and plan of care and effectively communicate information with family members of the patient.
4. Demonstrate respect, compassion, integrity and altruism in relationship with patients, families and colleagues. Demonstrate respect for religious beliefs, adhere to the principles of confidentiality, recognize and identify areas of improvement in personal and in peer performance.
5. Utilize resources to provide optimal health care, recognize limitations and opportunities regarding the individual patient care, apply evidence based, cost conscious strategies to prevention, diagnosis and disease management.

**Learning Activities:**

1. Students will spend 30% of the time in rotation doing clinical work. Student will be expected to interview, present and generate preliminary differential diagnosis and treatment plan. There may be other responsibilities as assigned by the clinic attending. In addition, the student will read a journal article and present it to the course director each week. Student will also spend majority of the rotation working on a scholarly project that will ultimately be disseminated in some format. Student will also participate in resident as teacher activities with the Faculty Development team members.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Psychiatry/Neurology**

**Child and Adolescent Psychiatry Elective**

**MDE 8873**

**Full-time (4 weeks)**

**(PO) Private Office**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Rashesh Dholakia**

**[dholakia@orangepsychassociates.com](mailto:dholakia@orangepsychassociates.com)**

**Contact Person: Dr. Dholakia,**

**(407) 675-3220**

**Maximum Enrollment: 1 per block**

**First Day: Report to 251 Maitland Ave, Suite 304,  
Altamonte Springs, FL 32701 @ 9:00 am**

This rotation is designed to provide medical students with insights into the specialty of Child & Adolescent Psychiatry. By the end of this rotation it is expected that medical students will have developed a knowledge base and clinical skills allowing them to conduct a full psychiatric diagnostic interview/assessment and formulate biopsychosocial treatment plans for common psychiatric disorders in children. There will be a focus on the following clinical skills: diagnostic interviewing and development of a therapeutic alliance; crisis intervention and management; and effective communication with the patients multidisciplinary treatment team. It is anticipated that clinical conditions the students will encounter include: ADHD, Autism Spectrum Disorders, OCD, Mood disorders including Major Depressive Disorder, DMDD and Bipolar Disorder, PTSD, and Psychotic disorders including schizophrenia

**Objectives:**

1. Perform and document a psychiatric diagnostic evaluation and develop recommendations for appropriate biopsychosocial evaluation (including laboratory, radiologic, and psychological testing) and treatment plans.
2. Recognize indications for psychiatric hospitalization, considering the presenting problem and its acuity, and any risk of danger to the patient or others; when necessary, help implement the process of hospitalization from outpatient setting.
3. Formulate appropriate differential diagnoses and psychiatric management plans.
4. Demonstrate the ability to appraise and assimilate scientific evidence, utilizing relevant databases of psychiatric evidence-based medicine, to improve patient care.
5. Utilize resources to provide optimal health care, recognize limitations and opportunities regarding the individual patient care, apply evidence based, cost-conscious strategies to prevention, diagnosis and disease management.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Psychiatry/Neurology

**Neurodegenerative Disease: Research & Clinical Care**

Clerkship Director: Stephen Berman, M.D.

**MDR 8802 9**

Full-time (2-4 weeks)  
(PO) Compass Research  
100 W. Gore St., Orlando, FL  
Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Ira Goodman

[ijgmd@aol.com](mailto:ijgmd@aol.com)

Contact person: Jessica Oldenburg, Office Manager,  
(407) 288-9907; [joldenburg@compass-clinic.com](mailto:joldenburg@compass-clinic.com)

Maximum Enrollment: 1 each block (Not available  
blocks 1-2, 5-6, 8, or 11)

First Day: Report to Compass Research, 100 W. Gore St.,  
Suite 406, Orlando, FL @ 9:00 a.m.

The focus of the elective is to provide students an intensive exposure to evaluation and management of patients with neurodegenerative disease, with a focus on Alzheimer's dementia and Parkinson's disease. The clerkship director (Dr. Riggs) has fellowship-level training in these areas, and the primary faculty (Dr. Goodman) has over 20 years' experience in care and evaluation of these patients. The elective will take place in the context of patients referred for possible participation in clinical trials, and exposure to clinical trial methodology is an additional focus. No on-call duties, no weekend activity.

**Objectives:**

1. Demonstrate the ability to assess patients with neurodegenerative disease; generate a thorough differential diagnosis for such patients; plan initial diagnostic and treatment interventions; discuss eligibility for clinical trials.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

**ELECTIVES**  
**RADIOLOGY/  
ANESTHESIOLOGY**  
**/**  
**EMERGENCY  
MEDICINE**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Radiology/Anesthesiology/Emergency Medicine**

**Diagnostic Radiology Clerkship**

**MDE 8763 3**

Variable (2-4 weeks)

(VA) Radiology Department

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Rashmi Mediratta

[Rashmi.Mediratta@va.gov](mailto:Rashmi.Mediratta@va.gov)

Contact person: Bryan Yi, [bryan.yi@va.gov](mailto:bryan.yi@va.gov)

(321) 805-6978;

[vhaorlmedicaleducationcoordinators@va.gov](mailto:vhaorlmedicaleducationcoordinators@va.gov)

Maximum Enrollment: 1 each block (Not available blocks 1,2,3,7,8 or 10)

First Day: Report to front desk of Orlando VAMC, Radiology Administrative office at 9:00am. Look for Marta Hill or Dr. Mediratta

**MDE 8763 3**

Variable (2-4 weeks)

(VA Bay Pines) Radiology Department

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Velasco

[Maria.Velasco@va.gov](mailto:Maria.Velasco@va.gov)

Contact person: VHA Medical Education Coordinators,

[vhabayacademicaffiliations@va.gov](mailto:vhabayacademicaffiliations@va.gov)

(727) 398-6661 x15563;

Maximum Enrollment: 1 each block

First Day: Report to 10000 Bay Pines Blvd, Building 100, Room 2A-162B at 8:30am.

This rotation is open to all M4s and is particularly suited to students who have completed a general radiology elective or plan to pursue a career in Radiology. The student will gain experience in this exciting field which will utilize all modalities of radiology (general radiography, ultrasound, fluoroscopy, nuclear medicine, CT, and MRI). Students will participate in radiology procedures, readout of cases and weekly case presentations. There are no call or weekend responsibilities.

Rotations can be general diagnostic radiology which will give an overview of all modalities—or specialty-specific rotations (i.e. Angio-interventional Radiology, Pediatric Radiology, Neuroradiology, Nuclear Medicine, Cardiac Radiology, Body (MRI, CT, US, Oncology combined); Musculoskeletal Radiology, and Women's Radiology).

**Objectives:**

1. Understand the clinical radiographic indications for a variety of imaging modalities and examinations.
2. Understand the major procedure-specific activities of physicians and associated pediatric patient experiences for the differing image modalities.
3. Gain familiarity and develop basic interpretive and diagnostic skills regarding the radiographic appearance of common pediatric pathological processes for commonly utilized imaging modalities.
4. Develop basic skills required for the professional presentation of radiologic material for daily work rounds and weekly case conferences.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Radiology/Anesthesiology/Emergency Medicine**

**Diagnostic and Interventional Radiology**

**Clerkship Director: Stephen Berman, M.D.**

**MDE 8765 C**

Variable (2-4 weeks)

(HoF) Heart of Florida

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Kevin Sawyer

Contact person: Dr. Kevin Sawyer;

(863) 688-2334; [ksawyer@risimaging.com](mailto:ksawyer@risimaging.com)

[jaykirti.patel@adventhealth.com](mailto:jaykirti.patel@adventhealth.com);

[LaQusia.Jackson@heartofflorida.com](mailto:LaQusia.Jackson@heartofflorida.com)

Maximum Enrollment: 1 each block

First Day: Report to Heart of Florida Medical Center- @  
8:00 a.m. Orientation is provided on Monday mornings  
at 8am.

This rotation is designed to provide medical students with insights into the specialty of radiology. The students will be exposed to both the diagnostic and interventional aspects of radiology in a hospital setting. Students will have the opportunity to work closely with the radiologists on site and the rotation will provide education in the care and management of patients from a radiologists perspective. The rotation will encourage students to do several case presentations on topics they have encountered during the rotation.

**Objectives:**

1. Students will learn the basic approach to interpreting a wide modality of imaging studies and will improve their knowledge in imaging interpretation. This includes X-Ray, CT, MRI, ultrasound and nuclear medicine interpretation.
2. Students will also be exposed to several interventional radiology procedures and learn a basic approach and skill set to perform these procedures. Procedures include biopsies and drainages as well as fluoroscopic procedures and interpretation.
3. Apply evidence based, cost conscious strategies to diagnosis in diagnostic radiology.
4. Advocate for patients and the families and help them understand and navigate the medical system complexities involved in diagnostic radiology.
5. Students will give multiple case presentations and literature reviews on interesting patients they encounter on service as well as on other radiologic topics of their choosing. Radiologists will also provide weekly case presentations and literature reviews to the student to increase their knowledge base.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

## Electives

Radiology/Anesthesiology/Emergency Medicine

### Neuro-Radiology: Currently Unavailable

Clerkship Director: Stephen Berman, M.D.

#### MDE 8767 9

Full-time (2 weeks)

(PO) Neuro-Skeletal Imaging of Winter Park

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Marc Shapiro

Contact person: Dr. Marc Shapiro

(407) 478-1550; [shapmd@gmail.com](mailto:shapmd@gmail.com) &

[vscott@neuroimagingwp.com](mailto:vscott@neuroimagingwp.com) & Richard Duemmling

[RDuemmling@neuroimagingwp.com](mailto:RDuemmling@neuroimagingwp.com)

Maximum Enrollment: 1 each block (every other block) Radiology, Neuro surgery or Neurology only

First Day: Report to NSI of Winter Park, FL, 2111  
Glenwood Drive., Suite 101, Orlando, FL 32792  
@ 11:00 a.m.

The focus of the elective is to provide students an intensive exposure to various modalities used in imaging the central nervous system, with a focus on MRI or CT. Students will gain experience interpreting results. No on call-duties and no weekend coverage.

#### Objectives:

1. Demonstrate competence in the selection of imaging tests to evaluate central nervous system structure and physiology; demonstrate familiarity with standards of care for patients undergoing neuro-imaging procedures; demonstrate basic skills in interpretation of common neuroimaging modalities.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Radiology/Anesthesiology/Emergency Medicine**

**Pediatric Radiology**

**Clerkship Director: Arthur Meyers, M.D.**

**MDE 8769 7**

**Full-time (2 or 4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Arthur Meyers,**

**[Arthur.Meyers@nemours.org](mailto:Arthur.Meyers@nemours.org)**

**Contact person: Maria Kierulf, (407) 567-3877;**

**[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)**

**Maximum Enrollment: 1 each block**

**First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am**

This rotation is open to all M4s and is particularly suited to students who have completed a general radiology elective or plan to pursue a career in a pediatric specialty. The student will gain experience in this exciting field which utilizes all modalities of radiology (general radiography, ultrasound, fluoroscopy, nuclear medicine, CT and MRI). Students will participate in radiology procedures, read-out of cases, and weekly case presentations. There are no call or weekend responsibilities.

**Objectives:**

1. Understand the clinical and radiographic indications for a variety of pediatric imaging modalities and examinations.
2. Understand the major procedure specific activities of physicians and associated pediatric patient experiences for the differing modalities.
3. Gain familiarity and develop basic interpretive and diagnostic skills regarding the radiographic appearance of common pediatric pathological processes for commonly utilized imaging modalities.
4. Develop basic skills required for the professional presentation of radiologic material for daily work rounds and weekly case conferences.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Radiology/Anesthesiology/Emergency Medicine

**Pediatric Emergency Medicine**

Clerkship Director: Jose Rubero, M.D.

**MDE 8505 7**

Full-time (4 weeks)

(NCH) Pediatric Emergency Department

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Nick Erbrich

[Nicolas.erbrich@nemours.org](mailto:Nicolas.erbrich@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 2 each block

First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am

**MDE 8505 5**

**Must be scheduled through ClinicianNexus**

Full-time (4 weeks)

(HCA) Osceola Regional Pediatric Emergency Department

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Ariel Vera

[arielveramd@outlook.com](mailto:arielveramd@outlook.com)

Contact person: Berliza Cruz, GME Coordinator, (407) 518-3347,

[Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)

Maximum Enrollment: 2 each block

First Day: Students should contact site directly.

The course is designed to expose the student to patient assessment and emergency management of a large number of pediatric patients entering a metropolitan Pediatric Emergency Department. Instruction is centered around bedside clinical supervision by faculty and residents in a busy Pediatric Emergency Department. Students will be expected to prepare a 45 minute case presentation from one of the cases encountered during their rotation.

Students will work eight hour shifts with approximately 5 shifts per week. These shifts will include 2 weekends per month. Shifts will be distributed between day and evening (not overnight) shifts.

**Objectives:**

1. Gain exposure to both emergent and urgent care of pediatric patients.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Radiology/Anesthesiology/Emergency Medicine**

**Emergency Medicine Elective**

**Clerkship Director: Jose Rubero, M.D.**

**MDE 1ave 5**

**Must be scheduled through ClinicianNexus**

**Full-time (4 weeks)**

**(HCA)**

**Grading Basis: Pass/Fail (must pass EM knowledge assessment at end of rotation)**

**First Day: Medical Arts Building, 720 West Oak St, Suite 201, Kissimmee, FL at 7:30am**

**Primary Faculty Supervisor: Dr. Jose Rubero**

**Contact person: Berliza Cruz, GME Coordinator, (407) 518-3347, [Berliza.Cruz@hcahealthcare.com](mailto:Berliza.Cruz@hcahealthcare.com)**

**Maximum Enrollment: 1-2 per block**

**MDE 8710 3**

**Full-time (4 weeks)**

**(VA) VA Bay Pines**

**Grading Basis: Pass/Fail**

**First Day: Students should report to Education Department-Building 20, room 200 at 8:00am.**

**Primary Faculty Supervisor: Dr. Jason Johnson**

**Contact person: LaVetta Bynum; [LaVetta.Bynum@va.gov](mailto:LaVetta.Bynum@va.gov); 727-398-6661 ext. 10775**

**Maximum Enrollment: 1 per block**

This course is designed to expose the student to patient assessment and Emergency Department management of a large number of patients entering a metropolitan Emergency Department and Pediatric Emergency Department. During this elective, the student will have responsibilities, supervision, and performance expectations comparable to that of a starting first year EM resident. Instruction is centered around bedside clinical supervision by faculty and residents in two busy Emergency Departments. A comprehensive didactic schedule is provided and includes conferences prepared for residents and students, as well as conferences designed exclusively for students. If available, there will be teaching time dedicated to the use of Ultrasound in the Emergency Medicine setting.

**Objectives:**

1. Perform an appropriate history and physical examination on pediatric, adult, and geriatric patients.
2. Recognize common, urgent, and emergent problems, and develop a differential diagnosis for these common presentations.
3. Interpret results of common lab studies, recognize basic ischemic patterns and arrhythmias on EKG tracings and interpret radiographs of the chest, abdomen, and extremities.
4. Recognize the indications for the specialty or subspecialty consultation and/or admission.
5. Apply real time data acquisition to patient management.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

Radiology/Anesthesiology/Emergency Medicine

### Anesthesia Elective

Clerkship Director: Helen Vo, MD

#### MDE 8702 3

Full-time (2-4 weeks)

(VA) VA Lake Nona

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Helen Vo

[Helen.Vo@va.gov](mailto:Helen.Vo@va.gov)

Contact person:

[VHAORLMedicalEducationCoordinators@va.gov](mailto:VHAORLMedicalEducationCoordinators@va.gov)

Maximum Enrollment: 1 each block

**First Day:** On the first day, report to the 3 G POD on clinic side at the Lake Nona VA @ 8:00 a.m. Please review the First Day Reporting Instructions document found on the M4 GPS site. Students should email Medical Education Coordinators to get computer access codes.

The University of Central Florida College of Medicine Selective in Anesthesia will introduce the student to evidence based care of the patient requiring surgery in an outpatient setting. They will have exposure to local, regional, or general anesthesia as well as the necessary preparation and care rendered in the preoperative and perioperative setting. The student will spend 2-4 weeks on the anesthesia service. Students will be responsible for the evaluation and workup of patients in the outpatient setting. There will also be opportunity for evaluation and assessment for patients receiving care for chronic pain. The student will be responsible for regular attendance. Students will be exposed to a series of practice based learning (PBL) sessions designed to illustrate common clinical anesthesia problems.

#### Objectives:

##### Medical Knowledge:

1. Begin to learn the fundamentals of anesthesiology as applied to surgery. Examples include the effect of induction agents, inhalation anesthetic agents, and muscle relaxants. Students should obtain an understanding of the effect of these agents on the respiratory physiology, circulatory physiology, and the fluid and electrolyte balance of the surgical patient. Evaluation of blood gas analysis and treatment of acid/base disorders.
2. Begin to understand the anesthesia preoperative exam and the concerns faced by the anesthesiologist when anesthetizing a surgical patient.
3. Understand the reasoning for ordering diagnostic laboratory procedures in the preoperative patients. Examples include liver function tests, serum chemistries, arterial blood gas analyses and hematologic profiles.
4. Begin to understand the different types of anesthetic care. *Examples include general anesthesia, spinal anesthesia, epidural anesthesia, and regional anesthesia and an understanding of when the various types of anesthetic care are indicated and which patients will benefit from regional versus general anesthesia.*
5. Begin to understand the commonly used anesthesia non-invasive monitors and the anesthesia machine.
6. Begin to understand the methods of securing/supporting an airway and associated complications.
  - a. Anatomy of the airway (adult vs. pediatric)
  - b. Airway assessment



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Anesthesia Elective—Continued

- c. Basic skills and tools to maintain ventilation and oxygenation
  - d. Outline the proper and safe way to inducing patients including rapid sequence inductions
  - e. Outline basic intubation techniques
  - f. Outline the Difficult Airway Algorithm
  - g. Perform a successful laryngoscopy and intubation on an adult with normal anatomy.
7. Begin to understand the medical procedural treatment of chronic pain syndromes.

#### **Patient Care:**

1. Perform pre-anesthetic physical examinations including specific knowledge regarding the patient's airway and possible need for advanced airway intubation techniques. Basic Airway management—the student should be able to perform an airway exam, demonstrate proper use of oral/nasal airways, show different ways of delivering oxygen to patients, perform bag-mask and bag-endotracheal tube ventilation on patients, and demonstrate the ability to perform basic laryngoscopy/intubation, and atraumatic placement of laryngeal mask airway (LMA).

#### **Interpersonal Communication Skills:**

1. Demonstrate skill and sensitivity when counseling and educating patients and their families in a variety of anesthesia options.
2. Work effectively with the health care team.
3. Present patients in a concise, organized, logical, and knowledgeable manner.
4. Exhibit honesty, reliability, good communication skills, and appropriate judgment.

#### **Practice-Based Learning and Improvement:**

1. Use textbooks and journal articles to learn principles of anesthesia as applied to surgery.
2. Attend department of surgery conferences.

#### **Systems-Based Practice:**

1. Understand the relationship and shared responsibilities between anesthesiologists and surgeons.

#### **Professionalism:**

1. Demonstrate adequate communications skills while dealing directly with patients.
2. Arrive in the OR on time, prepared for the procedure.

#### **Procedures:**

Under appropriate supervision, the student will have the opportunity to assist and at times perform basic anesthesia procedures such as:

- Tracheal intubation using different techniques
- Regional anesthesia, spinal and epidural
- Placement of intravenous lines



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

Radiology/Anesthesiology/Emergency Medicine

### Pediatric Anesthesia

Clerkship Director: Colleen Moran-Bano, M.D.

#### **MDE 8511 7**

Full-time (2-4 weeks)  
(NCH)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Lisgelia Santana

[lisgelia.santana@nemours.org](mailto:lisgelia.santana@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am

The fourth year rotation is designed to provide senior medical students with insights into the subspecialty of anesthesiology and the importance of the anesthesiologist in caring for patients prior to surgery, during surgery, and during the post-operative period. The rotation is hands-on and illustrates the role of the anesthesiologist in the clinical setting. During the rotation, students are assigned to an individual faculty mentor to guide them and be responsible for their daily clinical activities.

During the rotation, students become familiar with the many facets of the practice of anesthesiology, including the perioperative setting, pre-anesthetic evaluation, inducing and maintain anesthesia during surgery, patient emergence from anesthesia and post anesthesia care. By the end of the rotation, it is expected that the medical student will have developed a knowledge base allowing them to identify and manage common pre-operative concerns facing anesthesiologists and surgeons; developed an awareness and appreciation of the importance of patient safety relative to the anesthesiologist and operative course to the patient; comprehend pharmacological dosing, effects, and complications related to various anesthetic techniques; acquire a basic facility with airway and ventilator manipulation; and be able to contribute substantially to the management of regional or general anesthetics under the supervision of a licensed anesthesiologist. Our rotation is an opportunity for the medical student to gain valuable experience and knowledge of the operating room setting. You will be exposed to the challenges faced by anesthesiologists and surgeons on a daily basis and how contribute to the provision of excellent patient care while coping with the demands of a busy clinical setting. You are also expected to attend Morbidity and Mortality lectures as well as Surgical Grand Rounds on the first and second Wednesday of each month. Also a brief powerpoint presentation is required at the end of the rotation. The medical student will also interact with the Pain Clinic once or twice during the rotation. This is a valuable educational opportunity not only for those students who are considering anesthesiology as a specialty career path, but also for those who want to develop practical skills and knowledge that can serve as a foundation for practice in other specialties.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

# **ELECTIVES SURGERY**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Clinical Elective in Vascular Surgery**

**MDE 8605 3**

**Full-time (4 weeks)**

**First Day: Report to the Lake Nona VA Vascular Surgery Clinic Room 3G-902 @ 7:30 am. Please review the First Day Reporting Instructions document found on the M4 GPS. Students should email Medical Education Coordinators to get computer access codes.**

**(VA) VA Lake Nona**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Frederick Fisher;**

**[Frederick.Fisher@va.gov](mailto:Frederick.Fisher@va.gov); 407-868-7820**

**Contact Person: (407) 629-1599 x1143;**

**[VHAORLMedicalEducationCoordinators@va.gov](mailto:VHAORLMedicalEducationCoordinators@va.gov)**

**Maximum Enrollment: 1 per block**

Goal of clinical elective is to expose fourth year medical students to the vast array of vascular disease seen at a busy Veterans Administration Hospital including the risk factors for disease, clinical presentation, and treatment modalities. The risk factor modification for these patients with multiple medical co morbidities will be stressed. The history and physical findings will be the cornerstone of the workup for these patients with appropriate laboratory and radiologic studies based on the findings. Treatment options will include non-surgical approaches, minimally invasive approaches and surgical approaches. Since these patients have multiple organ systems affected by their diseases, the students will need to integrate many of the disciplines they have learned over the first three years of medical school training. This will give the students an early opportunity to sharpen clinical skills in history taking, physical diagnosis, and decision making. These skills have a broad application to all fields of medicine, so elective is appropriate to students interested in surgery or non-surgical fields.

The radiology department works closely with the vascular surgery department so the student will have ample opportunities to review studies in radiology. The students will follow their patients to the operating room and the PACU to further their learning of the disease process.

The student will be given the opportunity to create a presentation of one or two patients to the members of the department at either the multidisciplinary conference or the surgical conference. If the presentation warrants publication in a peer reviewed journal, then the student may go on to write a case report for submission with the assistance of the clerkship director.

Initially there will be no night or weekend activities. Once the VA hospital opens there will be opportunity to incorporate this into the program.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Clinical Elective in Vascular Surgery continued**

**Objectives:**

1. Identify and respect patients' differences and expressed needs.
2. Listen to, clearly inform, and communicate well with patients.
3. Share decision making management with emphasis on disease prevention and wellness with a promotion of healthy lifestyles.
4. Use established and evolving clinical and basic science knowledge to further patient care.
5. Assimilate appropriate scientific evidence to improve patient care.
6. Improve communication skills regarding information transfer with patients and their families.
7. Maintain professional behavior with strict adherence to accepted ethical standards.

**Learning Activities:**

1. Patient care will include daily patient visits in clinic. Student will be given advance notice of specific type of clinical problems to prepare for the encounter. After each patient visit a review of appropriate history and physical including relevant radiologic studies will occur with the instructor.
2. Student will be present in operating room twice on most weeks.
3. Review of literature will be continuously stressed by the instructor.
4. Student will be given opportunity for case presentation as noted above.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Introduction to Trauma and Surgical Critical Care**

**MDE 8682 5**

**Full-time (4 weeks)**

**First Day: Report to Trauma Administrative Office, 305 N Mangoustine Ave, Sanford 32771 @ 7:00 am.**

**(HCA) Central Florida Regional Hospital Sanford**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Pappas**

**Contact Person: (407) 924-7767; [peterpappas52@gmail.com](mailto:peterpappas52@gmail.com)**

**Maximum Enrollment: 1 per block (Only available 2, 4, 6, 8 and 10)**

Students will function as an integrated member of the trauma team at Central Florida Regional Hospital, a Florida Department of Health certified level II Trauma Center serving Seminole County and portions of Lake, Volusia and Brevard. Working with the trauma team, students will participate in ICU and Neurosurgical ICU rounds, floor rounds, trauma resuscitations, emergency room consults and follow-ups in the Trauma outpatient clinic. Patients will also be present for surgical interventions and procedures, including emergency surgery for trauma and general surgery as well as central line and chest tube placement.

**Objectives:**

1. Learn how to perform a history and physical exam for trauma patients
2. Learn the key aspects of the history and physical exam to identify common surgical diseases presenting to the emergency room
3. Learn appropriate examination of critically ill patients in the ICU setting
4. Develop skills for patient evaluation for follow up of complex injury in the clinic setting

**Learning Activities:**

1. Students will be embedded in the trauma team and work closely with faculty and team members. They will participate in ICU and floor rounds and observe trauma alerts, surgeries, and procedures. Additional clinical modules will expose students to emergency medicine, anesthesia and orthopedic and neurosurgical trauma care.
2. Lectures and workshops will be offered to supplement clinical experience, including modules on ventilator function, neuro critical care, hemorrhage control and intensive care unit monitoring. Students will also be exposed to the administrative, regulatory and financial aspects of modern trauma care.
3. At the completion of the rotation, students will present a capstone talk on a topic of interest to the faculty and trauma team.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Plastic Surgery 4<sup>th</sup> Year Elective**

Clerkship Director: David M. Plank, M.D., FACS

**MDE 8660 9**

Full-time (4 weeks)

(PO) Mid Florida Institute of Plastic Surgery

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. David M. Plank

[dmplank@gmail.com](mailto:dmplank@gmail.com) ; 513-604-3802

Contact person: *Cindy McGrath*

(407) 960-6936; [cindy-1910@hotmail.com](mailto:cindy-1910@hotmail.com)

Maximum Enrollment: 2 each block

First Day: Report to Mid Florida Institute of Plastic Surgery, 390 North Maitland Ave, Suite #1000, Altamonte Springs, 32701 at 8:00 am. Wear office attire or white coat.

Students will gain exposure to the diverse specialty of plastic surgery by working in office, operating room and hospital settings, (Orlando Health and Advent Health), with a number of private practice surgeons, whose differing interests will provide a broad exposure. Occasional weekend cases may exist if an attending is on ER call.

**Objectives:**

1. Understand basic principle of wound management, with emphasis on preservation of vital tissues and structures.
2. Demonstrate proficiency in basic suturing techniques.
3. Have a basic understanding of the broad specialty of plastic surgery.
4. Show competence in the evaluation of plastic surgery using a problem-based approach to formulate a surgical plan.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Aesthetic Plastic Surgery Rotation**

**Clerkship Director: Jacob Gerzenshtein, M.D., FACS**

**MDE 8900 9**

Full-time (4 weeks)

(PO) Finer You

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Jacob Gerzenshtein

[jacob.gerzenshtein@gmail.com](mailto:jacob.gerzenshtein@gmail.com)

Contact person: Keli Emery

(863) 647-2200; [keli@fineryou.com](mailto:keli@fineryou.com)

Maximum Enrollment: 1 each block (no July or December)

First Day: Report to 4429 Florida National Drive, Lakeland, FL 33813 at 8:00 am. Wear office attire or white coat.

This rotation will take the student to a private office setting. The focus of this facility is largely aesthetic surgery, but students also experience other plastic surgical procedures done on an outpatient basis. The objectives of this rotation are to gain experience and participate in cosmetic procedures involving the face, breast and body. The rotating student will spend two-three days per week in the operating room and two days in the clinic.

**Objectives:**

1. Advanced suturing techniques, simple reconstruction of small to moderate cancer resection defects.
2. The student will be responsible for a weekly review of 2 articles in plastic and reconstructive surgery, to include CME approved content. This will be combined with weekly discussion of the reviewed material.
3. Students will be expected to explain patient pathology to the selected patients as well as various options for surgical treatment of the issue at hand under direct supervision.
4. Didactic presentations on ethics are beyond the time constraints of this rotation, however, informal discussions prior to patient encounters will be an essential part of pointing out specific patient issues and sensitivities. This is essential to a practice rooted in elective procedures.
5. The hospital based trauma call portion is more in line with mainstream medicine in that various specialties are involved in the treatment of the multiply injured patient and care must be coordinated effectively, clearly, and in a timely fashion. The student will be expected to participate in the organization of this care and demonstrate effective communication with residents and mid-level providers charged with direct patient care.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Colon and Rectal Surgery Rotation**

**MDE 8676 9**

Full-time (4 weeks)  
(PO)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Sergio Larach

[swlarach@aol.com](mailto:swlarach@aol.com)

Contact person: Sergio Larach

(407) 797-5893; [swlarach@aol.com](mailto:swlarach@aol.com)

Maximum Enrollment: 1 each block (no December)

First Day: Report to 100 N. Dean Road, Suite 203,  
Orlando, FL 32825 at 9:00 am.

This rotation will build on the knowledge of the 4<sup>th</sup> year medical student in the workup, diagnosis, treatment and follow up of a wide variety of surgical diseases involving the colon, rectum and anus. There will be a broad experience caring for patients with inflammatory bowel disease. Evidence based practices will be emphasized. Students will be responsible for the evaluation and workup of patients in both the inpatient and out-patient setting. Participation in daily inpatient rounds as well as in a wide array of bedside surgical procedures and major operative interventions under general anesthesia will take place. In the office setting, students will participate in all diagnostic procedures, including colonoscopy, GI endoscopy and anoscopy/sigmoidoscopy. The student will be expected to attend all conferences, journal clubs and other educational experiences and will be required to present topics and discuss articles with the faculty.

**Objectives:**

1. Learn fundamentals of basic science as they apply to the clinical practice of colorectal surgery.
2. Understand GI anatomy and physiology, GI diseases, diagnosis and management and risks and complications of GI endoscopy.
3. Understand the indications and recommendations for surveillance and diagnostic endoscopy.
4. Develop a meaningful differential diagnosis and appropriate diagnostic plan for the evaluation of common colorectal disorders.
5. Begin to develop knowledge of surgical pathophysiology, pharmacology, physiology in diagnosing and managing the patient with colorectal disease.
6. Begin to formulate a minimal diagnostic and treatment plan for colorectal disease requiring surgical intervention.
7. Begin to understand the roles of surgery, chemotherapy, and radiation therapy as measures in the total management of the colon cancer patient.
8. Begin to develop some understanding of the roles of surgery and pharmacology in the total management of patients with inflammatory bowel disease.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Surgery**

**Intro to Ortho Surgery and Musculoskeletal Care Elective (NOT CURRENTLY AVAILABLE)**

**Clerkship Director: Charles Giangarra, M.D.**

**MDE 8900**

**Full-time (2-4 weeks)**

**(UCF) UCF College of Medicine**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Charles Giangarra,**

[Charles.giangarra@ucf.edu](mailto:Charles.giangarra@ucf.edu)

**Contact Person: Maria Baretto, (407) 882-4753;**

[Maria.barreto@ucf.edu](mailto:Maria.barreto@ucf.edu)

**Maximum Enrollment: 2 per block (No June or December)**

**First Day: Report to UCF Health Quadrangle  
@ 8:00**

This rotation is designed to provide medical students with insights into the specialty of Orthopaedic Surgery and Musculoskeletal Care.

**Objectives:**

1. The rotation is hands on, one on one with the preceptor. The student will be exposed to a wide variety of musculo-skeletal injuries and illnesses involving the bones, joints, and muscles in a broad spectrum of patients from pediatric to geriatric. These would include but not limited to sprains, strains, fractures, arthritis, back and neck pain. The student will be expected to perform a history and physical exam on new patients and be involved in outlining a treatment plan.
2. By the end of the rotation the student will have become more proficient in their history and physical diagnosis skills involving common problems involving the extremities of the back.
3. The student will be expected to perform two detailed case presentations in a 4 week rotation, and one in a two week rotation, including a current literature review with discussion of the pathology and treatment options. There may also be a short quiz at the end of the rotation as well on assigned reading topics.
4. The goal of this rotation is to benefit not only students interested in orthopaedic surgery but those students interested in primary care who would like to improve their knowledge base in musculoskeletal care and learn when a referral to a specialist is indicated.
5. When students are scheduled to the operating room the first case is usually at 7:30am but will be allowed the time necessary to go to Grand Rounds on Wednesdays. The students should arrive 30 minutes prior to the start of the case to discuss with the preceptor the planned procedure. The student should have reviewed the patients chart before coming into the OR, be familiar with the surgical anatomy that will be encountered, and have read at least one source describing the planned procedure.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Orthopaedic Spine Surgery Elective**

Clerkship Director: Maahir Haque, M.D.

**MDE 8900**

**Full-time (4 weeks)**

**(PO) Private Clinic (Celebration and Sand Lake)**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Maahir Haque,**

[maahirhaque@gmail.com](mailto:maahirhaque@gmail.com)

**Contact Person: Dr. Haque Office (321) 939-0222;**

**Maximum Enrollment: 2 per block**

**First Day: Call preceptor to discuss.**

Rotating students will gain experience in a busy orthopedic spine surgery practice. Spine surgery is unique in that while the surgical practice is quite specialized, the outpatient management of patients requires a working understanding of and diagnostic skills necessary to rule in/out a variety of pathophysiologies based on a patient's complaint, physical exam, laboratory data, and imaging findings. Rotating students will begin to understand how the successful management of a patient must begin with a proper diagnosis. Pain and neurologic complaints are an extremely common presenting issue for patients across multiple disciplines from primary care to emergency medicine to oncology or the surgical specialties. By the end of the rotation, students are expected to have developed a knowledge base and clinical skills necessary to be able to identify and understand some very basic orthopedic and spine surgery complaints. Students are welcome but not expected to participate in the inpatient practice, potentially to include observation in the OR. The student is expected to complete an EBM project during the rotation to present to the team.

**Learning Activities:**

Students will participate in weekly didactics. Students will prepare a literature review on a specialty topic and give a brief presentation. Students will be expected to participate in office hours with the preceptor or, on occasion, with his partners in the office. When students are scheduled to the operating room, the first case starts at 7:30am except on alternating Fridays, when the first case will start at 8:30am. The student should arrive 30 minutes prior to the first case to be able to discuss the treatment plan with the assigned preceptor and help prepare the operating room for the first case.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Essentials of Musculoskeletal Care in Primary Care Elective**

Clerkship Director: Nandan Shah, M.D.

**MDE 8900**

**Full-time (4 weeks)**

**First Day: Report to 604 Oak Commons Blvd @ 8am**

**(PO) Private Clinic (Orthopaedic Associates of Osceola)**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Nandan Shah, [nshah2@gmail.com](mailto:nshah2@gmail.com)**

**630-854-7066**

**Contact Person: Ana Davila (321) 402-5051;**

**[anadoao@cfl.rr.com](mailto:anadoao@cfl.rr.com)**

**Maximum Enrollment: 4 per block (Blocks 6, 8, 10 and 11 only)**

This rotation is designed to provide medical students with insights into the specialty of Orthopedic Surgery. The focus of this rotation will be to start initial evaluation, examination and treatment of musculoskeletal complaints in a primary care setting. Students are not expected to go to the operating room or learn procedural skills:

- Students should be able to evaluate various causes of neck and back pain at the end of the rotation.
- Students should be able to evaluate various causes of shoulder pain, elbow pain, and wrist pain at the end of the rotation.
- Students should be able to evaluate various cases of hip pain, knee pain, and ankle pain at the end of the rotation.

**Learning Activities:**

Students will have an opportunity to follow 3-4 orthopedic surgeons specializing in various sub-specialties over a 4 week period. Students are expected to learn initial evaluation and focused musculoskeletal exam in office based setting. Students will have didactic sessions twice a week at 7am on Tuesdays and Wednesdays focusing on differential diagnoses, natural history of various musculoskeletal pathologies, conservative treatment options and surgical indications. Students will have opportunity to interview and examine patients independently and subsequently see the patient again with supervising surgeon. Interested students can take initiative to learn commonly administered musculoskeletal injections.

Clinical knowledge will be evaluated through a quiz at the end of the rotation based on information from didactic sessions. Students will be given a 40 question quiz and have 90 minutes to complete it. Students must score at least 80% on the quiz. Can be retaken a week later if needed. If not passed on the second attempt, no credit will be given for the course.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Pediatric Neurosurgery Elective**

Clerkship Director: Stephen Berman, M.D.

**MDE 8491 7**

Full-time (2-4 weeks)

(NCH) Nemours Children's Hospital  
@ 8:30 am

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Christopher Gegg,

[christopher.gegg@nemours.org](mailto:christopher.gegg@nemours.org)

Contact Person: Maria Kierulf, (407) 394-0335;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 per block

First Day: Report to Nemours Children's Hospital  
lobby

Monday-Friday round with neurosurgeons, assist with surgery, Minimal call, one weekend per month.

**Objectives:**

1. Understand neurosurgical issues related to children.
2. Manage acute neurological problems.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Pediatric Orthopedic Surgery Elective**

**MDE 8485**

**Full-time (2-4 weeks)**

**(NCH) Nemours Children's Hospital**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Alec Stall,**

[Alec.Stall@nemours.org](mailto:Alec.Stall@nemours.org)

**Contact Person: Maria Kierulf, (407) 567-3877;**

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

**Maximum Enrollment: 1 per block**

**First Day: Report to Nemours Children's Hospital lobby @  
8:30 am**

This rotation is intended for the student interested in orthopedic surgery, pediatrics, and pediatric or family practice sports medicine. This rotation will prove an opportunity to gain insight and experience with the diagnosis and management of orthopedic surgical disorders of childhood. It will provide an overview of pediatric orthopedic topics selected from topics required by national pediatric, family practice, and orthopedic residency programs. The medical student will be expected to be involved in the workup, diagnosis, treatment, and follow up of patients with a wide variety of pediatric orthopedic surgical diseases. The student will be involved with the patient evaluation in the emergency department, outpatient clinic, and inpatient setting. He/She will also be involved in daily inpatient rounds, outpatient clinic, minor procedures, as well as well as major operations. The student will be expected to present in the orthopedic surgery education conference weekly, attend grand rounds, journal clubs, and morbidity and mortality conference. Call will be 1 week day and 1 weekend day per rotation for 2 week elective, and 2 week days and 1 weekend day per rotation for 4 week electives.

**Objectives:**

**Patient Care:**

1. Recognize common pediatric orthopedic surgical problems and emergencies in children.
2. Recognize orthopedic surgical complications in children.
3. Assist with the workup of new patients in the emergency department, outpatient clinic, and inpatient setting.
4. Assist in preparing patients for discharge.

**Medical Knowledge:**

1. Learn the fundamentals of basic sciences in pediatric orthopedic surgery.
2. Learn pediatric orthopedic common diagnoses and their management.
3. Read for the operative cases and be prepared for the OR.
4. Understand the pathology of pediatric orthopedic diseases.
5. Understand diagnostic tests commonly used pediatric orthopedic patients.
6. Practice evidence-based medicine by reviewing the literature.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Pediatric Orthopedic Surgery Elective continued**

**Practice Based Improvement:**

1. Utilize a pediatric orthopedic surgery textbook and journal articles to study pediatric orthopedic diseases.
2. Document patient care activities in the medical chart in a timely fashion.
3. Utilize electronic educational resources.

**Interprofessional and Communication Skills:**

1. Learn to communicate well with families and children.
2. Learn to interact with the surgical team.
3. Work well with other members of the health care team.

**Professionalism:**

1. Continue life-long learning.
2. Maintaining confidentiality of patient information.
3. Maintain sensitivity to others' cultures, age, gender, and disabilities.
4. Maintain accountability for personal actions and decisions.

**Systems-Based Practice:**

1. Only communicate appropriately with families under the direction of Faculty.
2. Communicate with the health care team members about the surgical patients.

**Learning Activities**

The medical student will present in the weekly pediatric orthopedic surgery education conference. He/She will present in daily inpatient rounds, attend pediatric orthopedic surgery clinic, and participate in surgeries. He/She will also practice evidence-based medicine by performing literature searches on the pediatric orthopedic surgery diseases of their patients.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Pediatric Surgery Elective**

Clerkship Director: Andrew Taitano, M.D.

**MDE 8490 7**

Full-time (4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Tamarah

Westmoreland, [tamarah.westmoreland@nemours.org](mailto:tamarah.westmoreland@nemours.org)

Contact person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital lobby

@ 8:30 am

Understand basic diagnosis and therapeutic management of pediatric surgical disease. Will participate in all inpatient and outpatient activities, including weekend rounds.

**Objectives:**

1. Take accurate H&P, see patients in consultation, participate in all didactic discussions and learn basic surgical technique.



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

## Electives

### Surgery

### Pathology and Laboratory Medicine

Clerkship Director: Richard Pepler, M.D.

#### **MDE 8530 7**

Full-time (4 weeks)

(NCH) Nemours Children's Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Dennis Drehner, [Dennis.drehner@nemours.org](mailto:Dennis.drehner@nemours.org)

Contact Person: Maria Kierulf, (407) 567-3877; [Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 1 per block (June, August, October, January, and March only)

First Day: Report to Nemours Children's Hospital lobby @ 8:30 am

#### **MDE 8530 3**

Full-time (4 weeks)

(VA) Lake Nona VA

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Anthony Roche; [Anthony.roche@va.gov](mailto:Anthony.roche@va.gov)

or Dr. Fady Baddoura, 407-631-2578 [Fady.Baddoura@va.gov](mailto:Fady.Baddoura@va.gov)

Contact Person: [Vhaorlmedicaleducationcoordinators@va.gov](mailto:Vhaorlmedicaleducationcoordinators@va.gov)

Maximum Enrollment: 1-5 per block (Not available June-August)

First Day: Report to Orlando VAMC Laboratory Room (2<sup>nd</sup> Floor, room 2J210) @ 9:00 am

Students will rotate through multiple areas of the clinical laboratory and anatomic pathology. They will shadow pathologists performing specific procedures including frozen sections, fine needle aspirations, and autopsies, and will have hands-on experience in processing surgical pathology specimens. They will participate in an active hematopathology service and learn about applications of molecular pathology for disease diagnosis. Exposure to clinical chemistry and blood banking will also be included.

#### Objectives:

1. Describe gross and microscopic pathology for multiple tissue types and correlate findings with clinical presentation.
2. Discuss the appropriate role of clinical laboratory testing for select disease processes.
3. Become familiar with a few select laboratory instruments and how they function, including interferences and limitations.
4. Gather appropriate laboratory and clinical information and interpret findings to select additional testing processes.
5. Communicate effectively with laboratory and other health care professionals.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Surgery**

**Forensic Pathology \*Currently Unavailable**

**Clerkship Director: Deanna Oleske, M.D.**

**MDE 8533 9**

**Full-time (2-4 weeks)**

**(PO) St. John's County Medical Examiner's Office**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Deanna Oleske**

**Contact Person: Deanna Oleske,**

**(904) 209-0820; [doleske@sjcfl.us](mailto:doleske@sjcfl.us)**

**Maximum Enrollment: 2 each block (not available 2a and 9b)) \*Free housing may be available**

**First Day: Report to 4501 Avenue A, St. Augustine, FL 32095 at 8:30am. 2 weeks prior to the rotation, the student will need to complete and email paperwork available on <http://medex.sjcfl.us/interns.aspx>**

The course is designed to provide medical students with insights into the specialty of forensic pathology. Students will have the unique opportunity of performing selected forensic autopsies under direct supervision of the medical examiner and when not assigned an autopsy, to actively participate and assist the attending physician performing the autopsy. Additional clinical duties include: writing autopsy reports, reviewing histology and critical thinking about the cause and manner of death. The rotating student is expected to learn a hands on approach in anatomy, interpretation of post mortem toxicology, abstracting medical records, as well as appropriate synthesis of clinicopathologic correlation. The rotating student will also be exposed to forensic death investigation, review cremation requests, and observe testimony/depositions.

**Objectives:**

1. The medical student is expected to provide accurate information, compassion and effective communication to law enforcement, families of the deceased, hospital representatives, and to members of the office.
2. Basic principles of performing an autopsy, collecting the appropriate samples, submitting sections for histology, interpreting post mortem toxicology, correlating autopsy findings with medical diseases, abstraction from medical charts, understanding jurisdiction and death certification.
3. Demonstrate the ability of synthesizing gross and microscopic autopsy findings to appropriately assign a case of manner of death.
4. Provide effective communication to the medical examiners, the members of the medical examiner's office, law enforcement, hospitals and family members of the deceased.
5. Students are expected to show commitment to integrity and compassion to all of those within the medical examiner's office, law enforcement and families.
6. The student will learn the systematic approach to determining appropriate cause and manner of death by abstracting autopsy findings, histology, toxicology and medical record review.
7. Apply evidence based critical thinking skills to future practice for death certification and jurisdiction.
8. On a weekly basis, the student will be required to present a relevant article from the literature that is relevant to an autopsy case that the student performed or assisted. A final 30 minute presentation will be given by the medical student at the end of the rotation. As the opportunity presents, research topics with intent to publish in the medical and forensic literature are available.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Advanced Clinical Anatomy**

**Clerkship Director: Dr. Topping**

**MDE 8520 0**

**Full-time (2 or 4 weeks)  
(UCF COM)**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Daniel Topping**

**Contact person: Daniel Topping,**

**[daniel.topping@ucf.edu](mailto:daniel.topping@ucf.edu)**

**Maximum Enrollment: 3 each block**

**First Day: Report to 411L UCF COM @ 9:00 a.m.**

**Students must contact Dr. Topping by email to set up a phone call to discuss expectations and plans no later than 2 weeks prior to the start of the elective.**

Primary goal of the elective is to provide medical students with the opportunity to study advanced clinical anatomy related to a medical specialty they anticipate applying for graduate medical education. The experience will involve cadaver dissections, literature survey and consulting with clinical specialists in the area they will be working on. The contact time is flexible and does not require any on call responsibility.

**Objectives:**

1. Demonstrate detailed anatomy, and anatomical variations in the area studied.
2. Describe the current knowledge of the anatomy in the area studied.
3. Relate and compare the anatomical knowledge with the current surgical approaches in the area studied.
4. Prepare and give a presentation to the supervising faculty member and assigned clinical faculty on the project outlined in the contract agreed upon at the beginning of the elective.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Surgery

**Introduction to the Ambulatory Surgical Center**

**Clerkship Director: Dr. Sanchez**

**MDE 8606**

**Full-time (2 or 4 weeks)**

**(PO) Private Office**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Virgil Sanchez**

**Contact person: Virgil Sanchez, 407-497-2002**

**[virgilsanchez@hotmail.com](mailto:virgilsanchez@hotmail.com)**

**Maximum Enrollment: 1 each block (Not available in block 3)**

**First Day: Report to Kissimmee Surgery Center, 2275 North Central Ave, Kissimmee, FL @ 7:30am.**

During this rotation students will be assigned to an individual faculty mentor to guide them and be responsible for their daily clinical activities. By the end of the rotation it is expected that medical students will have developed a knowledge base and clinical skills allowing them to assess surgical risk in patients. In addition, the medical students will be exposed to ultrasound guided pain blocks commonly used in ambulatory surgery, ie, Interscalene, popliteal, TAP, axillary blocks. The student will also be exposed to colonoscopies and EGD with emphasis in anatomy and physiology of the gastrointestinal tracts. Knee arthroscopies and inguinal herniorraphy are commonly done as well with the same emphasis on the anatomy. Finally, they will be exposed to the art of medicine of providing anxious and frightened people a pleasant experience. They will start seeing different doctor's approaches of such.

**Learning Activities:**

The student will be required to arrive at the Surgicenter at 7:30 in time for the first scheduled cases. The student will be expected to end the day when the last patient is discharged from the surgicenter. Between these two times, the student will actively participate in assisting the anesthesiologist prepare the blocks, learn airway management, learn radiation safety, review x-rays and interact with over 8 different specialties.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**Surgery**

**Non-Clinical Advanced Surgery Elective**

**Clerkship Director: Dr. Taitano**

**MDE 8900**

**Full-time (4 weeks)**

**(UCF) UCF College of Medicine**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Andrew Taitano**

**Contact person: Katherine Newsum, 407-266-1342**

**[katherine.newsum@ucf.edu](mailto:katherine.newsum@ucf.edu)**

**Maximum Enrollment: min of 4, max of 30 (Blocks 1,2,  
7, 8, 9 and 11)**

**First Day: Zoom meeting (email with meeting ID will be sent prior to start of rotation. Time will be coordinated based on student and instructor availability.**

Students will be responsible for assigned independent study work each week, which includes but is not limited to: operative videos from the Journal of Medical Insight, landmark research articles, textbook chapters, podcasts and various sources regarding both “soft-skills” for surgeons and historical examples of surgical practice and education. Students will be responsible to prepare for and attend scheduled web-based student-led journal clubs, student presentation sessions, and specialty-specific discussion sessions that will occur three to four times weekly and as needed. Lecture/presentation based sessions will include all students in the course. Discussion based sessions will be divided into small groups consisting of at least 4 and no more than 7-8 students to facilitate active participation.

**Learning Activities:**

This rotation is designed to provide medical students with knowledge and insights into the core principles of care of the surgical patient, the historical and contemporary practice of surgery and key topics in selected surgical specialties including vascular surgery, orthopedic surgery, gynecologic surgery, urologic surgery, plastic surgery, head/neck surgery, neurosurgery and ophthalmology. Emphasis will be given to awareness and development of skills and attributes necessary for lifelong learning, education of others, teamwork and leadership.

The student will obtain and develop medical knowledge in the following areas:

- Basic sciences principles of surgery
- Evaluation of pre-operative risk and perioperative risk mitigation practices
- Bedside management of surgical patients
- Core topics in general and trauma surgery
- Emergency and “do not miss” topics in all surgical subspecialties
- In-depth topics in surgical subspecialty of the student’s choice



UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)

# ELECTIVES GENERAL CATEGORIES



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

General Miscellaneous Categories

**Independent Studies/Research at UCF COM**

Clerkship Director: Varies

**MDR 8900 1**

Full-time (4 weeks)

(Various Locations)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Varies

Contact person: *Christie Hasegawa, Coordinator*

UCF COM Registrar's Office

[Christie.Hasegawa@ucf.edu](mailto:Christie.Hasegawa@ucf.edu)

Maximum Enrollment: Varies

The independent study/research elective permits fourth year medical students to pursue, under the sponsorship of UCF COM faculty members, areas of study/research that are not included among regular elective offerings. Arrangements for these electives are made between the student and the faculty member; and will require written administrative approval prior to registration.

**Directed Study/Independent Study at UCF COM**

Clerkship Director: Varies

**MDE 8900 0**

Full-time (4 weeks)

(Various Locations)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Varies

Contact person: *Christie Hasegawa, Coordinator*

UCF COM Registrar's Office

[Christie.Hasegawa@ucf.edu](mailto:Christie.Hasegawa@ucf.edu)

Maximum Enrollment: Varies

Individual study by students under the direction of a faculty member and with the approval of the Assistant Dean of Medical Education and the Associate Dean for Students. Topics vary and will be selected on an individual basis. Arrangements for these electives are made between the student and the faculty member; and will require written administrative approval prior to registration.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

General Miscellaneous Categories

**Independent Studies/Research Elective (Away)**

Clerkship Director: Varies

**MDX 8900**

Full-time (4 weeks)

(Various Locations)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Varies

Contact person: *Christie Hasegawa, Coordinator*

*UCF COM Registrar's Office*

[Christie.Hasegawa@ucf.edu](mailto:Christie.Hasegawa@ucf.edu)

Maximum Enrollment: Varies

The Independent Study/Research elective (away) permits 4<sup>th</sup> year medical students to pursue areas of research/away outside of UCF. Arrangements for these electives are made between the student and the away location supervising faculty member and must be supervised by a UCF COM faculty member. Students must obtain written administrative approval prior to registration.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

General Miscellaneous Categories

**International Elective**

Clerkship Director: Dr. Judith Simms-Cendan

**MDE 8072**

Full-time (4 weeks)

(Various Locations)

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Varies

Contact person: Dr. Judith Simms-Cendan

Director of International Programs @ UCF COM

(407) 266-1171; [Judith.simms-cendan@ucf.edu](mailto:Judith.simms-cendan@ucf.edu)

Maximum Enrollment: Unlimited

Please visit <https://med.ucf.edu/global-health/> for approved electives.

Students interested in completing an elective outside of the United States should contact the Director of International Health Programs. Additional information may be available from the Office of Student Affairs. The process for arranging for an international elective should begin early in the 3<sup>rd</sup> year. Students must obtain written administrative approval prior to registration. All students are required to meet with Dr. Judith Simms-Cendan prior to travel and register the travel with UCF at [www.med.ucf.edu/global-health](http://www.med.ucf.edu/global-health). Prior to traveling, students should review the information in the "Before You Travel" section. Completed forms must be submitted to Dr. Judith Simms-Cendan.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Narrative Medicine Elective

#### **MDE 8048**

Part-time (2 weeks)

(NCH) Nemours Children's Hospital Medical Library

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Olivia DiLeonardo, MLS,

[Olivia.dileonardo@nemours.org](mailto:Olivia.dileonardo@nemours.org)

Contact Person: Maria Kierulf, 407-567-3876;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 2 per block (Block 5-11 only)

First Day: Report to Nemours Children's Hospital lobby  
@ 8:30 am for a tour and brief orientation.

Student will be expected to participate in patient rounds; read/view and be prepared to discuss assigned readings (including short stories, essays, or poetry) and short films; actively participate in close reading exercises; write parallel chart entries (a parallel chart entry is a written, reflective account written by the student reflecting upon a patient encounter); elicit and transcribe patients illness narratives; respond to writing prompts developed by the preceptor; and lead a Narrative Medicine workshop for the M3 and M4 students assigned to NCH.

#### **Goals of the Rotation:**

- Student will learn about the history and development of Narrative Medicine and medical humanities. Student will be able to identify how humanities-related disciplines can "...enhance empathy, perspective-taking, openness to different viewpoints, and to prompt reflection on self, others, and the world." (Kumagai, 2014)
- Student will recognize the ability of the arts to "make strange": "...to trouble one's assumptions, perspectives, and ways of being in order to view anew the self, others, and the world, (which) may serve a critical educational function in the development of reflective, humanistic clinicians." (Kumagai, 2014)
- Students will be able to identify and describe the tenets of Narrative Medicine: attention, representation, affiliation (Charon, 20016)
- Student will learn to conduct close reading exercises using prose, poetry, essays, short films, photography, and works of art assigned by preceptor
- Student will participate in Pediatric Intensive Care (PICU), Neonatal Intensive Care (NICU), and Pediatric Hospitalist rounds with direct faculty preceptor supervision, and write parallel chart entries based upon patient encounters.
- Student will elicit a narrative from a patient, listen while the patients tells his/her story, and then transcribe the story, concentrating on capturing its essence. The student will then read his/her written version of the patient's story back to the patient. This experience will be conducted under the direct supervision of the faculty preceptor. This exercise has been shown to develop the skills of narrative competence and attentive listening, and ultimately result in enhanced affiliation with the patient the patient care experience from the patient perspective. (Chretien et al, 2015; Das Gupta, 0007; Kumagai, 2008)



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Narrative Medicine Elective continued**

- Student will respond to writing prompts and actively participate in discussion of these written entries with preceptor.
- Student will choose a piece of short fiction (poetry or prose), short film, photographs, or work of art and lead a Narrative Medicine exercise for M3 and M4 students assigned to NCH, including a close reading, in-depth discussion, and response to a writing prompt under the direct supervision of the faculty preceptor.

**Learning Activities**

Student will participate in close reading and writing exercises daily, both scheduled with the preceptor as well as independently as directed by the preceptor. Student will participate in NICU, PICU, and Hospitalist rounds, elicit and transcribe patient illness narratives, and write reflectively about patient encounters. Student will actively participate in discussion of readings and his/her reflective writing. At the end of the course, student will lead a 1 and ½ hour Narrative Medicine workshop consisting of close reading exercises, discussion, and writing prompt. These workshops already occur as part of the UCF COM pediatric clerkship at Nemours Children's Hospital and are currently led by the preceptor, Olivia DiLeonardo.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Culinary Medicine

#### MDE 8105

First Day: Report to Rosen College Kitchen Labs.

Full time (4 weeks)

(NCH) Nemours Childrens Hospital

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Robert Karch,

[robert.karch@nemours.org](mailto:robert.karch@nemours.org)

Contact Person: Maria Kierulf, (407) 567-3877;

[Maria.Kierulf@nemours.org](mailto:Maria.Kierulf@nemours.org)

Maximum Enrollment: 24 maximum per block.

Offered February only

Culinary Medicine is a unique approach to nutrition education that integrates medical nutrition therapy principles with culinary medicine techniques. The goal is to introduce future physicians to healthy nutrition and cooking principles and to develop their communication skills around nutrition so that patients and their families can more effectively incorporate nutrition and food preparation knowledge into their daily lives in their own home kitchens. Exposure to the Culinary Medicine elective will enhance medical students' awareness of the positive impact of nutrition and healthy cooking in preventing and treating diet-related illnesses such as obesity, diabetes and coronary heart disease. This unique nutrition education is based upon the culinary medicine curriculum developed at the Tulane school of Medicine. Community partners will include the Second Harvest Food Bank and TMCA of Central Florida. Students will learn culinary nutrition techniques from professional chefs and dietitians at the UCF Rosen College of Hospitality Management and then teach these concepts and techniques to community members of all ages to the community partners using on site kitchens and mobile kitchens.

#### Learning Activities:

1. Module 1: Introduction to Culinary Medicine, Sanitation, Mediterranean Diet
2. Module 2: Weight Management, Portion Control, Nutrition Labels, Healthy Breakfast preparation
3. Module 3: Fat, Texture, Increasing Fiber, Lunch Preparations
4. Module 4: Food Sensitivities and Allergies, Calcium and Osteoporosis, Mindfulness, Local Resources
5. Module 5: Protein, Amino Acids, Vegetarian Diet, Eating Disorders
6. Module 6: Renal Physiology, Hypertension, Sodium and potassium homeostasis, sodium reduction and flavor building.
7. Module 7: Carbohydrates, Diabetes, Snacking and desserts
8. Module 8: Pediatric Diet, Breastfeeding, Meal Planning, Baby Food, Kid friendly meals





# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Aquifer Course (Peds, Radio, IM, WISE, Family Med)

**MDE 8900**

Part-time (2 weeks)

(UCF COM) UCF College of Medicine

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Colleen Moran-Bano

Contact Person: Ken Staack, Coordinator,

[ken.staack@ucf.edu](mailto:ken.staack@ucf.edu)

Maximum Enrollment: Unlimited (No block 11)

First Day: Sign in to the course(s) for which you signed up and complete the cases by the end of the block.

Please note that the time you spend on each section will be monitored by the module director.

This course will focus on one of the following Aquifer courses for a two-week elective: Aquifer Pediatrics, Aquifer Radiology, WISE (surgery), Aquifer Family Medicine, Aquifer Internal Medicine. Students will utilize the online Aquifer virtual patient courses found at <http://www.aquifer.org>. Each course contains 30+ interactive cases with links for additional learning. Many of the courses have formative multiple choice questions associated with each case.

#### Learning Activities

You will sign up to complete an independent study elective using the Aquifer online learning programs. This includes pediatrics, radiology, internal medicine, family medicine and the WISEmd surgical videos; it does not include the uWise OBGYN course. During this elective you will be able to work independently while completing **every** module in your selected course. You selected your courses when you planned your M4 year through the registrar's office. That office provides me with the list of courses for which you are registered. Dr. Moran will only complete a course student performance evaluation in OASIS for the course the registrar's office informed me. If you do not remember which course/s you selected, you will need to contact Christie Hasegawa. If you need to change the course/s you previously selected, you will need to notify, by email, both Ms. Hasegawa and Dr. Moran. She is available for any questions that you may have- just send an email.

You will not need to send in any documentation of your completion as I will be reviewing your course log through Aquifer's administrative access. This view enables me to see **your time spent on each module or each case**, your short answers within the cases and any posttest assessments (not all courses have post case assessments.) If the time spent on each module or case is less than what would signify meaningful engagement then you will be asked to repeat the modules or the entire course. When you have completed all of the cases/modules in your selected course, you will have completed the independent study. You do not need to contact me of your completion unless you requested and were given an extension. We are not currently using the summative Aquifer course assessments. If you are



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Aquifer Continued**

interested in taking the post course exam please let me know and this can be set up but it will not affect your grade for the independent study.

**If, for any unforeseen reason of which there are many during the M4 year especially during interview season, you are unable to complete all modules within your elective block you must notify me and we will create a learning plan that will enable you to successfully complete the independent study.** If you do not notify me and your coursework is incomplete at the time of evaluation, you could be at risk for receiving an incomplete grade or failure for the course. Please communicate in a timely and professional manner!



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Hospice and Palliative Care Elective

#### **MDE 8150 3**

Full-time (2-4 weeks)

(VA) Orlando VA Medical Center Community Living Center

Grading Basis: Pass/Fail

First Day: Report to OVAMC CLC, Room A113@ 10:00 am

Primary Faculty Supervisor: Dr. Sabiha Kazi,

(407) 491-5290, [Sabiha.kazi@va.gov](mailto:Sabiha.kazi@va.gov)

Contact person: Dr. Sabiha Kazi,

[Sabiha.kazi@va.gov](mailto:Sabiha.kazi@va.gov) ;

[vhaorlmedicaleducationcoordinators@va.gov](mailto:vhaorlmedicaleducationcoordinators@va.gov)

Maximum Enrollment: 1-2 each block

During this rotation, students will see palliative care and hospice patients in the inpatient acute care hospital setting, outpatient clinic, home environment via home visits, as well as in the community living setting. Students will be able to participate in the interdisciplinary care of seriously ill and dying patients. Additionally, students will have the opportunity to learn about pain management symptoms such as pain, nausea, constipation, fatigue and delirium in this vulnerable patient population. Students will also learn communication skills as they will participate in family meetings. By the end of the rotation, the students will have gained basic communication skills required to deliver difficult information to patients in a compassionate manner. Additionally, students will understand the importance of determining a patient's goals of care, and how to subsequently tailor medical care to achieve those goals. Students will be expected to give one 15 minute presentation at the end of the rotation.

#### Goals:

- Students will be actively involved in the initial assessments of all patients by the Palliative Care team and to write an initial history and physical.
- Students will be expected to participate in daily rounds, write prognosis notes, attend interdisciplinary team meetings, and to perform self-directed learning.
- Students will be evaluated for engagement and preparedness while on rounds.
- Students will be evaluated on the quality of the presentation at the end of the rotation.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Geriatric Elective

#### **MDE 8147**

**First Day: Report to UCF COM at 9:00am/virtual orientation**

**Part-time (2 weeks)**

**(UCF COM) UCF College  
of Medicine**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Dangiolo and Dr. Laurel Gorman,  
[Mariana.dangiolo@ucf.edu](mailto:Mariana.dangiolo@ucf.edu) and [laurel.gorman@ucf.edu](mailto:laurel.gorman@ucf.edu)**

**Contact Person: Dr. Dangiolo (407) 266-1191; Dr. Gorman 407-266-1127**

**Maximum Enrollment: 2 per block for clinical experiences. 4 per block  
for academic experiences. (Not available in June, November or  
December)**

This rotation is designed to provide medical students with insights into the specialty of Geriatrics and geriatric pharmacology. During this rotation, students will be assigned to a faculty mentor to guide their activities. If the clinical option is selected (1 week in outpatient geriatric clinic), students will develop the knowledge and clinical skills needed to identify and manage common concerns in the older adult population.

If the academic option is pursued, students will conceptualize and develop an educational project under the supervision of an appropriate mentor (dependent on the project). All students will complete the assigned online modules and web-based cases.

#### **Objectives:**

- a.** Determine clinical features, differential diagnoses, evaluation and treatment/pharmacological approach for the common clinical conditions that affect older adults.
- b.** Recognize mediations to be avoided and identify evidence-based interventions that promote healthy aging.
- c.** Collaborate with other health care team members in the assessment, implementation, and evaluation of care. Meet deadlines for completion of curricular assignments.

#### **Learning Activities**

The first week of the experience will include many of the self-directed activities including the completion of several faculty developed SLMS, National web-based modules on geriatric topics and for the students who select the academic track, the conceptualization of their project. The second week of the experience will include three days in a geriatric primary care clinic and two days at an upscale retirement community for the home visiting component. The schedule for the clinical week will be communication prior to the start of the rotation. The second week for the academic track includes mentoring and feedback as the student develops a curricular resource/project.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Medical Spanish

#### **MDE 8040**

Full-time (4 weeks)

(UCF COM)

Grading Basis: Pass/Fail

**First Day:** *Access to Canopy Medical Spanish to be obtained from the COM library. Clinical skills sessions will be scheduled 3 times per year and students are expected to participate in at least one.*

**Primary Faculty Supervisor:** Dr. Judith Simms-Cendan

**Contact Person:** *Dr. Judith Simms-Cendan,*  
(407) 266-1057; [Judith.simms-cendan@ucf.edu](mailto:Judith.simms-cendan@ucf.edu)

**Maximum Enrollment:** 20 max in blocks 5-10

**\*\*Students are required to attend a virtual practical session from 8:00 – 3:00 based on the block the student is registered in. Dates are not negotiable.**

- November 19, 2020 (Blocks 5-6)
- December 17, 2020 (Block 7)
- February 25, 2021 (Block 8)
- April 8, 2021 (Blocks 9-10)

#### **Goals of the Rotation:**

1. Students will have improved knowledge of Spanish grammar and medical Spanish vocabulary.
2. Students will learn how Latino culture affects access and utilization of health care.
3. Students will become familiar with correct use of a medical interpreter.
4. Students will practice use of medical Spanish in the clinical skills center.

#### **Objectives:**

1. Improved knowledge of role of culture in care of patients will enhance patient care.
2. Assessing skills in language will define safety limits in relying on personal medical Spanish knowledge.
3. Enhanced knowledge of medical Spanish will improve communication ability.
4. Understanding correct use of an interpreter will improve professionalism.
5. Understanding the role of the interpreter and laws requiring access to interpreter will improve systems based practice knowledge.

#### **Learning Activities**

1. Students are expected to work independently on Canopy models. You must request access from the COM library.
2. They are expected to attend the session in the clinical skills center, and sessions on use of an interpreter and practical medical Spanish.
3. A literature review and brief essay (1-2 pages) on the role of culture in medical care is required.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

## **Electives**

### **General Miscellaneous Categories**

### **Clinical Anatomy Teaching Elective**

**Clerkship Director: Dr. Topping**

#### **MDE 8093 0**

**Full-time (2 or 4 weeks)**

**(UCF COM)**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Daniel Topping**

**Contact person: Dr. Topping,**

**[Daniel.Topping@ucf.edu](mailto:Daniel.Topping@ucf.edu)**

**Maximum Enrollment: 8 each block (Blocks 5-9 only)**

**First Day: Report to 411 L UCF COM @ 9:00 a.m.**

**Students must contact Dr. Topping by email to set up a phone call to discuss expectations and plans no later than 2 weeks prior to the start of the elective.**

Students will participate as teaching assistants in the Structure and Function Module for the four week period of their elective. They will need to prepare for the anatomical/physiological areas being covered in the respective component of the HB-2 module during their elective period. They will be required to be prepared to discuss with the M-1 students the relevant anatomy/physiology and medical imaging of the area being studied. They will attend all anatomy/histology/physiology/medical imaging laboratory/simulation sessions. They will also assist the M-1 students with their cadaver/autopsy report data and provide support for students having difficulties in the areas being studied.

#### **Objectives:**

1. Prepare pro-section anatomy dissections for demonstration to M-1 students.
2. Attend all anatomy/histology/physiology/medical imaging laboratory/simulation sessions.
3. Demonstrate knowledge of the anatomy/physiology/histology and medical imaging of the areas being studied in the elective
4. Assist M-1 students having academic difficulties with anatomy
5. Assist M-1 students' knowledge of clinical anatomy



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**General Miscellaneous Categories**

**Endoscopic Spine Surgery/Interventional Pain Management**

**Clerkship Director: Avi Bhandary**

**MDE 8820 9**

**Full-time (2-4 weeks)**

**(PO) Private Office**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Avi Bhandary;**

**[avibhandarymd@gmail.com](mailto:avibhandarymd@gmail.com)**

**Contact person: Jill Olsen, [admin@manaspine.com](mailto:admin@manaspine.com) ;**

**407-605-5621**

**Maximum Enrollment: 1 each block (October,  
December and March only)**

**First Day: Report to Mana Spine, 7984 Forest City  
Rd, Suite 104, Orlando, FL 32810 at 8:15 a.m.**

The rotation is an introduction to Minimally Invasive treatment modalities for spine pathology with a primary focus on Endoscopic Spinal Surgery and a secondary focus on Interventional Pain Management. The rotation will focus on the fundamentals of Endoscopic spinal surgery and fluoroscopically guided spine injections. The importance of quality measures and understanding the financial landscape of medicine from a private practice perspective. The creation of outcome based care plans will also be taught as well as how to achieve objectives in the face of logistical barriers.

**Goals of the rotation:**

This rotation is hands-on and illustrates the role of the private practice provider in the outpatient clinical setting. During the rotation students will follow a private practice faculty mentor to guide them and be responsible for their daily clinical activities. By the end of the rotation it is expected that medical students will have developed a knowledge base and clinical skills allowing them to identify and manage provider specific issues and patient care.

**Objectives:**

**Patient Care:**

The medical student is expected to provide patient care that is compassionate, appropriate, and effective for the promotion of health, prevention of illness and treatment of disease. The medical student may be asked to submit a generalized writing assignment.

**Medical Knowledge:**

1. Recognize patho-anatomical pain generator as they relate to primary diagnosis
2. Describe therapeutic effects and contraindications of pharmacology used in pain medicine
3. Learn the basic anatomy and pathology of the spine
4. Learn basic reading ability of spine MRI's and fluoroscopy



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

5. Learn the pharmacokinetics of steroids
6. Learn fundamentals of Endoscopic Spine Surgery
7. Learn tissue recognition as it is viewed through an Endoscope
8. Discuss spinal cord/epidural space physiology as it pertains to endoscopic spine surgery

#### **Endoscopic Spine Surgery/Interventional Pain Management continued**

9. Learn contemporary treatment options for low back pain and radiculopathy
10. Learn risks, benefits, limitations, and expected outcomes of standard spinal procedures such as endoscopic discectomy, facet injections, medical branch blocks, radio frequency ablations, epidural steroid injections, sacroiliac joint injections, spinal cord stimulation, peripheral nerve stimulation
11. Discuss quality of metrics of care for Endoscopic Spine Surgery, what are our objectives and what is the best way to measure them

#### **Practice Based Improvement:**

1. Understand the importance of conceptual thinking in procedural therapy
2. Develop the ability to analyze medical journals
3. Gain perspective on the business of medicine
4. Gain understanding and perspective in “minimally invasive treatment modalities”

#### **Interprofessional and Communication Skills:**

1. Effectively document the patient history and plan of care
2. Effectively communicate information with the patient
3. Become familiar with interprofessional communication between referral physicians

#### **Professionalism:**

1. Demonstrate respect, compassion, integrity and altruism in relationship with patients, families and colleagues
2. Demonstrate respect for religious beliefs
3. Adhere to principles of confidentiality
4. Recognize and identify areas of improvement in personal and in peer performance

#### **Systems Based Practice:**

1. Utilize resources to provide optimal healthcare
2. Recognize limitations and opportunities regarding the individual patient care
3. Apply evidence based, cost-conscious strategies to prevention, diagnosis and disease management
4. Consider the importance of quality measures when developing outcome based care plans

Students will participate in initial and follow up appointments. They will also participate in outpatient interventional pain management and procedures and discuss access and tissue/pathology recognition in Endoscopic Spine Surgery.

The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic and participation in educational conferences. There will be a formal feedback session at mid-term and at the end of the rotation. Feedback for continuous improvement will be provided throughout the rotation. A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

**General Miscellaneous Categories**

**Trichology-Clinical and Surgical**

**Clerkship Director: Marco Barusco**

**MDE 8256**

**Full-time (2-4 weeks)**

**(PO) Private Office**

**Grading Basis: Pass/Fail**

**Primary Faculty Supervisor: Dr. Marco Barusco**

**[drbarusco@tempushair.com](mailto:drbarusco@tempushair.com) ; 877-877-5200**

**Contact person: Jessica Aivazis, 877-877-5200**

**[info@tempushair.com](mailto:info@tempushair.com)**

**Maximum Enrollment: 1 each block (no July)**

**First Day: Report to 5537 S. Williamson Blvd, Suite  
752, Port Orange, FL 32128 @ 7am.**

In this rotation, the student will work directly with the preceptor and his staff, seeing patients in consultation, follow-ups and assisting in office procedures (hair transplant procedures, hair loss treatments involving Platelet-Rich Plasma (PRP) and/or Mesenchymal, Adipose-Derived Stem Cells, skin biopsies, Botox Cosmetic treatments, Facial Filler application). The student will be involved daily in taking medical histories from patients with different types of hair loss, performing skin and scalp examinations, considering differential diagnosis and assisting in prescribing treatment, both medical and surgical when indicated. Student will assist in hair transplant procedures, skin biopsies intralesional injections and in data collection for clinical research. Student will participate in post-operative follow-ups and clinical follow ups. Time will be given to student for studying and reading from textbooks in Trichology and Hair Pathology. At the end of the rotation, student will be asked to write a report on his/her experience and how he/she will apply the knowledge acquired during the rotation.

During this experience, the student will be able to learn how different specialties can work together toward the common goal of providing optimal care to patients. Feedback will be given to the student in real time so they may improve their skills. Student will be expected to be inquisitive and resourceful and to be able to research and demonstrate understanding of the various clinical conditions that will be seen in the practice.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### WikiProject Medicine

**MDE 8097**

Full-time (4 weeks)

(UCF) UCF COM

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. David Lebowitz

Contact Person: Nadine Dexter, [Nadine@ucf.edu](mailto:Nadine@ucf.edu); 850-766-2614

David Lebowitz, [David.Lebowitz@ucf.edu](mailto:David.Lebowitz@ucf.edu)

Maximum Enrollment: 20 per block (Block 6 and 8 only)

First Day: Report to UCF Health Sciences Library  
210C @ 9:00am. Required attendance on the  
first and last day then online.

### Goals of the rotation:

This rotation is designed to provide medical students with insights into the specialty of Evidence Based Medicine and Informatics.

1. Efficiently use information technology to identify relevant, high-quality evidence and apply it to the improvement of Wikipedia's WikiProject: Medicine articles.
2. Identify clinical questions that currently exist in WikiProject: Medicine and identify and apply evidence relevant to answering those questions.
3. Appraise, assimilate and apply relevant, high-quality, evidence in editing WikiProject: Medicine articles.
4. Determine whether clinical evidence can be applied to the reference standards of Wikipedia.
5. Access and appropriately apply information from practice guidelines while editing articles.
6. Identify a WikiProject Medicine article that has not yet reached "Good Article" or "Feature Article" status.
7. Use secondary literature (systematic reviews, meta-analyses), textbooks, and practice guidelines, to edit an article using the WikiProject Medicine Style Guidelines, providing references as required.
8. Demonstrate proficiency in appraising the quality and reliability of a Wikipedia medicine article.

### Objectives:

**Patient Care:** The medical student will engage in effective utilization of evidence based resources and techniques on how to appropriately convey the information to patients on a global scale.

**Medical Knowledge:** The student will obtain and develop medical knowledge in the following areas: Information Retrieval, Critical Appraisal of Medical Literature, Writing/editing medical articles



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### WikiProject Medicine continued

**Practice Based Improvement:** Students will select, critically evaluating and utilize information from scholarly articles to disseminate accurate and evidence based information to patients worldwide. Students will also edit and critique current Wikipedia medical articles to make them current, reliable and up to date.

**Interprofessional and Communication Skills:** Medical students will learn how to use digital media to effectively communicate and convey complex medical information on a global scale

**Professionalism:** Medical students will demonstrate professional communication, adherence to copyright law, and respect for intellectual property (plagiarism).

**Systems Based Practice:** This course exposes students to information that millions of patients read worldwide. Students will become experts at editing content with evidence based resources, so that patients and readers can read reliable, trustworthy content.

The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations and participation in educational conferences. There will be weekly feedback sessions with a final project due at the end of the rotation.

The final evaluation is the completed peer reviewed article on Wikipedia. Final feedback will be provided and completed electronically via an online evaluation system for each student.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

## **Electives**

General Miscellaneous Categories

### **Simulation in Medical Education: From Design to Delivery**

**MDE 8094**

Part Time (2 weeks)

(UCF) UCF COM

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Analia Castiglioni,

Analia.castiglioni@ucf.edu , 407-266-1155

Contact Person: Dan Franceschini, [DanFran@ucf.edu](mailto:DanFran@ucf.edu);

Christopher Gallagher, [Christopher.Gallagher@ucf.edu](mailto:Christopher.Gallagher@ucf.edu)

Maximum Enrollment: 3 per block

First Day: Report to UCF COM, Suite 321  
@ 9:00am.

#### **Goals of the rotation:**

This program will be clinically aligned with the current curriculum. It will highlight a clinical condition recently explored in the didactic setting and enable participants to broaden their knowledge of that condition by applying relevant physiologic and pharmacologic principles to simulation case design, development and delivery.

#### **Objectives:**

**Patient Care:** Participants will design a simulation case for a simulated patient and apply the principles of care to that simulated patient encounter.

**Medical Knowledge:** Anatomy, physiology, pharmacology, disease process, physical exam findings, focused history guidelines, development of differential diagnoses, creation of various diagnostic values and establishment of treatment plan appropriate to case condition.

**Practice Based Improvement:** Utilizing various principles of simulation in healthcare, participants will create a unique (simulated) patient care encounter (case). Case creation enables participants to apply existing knowledge to structured simulation templates in a controlled, immersive environment guided by clinical faculty. This experience will broaden perspectives of practice and solidify pathophysiologic concepts through active learning and peer development.

**Interprofessional and Communication Skills:** This program will emphasize interpersonal and interprofessional communication throughout the continuum of a selected patient care encounter. Utilizing established team communication strategies, concepts and principles, participants will create a simulated patient care encounter inclusive of communication roles, goals and objectives. During all phases of this elective, participants will communicate with one another, various Faculty, Medical Librarians and fellow medical students.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

#### Simulation in Medicine continued

**Professionalism:** Throughout this experience, participants will be expected to demonstrate all concepts of professionalism described above in addition to privacy and confidentiality (case content). A common theme of continuous improvement will be highlighted throughout this elective to ensure a safe, professional learning environment.

**Systems Based Practice:** This elective will continuously emphasize the continuum of care within the larger context of healthcare in general. It is expected that participants will engage (or verbal engagement of) various healthcare-related resources available to them and applicable to the case.

Participants will explore simulation through literature review, content development, case creation, consultation sessions with faculty and/or subject matter experts, case refinement and case presentation with peers. From focused scenarios to complex conditions, each cohort will practice and continuously develop simulation skills including debrief and feedback, apply principles of anatomy, physiology, pharmacology, communication, teamwork and professionalism to each case and enhance existing knowledge of systems based assessment and care.

The summative evaluation will be based on level of participation, development of case content, application of current evidence-based medicine, simulation principles and current curricular relevance, general case creation, peer delivery of a simulation encounter and subsequent debrief session (s).



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Telemedicine Elective

#### MDE 8081

Part Time (2 weeks)

(UCF) UCF COM

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Dr. William Gonzalez,  
wgonzalezmd@gmail.com , 407-757-8383 (text preferred)

Contact Person: William Gonzalez,

Maximum Enrollment: 4 per block (not available in June or December)

First Day: Report to UCF COM, Health Sciences  
Library at @ 1:30pm.

#### Goals of the rotation:

This rotation is designed to provide medical students with insights into the specialty of Telemedicine for outpatient primary care. Medical students will be introduced to key concepts, competencies and applications of telemedicine as a method of delivery of quality medical care.

#### Objectives:

**Patient Care:** Student understands the provider-patient relationship within the context of a telemedicine encounter. Student understands the process of Informed consent for telemedicine services. Student understands privacy and confidentiality (HIPPA) within the context of telemedicine. Student demonstrates awareness of technology pitfalls and privacy (not all technology is HIPPA compliant-text, email). Student understands the importance of screening other family members and or care takers accompanying the patient (for health provision, risk assessment, and privacy purposes). Student is capable to take a standard history. Student considers patient site and geographic location factors. Student considers patient site and geographic factors. Student considers patient culture, values, behaviors and technological needs/preferences (social determinants of health). Student understands the importance of assessing patient safety and stratify risk factors remotely (unstable patient, suicidal risk, safety of surrounding area). Considers the appropriateness of the telemedicine encounter and its limitations.

**Medical Knowledge:** Student understands the medical standard of care as it applies to both in person care and telemedicine. Florida standards for telemedicine practice. Student is aware of telemedicine guidelines and best practices.

**Practice Based Improvement:** Student is aware of strengths, deficiencies, and limits in one's knowledge and expertise of telemedicine. Student must think creatively to solve problems encountered during sessions. Student is familiar with the resources available for telemedicine research and self-learning.

**Interprofessional and Communication Skills:** Student understands the importance of effective and clear communication with patient family and other health care providers via telemedicine. Student understands the importance of putting patients at ease when they feel insecure about using telemedicine technology.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Telemedicine continued**

**Professionalism:** Student is aware of telemedicine regulations. Student is aware of legal and jurisdictional issues related to prescribing drugs via telemedicine.

**Systems Based Practice:** Student understands how to work effectively in various health care settings via telemedicine; outpatient, inpatient, rural, urban, small practice, large trauma run, etc.

Participants will experience didactic teaching: online and webinars, case based learning: video/webinar, clinical site experience, report presentation.

The student will be evaluated based on his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conferences. There will be a formal feedback session at mid-term and at the end of the rotation.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

## Electives

### General Miscellaneous Categories

### Medical Ethics Elective

**MDE 8900**

Part Time (2 weeks)

(UCF) UCF COM

Grading Basis: Pass/Fail

Primary Faculty Supervisor: Dr. Dr. Luciana Garbayo,

Luciana.Garbayo@ucf.edu , 407-266-1147 or cell 617-319-0010

Contact Person: Andrea Berry, [Andrea.Berry@ucf.edu](mailto:Andrea.Berry@ucf.edu)

Maximum Enrollment: 4 per block

First Day: Report to UCF COM, Health Sciences  
Library at @ 1:30pm.

#### Goals of the rotation:

Mixed mode course-students and faculty shall meet Face to Face once in 2 weeks-for the closing course session and final group activity. All further activities shall be carried out online. Medical students shall participate in mock rounds with typical ward ethics cases; they shall present both assigned cases and their own ethical dilemmas regarding cases and preceptors experiences on the clerkships (core M3 clerkships and sub-internships). Students are expected to prepare in appropriate level of detail readings and ethical analyses for group discussion as well as to provide commentary to colleagues in a safe environment. They shall consider hidden curriculum, moral distress and organizational ethics challenges to their professional identity and wellness, and develop their “virtuous fishbone root causal analysis” and team and shared decision making strategies for both reverse engineering medical error in ward care and for planning ways to mitigate a range of ethical challenges as part of their medical education preparation. Additionally, there will be opportunities to explore end of life issues and palliative care.

#### Objectives:

**Patient Care:** The medical student is expected to develop one’s ethical sensitivity in the context of moral disagreement and moral distress while handling mock patient cases.

**Medical Knowledge:** Medical ethics; Ward Ethics; Student well-being; Moral Distress; Hidden Curriculum; Theoretical and Empirical Bioethics; Palliative Care and end of life

**Practice Based Improvement:** Students will engage in the deliberate practice of ethical reasoning and ethical deliberation under moral diversity through multiple case analyses

**Interprofessional and Communication Skills:** Student shall reflect on communication gaps in ward cases and propose ethics and shared decision making strategies for their revision, inclusive of team ethics and consideration

**Professionalism:** Students shall discuss in practice and in context the recommendations of the AMA Code of ethics regarding their own real-life ward cases





**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Ward Ethics continued**

**Systems Based Practice:** Students are expected to demonstrate an understanding of the interface between Medical Ethics and Organizational Ethics and its extensions to health care ethics and justice in social context.

Students are expected to prepare, present and respond to multiple ward ethics cases representing challenges on the team-doctor-student-patient relationship, inclusive of conflict of interest, managing confidential information, refusal of care, impaired colleagues, gifts from drug companies, from patients as well as special ethical issues on clinical specialties. Students will be paired for providing feedback on assigned close readings but shall present cases individually for the group. By the end of the course, students shall develop a brief reflective essay, considering their wellness, moral distress and how to thrive ethically in their physician training. They shall also provide each other with suggestions and deliberate practices to avoid moral distress and on how to contribute to an ethical environment in wards, in a final document.

The student will be evaluated based on his/her participation, including presentations, preparedness, collaboration with others and final essay. A final written evaluation will be provided at the end of the rotation.



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

# **EXTRAMURAL CLERKSHIPS**



**UNIVERSITY OF CENTRAL FLORIDA  
COLLEGE OF MEDICINE  
FOURTH YEAR (M4)**

**Electives**

Extramural

**Extramural Clerkship  
(VSLO and non-VSLO)  
Clerkship Director: Varies**

**MDX 8011**

Full-time (4 weeks)

Grading Basis: Pass/Fail  
(Various Locations)

Primary Faculty Supervisor: Dr. Marcy Verduin,  
Associate Dean for Students: Dr. Marcy Verduin  
Assistant Dean for Medical Education: Dr. Martin  
Klepheke

Contact person: *Christie Hasegawa, Coordinator  
COM Registrar's Office*

[Christie.Hasegawa@ucf.edu](mailto:Christie.Hasegawa@ucf.edu)

Maximum Enrollment: Varies

Extramural electives offer students the opportunity to gain experience at LCME accredited medical schools and affiliated facilities. Arrangements for these electives are made between the student and the visiting institution. Students must obtain written administrative approval prior to registration.

**Objectives:**

1. Have the student assume greater levels of responsibilities for the patient.
2. Expand the student's skills and medical knowledge.
3. Prepare the student for their residency.



# UNIVERSITY OF CENTRAL FLORIDA

## COLLEGE OF MEDICINE

### FOURTH YEAR (M4)

Local VSLO courses that can be given UCF credit. For course descriptions and first day reporting instructions, please contact the site directly.

#### **Acting Internships:**

##### **Family Medicine:**

- Acting Internship in Family Medicine, MDI 8120 (AH)

##### **Internal Medicine:**

- Acting Internship in Internal Medicine, MDI 8340 (AH), MDI 8340 (OH)

##### **Surgery:**

- Acting Internship in General Surgery, MDI 8600 1 (AH), MDI 8600 2 (OH)
- Acting Internship in Neurosurgery, MDI 8650 1 (AH)
- Acting Internship in Colon and Rectal Surgery, MDI 8676 1 (AH), MDI 8676 2 (OH)
- Acting Internship Pediatric Surgery, MDI 8490 2 (OH)

##### **Emergency Medicine:**

- Acting Internship in Emergency Medicine-MDI 8710 1 (AH) , MDI 8710 2 (OH)

##### **Neurology:**

- Acting Internship in Neurosurgery, MDI 8650 1 (AH)

##### **OB/GYN:**

- Acting Internship in Obstetrics and Gynecology, MDI 8160 2 (OH)
- Acting Internship in Gynecologic Oncology, MDI 8164 2 (OH)

##### **Pediatrics:**

- Acting Internship in General Pediatrics, MDI 8400 1 (AH), MDI 8400 2 (OH)

##### **Critical Care:**

- Acting Internship in Critical Care, MDI 8247 1 (AH)
- Acting Internship in SICU, MDI 8343 2 (OH)
- Acting Internship in MICU MDI 8344 2 (OH)
- Acting Internship in NICU,MDI 8461 1 (AH)
- Acting Internship in PICU: MDI 8463 1 (AH), MDI 8463 2 (OH)

##### **Electives:**

- Critical Care Medicine Elective, MDE 8341 (OH Health Central)
- Urology Elective, MDE 8675 (OH Arnold Palmer)
- Cardiology Inpatient/Outpatient at Orlando Heart Center, MDE 6 2 (OH)
- Congenital Cardiology, MDE 8225 (OH)
- Gastroenterology, Inpatient/Outpatient, MDE 8270 (OH)
- Diagnostic Hematology, MDE 8285 2 (OH)



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### FOURTH YEAR (M4)

- Nephrology, Inpatient/Outpatient, MDE 8350 2 (OH)
- Pulmonary Elective, MDE 8245 2 (OH)
- Infectious Disease, Inpatient/Outpatient, MDE 8320 2 (OH)
- Hematology & Oncology, Inpatient/Outpatient, MDE 8280 2 (OH)
- Gynecologic Oncology Elective, MDE 8162 (OH)
- Ambulatory Pediatrics Elective, MDE 8404 2 (OH)
- Pediatric Nephrology Elective, MDE 8445 2 (OH)
- Pediatric Endocrinology Elective, MDE 8430 1 (AH)
- Pediatric Hematology/Oncology, MDE 8440 1 (AH), MDE 8440 2 (OH)
- Developmental/Behavioral Pediatric Medicine Elective, MDE 8415 1 (AH), MDE 8415 2 (OH)
- Pediatric Dermatology, MDE 8500 1 (AH)
- Pediatric Pulmonary Elective, MDE 8425 2 (OH)
- Pediatric Critical Care and ICU, MDE 8465 1 (AH)
- Pediatric Cardiology, MDE 8420 1 (AH), MDE 8420 2 (OH)
- Pediatric Gastroenterology, MDE 8433 2 (OH)
- Pediatric/Adolescent Gynecology, MDE 8512 2 (OH)
- Pediatrics Orthopaedics Elective, MDE 8485 2 (OH)
- Diagnostic Radiology, MDE 8763 1 (AH)
- Pediatric Radiology, MDE 8769 1 (AH)
- Pediatric Emergency Medicine, MDE 8505 1 (AH)
- Emergency Medicine Elective, MDE 8710 1 (AH)
- Emergency Ultrasound Elective, MDE 8773 1 (AH)
- Trauma and Orthopaedic Elective, MDE 8683 2 (OH)
- Pediatric Neurosurgery Elective, MDE 8491 2 (OH)
- Pediatric Surgery Elective, MDE 8490 1 (AH)
- Pediatric Maxillofacial & Craniofacial Surgery Elective, MDE 8591 2 (OH)
- Pathology and Laboratory Medicine, MDE 8530 1 (AH)
- Clinical Pathology Methods and Interpretation, MDE 8532 2 (OH)
- Autopsy Pathology, MDE 8535 2 (OH)
- Surgical Pathology, MDE 8534 2 (OH)
- Clinical Pharmacology, MDE 8362 (OH)

Advent Health has a few courses that you can schedule via paper application with their coordinator instead of applying via VSLO. Here are a few that we are aware of:

1. Neuro-Oncology with Dr. Newton
2. Otologic/Neurotologic/Skull Base Surgery elective with Dr. Seidman

This application can also be used if you are doing a rotation with a physician who operates at an Advent Health hospital. Please email [Christie.Hasegawa@ucf.edu](mailto:Christie.Hasegawa@ucf.edu) to request the form.