UCF | College of Medicine

UNIVERSITY OF CENTRAL FLORIDA

THIRD YEAR (M3)

Revised 3/7/2022

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

2022-2023 Academic Year

Rotation/Block	M3 Rotation Dates
1 (June)	June 6, 2022 – July 1, 2022
2 (July)	July 4, 2022 – July 29, 2022
3 (August)	August 1, 2022 – August 26, 2022
4 (September)	August 29, 2022 – September 23, 2022
5 (October)	September 26, 2022 – October 21, 2022
6 (November)	October 24, 2022 – November 18, 2022
7 (December)	November 21, 2021 – December 16, 2022
Holiday Break, M3 Intersession 1 December 11, 2022 – January 8, 2023 *Classes resume Mondayy, January 9, 2023*	
8 (January)	January 9, 2023 – February 3, 2023
9 (February)	February 6, 2023 – March 3, 2023
10 (March)	March 6, 2023 – March 31, 2023
11 (April)	April 3, 2023 – April 28, 2023
12 (May)	May 1, 2023 – May 26, 2023

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

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

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 to enrich one's undergraduate medical education.

- Electives are Pass/Fail, taken for credit, and students must perform satisfactorily in their elective work in order to be promoted. Electives must be approved by the M3/M4 Assistant Dean and by the Associate Dean for Students.

- 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.

- All preceptors must have a UCF faculty appointment. This is mandated by our accrediting body, LCME. If you decide to enroll in the special independent clinical/special independent research study option, you must ensure that your selected preceptor has been on-boarded with the college. You can confirm this by emailing the M3 Elective Coordinator with the first and last name of your preceptor. If they are not on-boarded and you have more than 4 months before the start of your independent study, you must reach out to your preceptor and get them to complete the faculty application form ASAP. Faculty appointments can take 3-4 months to be processed as there are many individuals applying that must go through a review process with multiple levels of approvals. Once your preceptor completes the application, please notify the M3 Elective coordinator so they can contact the UCF COM Non-Salaried Faculty Office to confirm receipt. If your preceptor does not complete his/her application three months prior to the start of your rotation, you will need to discuss an alternate plan with the M3 Elective Coordinator.

- When reviewing the course electives being offered, please read the course description in its entirety. Some electives have pre-requisite(s) so please be sure to take this into consideration before ranking/enrolling in a course.

- Students **cannot** enroll in any special independent clinical/special independent research study with any Advent Health physician/facility.

- Students that have worked on their FIRE projects with an Orlando Health physician, might be able to continue their FIRE project as an independent research study with special permission. Otherwise, students are not allowed to participate in any clinical rotations at this institution.

- Faculty and Student evaluations become available during week 3 of the M3 elective in Oasis. An email reminder will be sent to faculty and students during week 3 as a reminder. Please complete the evaluation within the noted deadline in Oasis.

- Electives taken during your third year cannot be repeated during your M4 year; questions should be directed to the M3/M4 Assistant Dean.

Attendance Policy

Policy Title: M-3 Clerkships and M-4 Senior Required and Elective Rotations Attendance Policy

Policy Number (relate to LCME Element as applicable)**:** UCF COM Policy 12.5.1 version 4

Applies to: All third and fourth year medical students at the University of Central Florida College of Medicine (UCF COM).

Date: 10/18/2019

1.0 Purpose:

To specify anticipated and unanticipated absences during the third and fourth year of medical school.

2.0 Policy Statement:

General Attendance Policy:

As a member of a health care team during the third and fourth years of medical school, students are expected to attend all scheduled hours of clinical responsibilities and didactic instruction. There is no guaranteed time off for secular holidays. Students are expected to follow the holiday practice of the clinic/hospital/site at which they are rotating. Clinical responsibilities such as night call and rounding take precedence over holiday schedules. If situations arise which require students to miss time from clerkship responsibilities, the guidelines below will be followed. Additional remediation may be required at the clerkship director's discretion (e.g., the taking of extra call). The clerkship or rotation director should be notified prior to the start of the rotation of requests for absences for religious observances (see "Religious Observances").

Excused Absences: Definitions and Required Actions:

Students are allowed to take an excused absence for 1 day (for a 2 week rotation), 2 days (for a 4 week rotation) and 3 days (for a 6 or more week's rotation). Any excused absences in excess of these limits will be allowed at the discretion of the module director and will require the student to make up this excess missed time through an equivalent experience, e.g., through weekend or on-call duties.

Anticipated Absences:

- **Presentation of research at professional meeting**
- Maximum of one meeting per academic year; and
- Same research project may not be presented at more than one meeting; and
- Time away is only for presentation of data and travel time; and
- Requests must be submitted to Clerkship Directors for approval no later than 6 weeks prior to date of presentation.
- If approved, the student is responsible for notifying the attending/resident and their team in advance of all anticipated absences.
- The student must complete the absence form, have it signed by the Clerkship Director and forward it to the Office of Student Affairs.
- **Requests for exceptions to this policy (e.g., for those on National Committees or those with compelling reasons to give additional research presentations) must be discussed with the Clerkship Director in advance.**
    - **Residency interviews**
        - During interview months of October-January, students will be allowed to take time off for interviews.
        - On 4-week rotations, the maximum number of days allowed is 4 (no more than 3 consecutive days). On 2-week rotations, the maximum is 2 days. Requests for additional days must be discussed and approved by the rotation director. If request exceeds the maximum number allowable, student may be required to repeat the rotation.
        - Requests must be submitted in writing to rotation director/s prior to the start of the affected rotation/s or within 24 hours of an interview offer during the course of the rotation.
        - Once approved, the student is responsible for notifying the attending/resident and their team in advance of all anticipated absences.
        - The student must complete the absence form, have it signed by the rotation director and forward it to the Office of Student Affairs.
    - **Meeting with core advisor or Dean of Students**
    - May schedule one meeting with advisor or Dean of Students during each clerkship/elective
    - Meeting/s must be approved in advance by the Clerkship Director; and
    - Meeting/s must be scheduled at a time that minimizes disruption of clinical responsibilities, didactics and other clerkship activities; and
    - Absence includes time for meeting and appropriate travel time only; and
    - Students are required to be present at clinical sites before and after meeting/s as dictated by their clinical schedules.

- **Health Care Visits (e.g., well visits, preventive care): students should try to schedule these appointments when on vacation or not on clinical duty, but if this is not possible, they can apply for an excused absence:**
- Meeting/s must be approved in advance by the Clerkship Director; and
- Meeting/s must be scheduled at a time that minimizes disruption of clinical responsibilities, didactics and other clerkship activities; and
- Absence includes time for meeting and appropriate travel time only; and
- Students are required to be present at clinical sites before and after meeting/s as dictated by their clinical schedules.

Unanticipated Absences:

- **Hospitalization of student**
- **Death of family member**
- **Illness**
- An excused absence may be granted if you are ill.
- An excused absence due to illness requires that a note from your physician be obtained and given to the Clerkship Coordinator within 24 hours of the first day missed if: illness lasts 72 hours or more at any time, lasts 24 hours during the final week of a rotation, or at the discretion of the Clerkship Director; and
- The Clerkship Coordinator and the attending physician/resident physician on your clinical team are notified by you in a timely fashion (e.g., before the start of AM rounds); and
- The student absence form is completed, signed by the Clerkship Director and forwarded to Student Affairs.

Failure to comply with any component of the above instructions will result in unexcused absence and loss of 5 points from the final clerkship grade for each day missed.

Residents or faculty directly working with students cannot grant approval for absence. Please do not approach these individuals, as approval by them is not official.

Unexcused Absences: Definitions and Required Actions:

- Unexcused Absences include:
  - Vacations, personal days or social events, including weddings, graduations or birthdays
  - Routine doctor/dental appointments
  - Taking Step 2 exams during the third year
  - If the student chooses to travel for personal reasons during the rotation (e.g., a weekend off), it is expected that the student will return to her/his clinical responsibilities on time. Delays in returning (e.g., bad weather, missed flights) will be considered as unexcused.

  - Missing any portion of the Orientation to the Third Year, the M3 Capstone, the M4 Capstone or the Longitudinal Curricular Sessions
- In the event of an absence from the clerkship without permission from the Clerkship Director, the student will lose 5 points for each unexcused day. These points will be taken off the final clerkship grade.
- Additional remediation may be required at the Clerkship Director's discretion (e.g., the taking of extra call).
- Unexcused absences impact upon assessment of a student's professionalism and will be reported to the student SEPC.

Scheduling Special Independent Clinical/Special Independent Research Studies

Special independent clinical/special independent research study

- The opportunities for use of elective time in the third year includes potential Independent Clinical or Research at UCF College of Medicine or affiliated institutions. The flexibility of the M3 elective curriculum gives students maximum opportunity for individual development.

- Special Independent Clinical or 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.

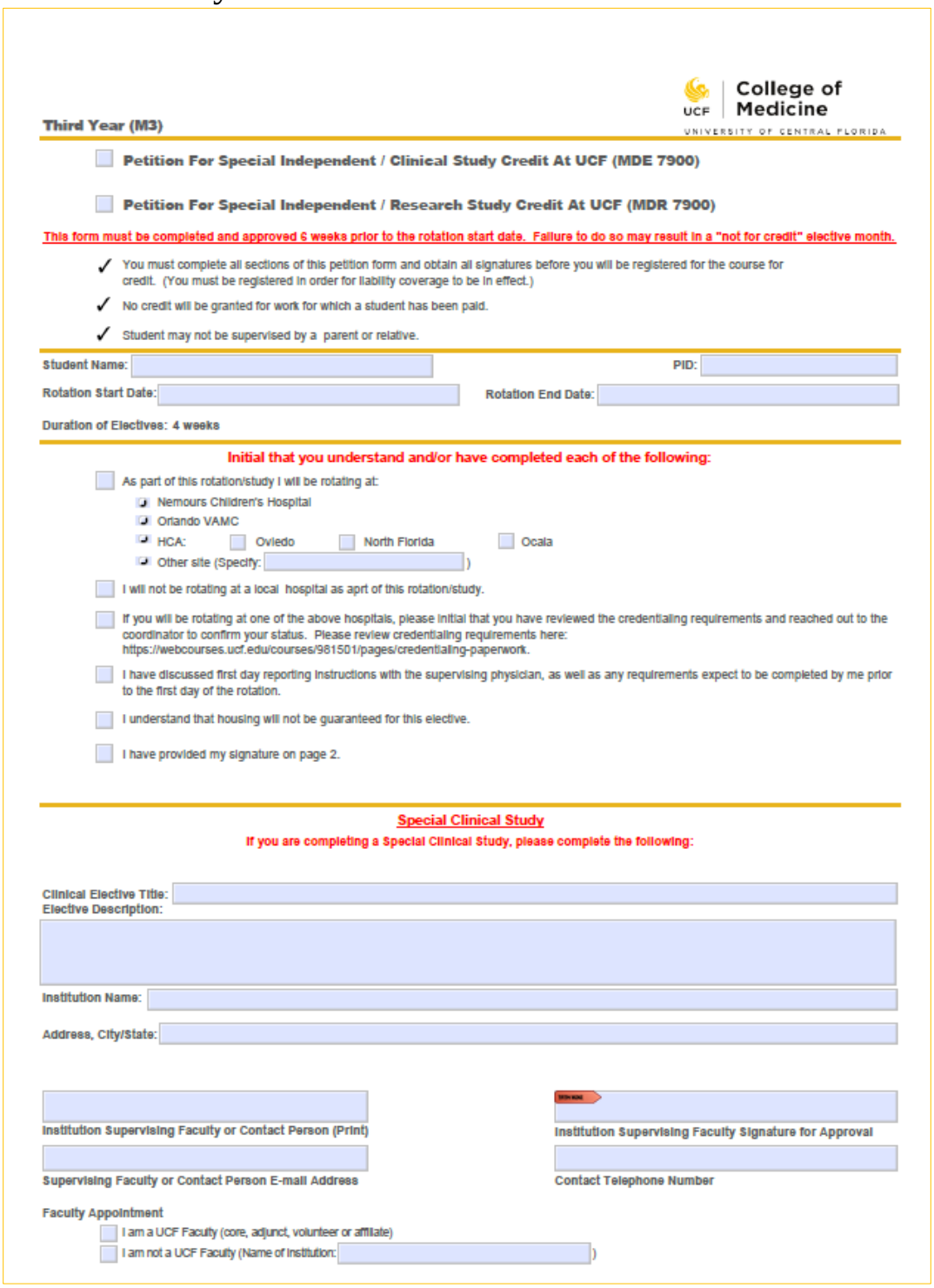
- Students must complete a Petition (see page 8-9) for Special Independent Clinical or Research Study prior to the start of the rotation. The petition must include a description of the clinical work or research being conducted, and must be signed by the faculty supervisor, the Assistant Dean for Medical 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.

Away Electives

- Away rotations during the M3 year are not allowed at institutions not affiliated with UCF COM.

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Sample: Special Independent Clinical Study/Special Independent Research Study Form



College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Third Year (M3)

☐ **Petition For Special Independent / Clinical Study Credit At UCF (MDE 7900)**

☐ **Petition For Special Independent / Research Study Credit At UCF (MDR 7900)**

This form must be completed and approved 6 weeks prior to the rotation start date. Failure to do so may result in a "not for credit" elective month.

✓ You must complete all sections of this petition form and obtain all signatures before you will be registered for the course for credit. (You must be registered in order for liability coverage to be in effect.)

✓ No credit will be granted for work for which a student has been paid.

✓ Student may not be supervised by a parent or relative.

Student Name: PID:

Rotation Start Date: Rotation End Date:

Duration of Electives: 4 weeks

Initial that you understand and/or have completed each of the following:

☐ As part of this rotation/study I will be rotating at:

- ☑ Nemours Children's Hospital
- ☑ Orlando VAMC
- ☑ HCA: ☐ Oviedo ☐ North Florida ☐ Ocala
- ☑ Other site (Specify:)

☐ I will not be rotating at a local hospital as aprt of this rotation/study.

☐ If you will be rotating at one of the above hospitals, please initial that you have reviewed the credentialing requirements and reached out to the coordinator to confirm your status. Please review credentialing requirements here: https://webcourses.ucf.edu/courses/981501/pages/credentialing-paperwork.

☐ I have discussed first day reporting instructions with the supervising physician, as well as any requirements expect to be completed by me prior to the first day of the rotation.

☐ I understand that housing will not be guaranteed for this elective.

☐ I have provided my signature on page 2.

Special Clinical Study

If you are completing a Special Clinical Study, please complete the following:

Clinical Elective Title:
Elective Description:

Institution Name:

Address, City/State:

Institution Supervising Faculty or Contact Person (Print)

Institution Supervising Faculty Signature for Approval

Supervising Faculty or Contact Person E-mail Address

Contact Telephone Number

Faculty Appointment

☐ I am a UCF Faculty (core, adjunct, volunteer or affiliate)

☐ I am not a UCF Faculty (Name of Institution:)

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Special Research Study

If you are completing a Special Research Study, please complete the following:

Research Elective Title:

Study Question:

Background:

Anticipated Goals/Outcomes:

Institutional Supervising Faculty or Contact Person (Print)

Institutional Supervising Faculty Signature for Approval

Supervising Faculty E-mail Address

Contact Telephone Number

Faculty Appointment

- ☐ I am a UCF Faculty (*core, adjunct, volunteer or affiliate*)
- ☐ I am not a UCF Faculty (Name of Institution:)

Student's Signature

Date

UCF COM M3/M4 Assistant Dean Signature Approval

Date

UCF COM Associate or Assistant Dean for Students Signature Approval

Date

FOR OFFICE USE: APPROVED ☐ PEOPLESOFT ☐ STUDENT ☐ DENIED ☐

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Making Changes to Your Schedule

- Enrollment in an elective is considered a commitment. Changes must be requested **at least 6 weeks** in advance prior to the beginning of the elective.

- Third 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 changes 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 M3/M4 Assistant Dean of Medical Education.**

  ****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 the scheduler at MDClinicalScheduling@ucf.edu. Students should never make schedule requests directly with the preceptor.

- When availability of a course is confirmed by the M3 Elective Scheduler and a request for a change has been approved, students must complete an "Add/Drop" form. The completed form must be turned in 6 weeks 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/Add/Drop form has been received by the Registrar's Office. Failure to turn in a Clerkship/Add/Drop 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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

M3 Elective Add/Drop Form

REQUEST TO CHANGE COURSE

Use this form if you are requesting to change your assigned M3 elective course to another elective course.

Student Name (Please Print):_____

Date:_____

Email:_____ **Phone:**_____

Current M3 Enrollment:

I am currently enrolled during the following block and weeks. (Select the appropriate check box for your respective block and weeks.

☐Block 1	☐Block 2	☐Block 3	☐Block 4	☐Block 5	☐Block 6	☐Block 7	☐Block 8
☐ Block 9	☐Block 10	☐Block 11	☐Block 12				

My current M3 Elective enrollment course name is: (Note the name of the course and the faculty in the line below)

Course: _____ Faculty:_____

Reason for requesting change:

Request to change M3 Elective to:

Course:_____ **Faculty:** _____

By signing this petition you are agreeing to switch your M3 Elective Course.

Student signature:_____ **Student Name (Print)**_____

Date:_____

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Clerkships and Elective Training Locations: Course Key

- **(BC)** The Baltodano Clinic
- **(BP)** VA Health Care System – Bay Pines VA Healthcare System
- **(DLCF)** Digestive and Liver Center of Florida
- **(DSCSC)** Dermatology & Skin Cancer Surgery Center
- **(FCS)** Florida Cancer Specialists
- **(FLAG)** Flagler Hospital
- **(FPM)** Florida Pain Medicine
- **(HCA)** Hospital Corporation of America
    - *Osceola Regional Medical Center (HCA – OsRMC)*
    - *Ocala Regional Medical Center (HCA – Ocala)*
    - *Oviedo Regional Medical Center (HCA – OMC)*
    - *North Florida Regional Medical Center (HCA – North Florida)*
    - *Central Florida Regional Hospital (HCA – CFLR)*
- **(HCCH)** Health Care Center for the Homeless
- **(HoF)** Heart of Florida
- **(HVC)** Heart and Vascular Care, PA
- **(LR)** Lake Rheumatology
- **(LSBC)** LifeStream Behavioral Center
- **(MDPC)** Mid Florida Psychiatry Center
- **(NCH)** NCH Healthcare System
    - *NCH Baker Hospital Downtown*
- **(NEM)** Nemours Children's Hospital
    - *Nemours Children's Clinic – Orlando*
    - *Nemours Children's Hospital – Lake Nona*
- **(OPSC)** Orlando Pain & Spine Center
- **(OSMI)** Orthopaedic & Sports Medicine Institute
- **(PO)** Private physician's office, clinic or externship location

- **(PPC)** Planned Parenthood Clinics
- **(UCF COM)** University of Central Florida College of Medicine
- **(VAMC)** Department of Veterans Affairs
    - *VA – Lake Baldwin*
    - *VA Lake Nona*
    - *VA Kissimmee*
    - *VA Clermont*

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

M3 ELECTIVES

THE FIRST TWO DIGITS IN THE COURSE SECTIONS DENOTE SPECIFIC SITE LOCATION:
(EXAMPLE, MDE 8336 **11**XX)

Third Year Requirements - 2021-2022

The third year is divided into 12 blocks. All students are required to complete and pass the following clerkships: IM/FM, OB/GYN, Neurology, Pediatrics, Psychiatry and Surgery/ 2 M3 Electives.

NOTE: STUDENTS CANNOT REPEAT THE SAME ELECTIVE DURING THEIR FOURTH YEAR.

Important: Third Year Electives availability varies across blocks. Exceptions are noted with individual course listing. Enrollment limitations are noted in course information. All electives are susceptible to last minute changes at the discretion of the instructor/UCF COM.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

MDE 7107 Health Care for the Homeless

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Pia Valvassori
Email: pvalvassori@yahoo.com
Phone: (407) 461-2912
Maximum Enrollment: 1 per block
Pre-requisites: IM/FM

First Day: Report to Health Care for the Homeless, 232 North Orange Blossom Trail, Orlando, FL 32805 at 10:00 am

Course description and goal of rotation: This experience would enable students to understand how the experience of homelessness impacts health and the ability to access health care, this experience would enable the student to participate in a program, which addresses these issues by utilizing a multidisciplinary approach to care. Blended learning experience comprised of working with interprofessional team including street outreach, peer navigators and case managers outside of the clinic setting, also working in the primary care clinic with both primary care and behavioral health providers. In addition, modules, podcasts and readings that pertain to health care for the homeless will be incorporated all in an attempt to allow the student to gain insight into the complex nature of those experiencing homelessness. Student will be responsible for presenting on homeless specific topic at the conclusion of the rotation. The student will encounter clinical conditions including various infectious diseases, chronic obstructive pulmonary disease, dermatologic diseases, cardiovascular disease and cancers. They will learn how social determinants greatly influence clinical outcomes and preventative care and gain an understanding of health disparities. The student will have the opportunity to work with an interprofessional team including behavioral health, clinical pharmacy, street outreach, case managers and peer specialists. The rotation will also incorporate trainings on motivational interviewing, trauma informed care and other webinars and podcasts addressing the nuances of health care for the homeless. The students will gain an understanding of how homelessness is a complex social problem having direct health implications. In addition, students will gain the knowledge and skills to advocate for available social, community and government resources.

Learning Objectives:

Patient Care:

The medical student is expected to provide patient care that is compassionate and will demonstrate the skills to evaluate the psychosocial components and stressors of a patient's illness. The students will understand the necessity of working with an interprofessional team to effectively address the patient's complex needs.

***Medical Knowledge*:** The medical student is expected to develop the skills and knowledge to recognize the most prevalent diseases in individuals experiencing homelessness and use the appropriate tools and resources to identify other comorbidities. The student will use evidence based approaches and adapted clinical guidelines to address various medical conditions.

MDE 7107 Health Care for the Homeless continued…

***Practice Based Improvement*:** The medical student is expected to demonstrate the ability to investigate and evaluate the care of patients and to continuously improve care based on ongoing self and faculty evaluation. The student will use the resources available to address the socio-medical conditions and direct patients to the appropriate resources. In addition, they will identify barriers to care and devise patient centered strategies to enhance provider and patient satisfaction.

Interprofessional and Communication Skills: The medical student is expected to demonstrate communication skills that result in the effective exchange of information and collaboration. The students will regularly consult with behavioral health staff on issues that pertain to mental illness and substance use disorders. They will consult clinical pharmacy on chronic disease management strategies and advocate for housing working alongside peer support specialists, case management and the street outreach team.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice.
The student will demonstrate compassion and respect towards patients many of whom have been victims of traumatic experiences and require a higher degree of sensitivity. The student will not impose their own personal belief systems on patients experiencing homelessness many of whom suffer from the stigma of severe mental illness and substance use disorders.

***Systems Based Practice*:** The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. The student will gain an understanding of the epidemiology of homelessness, recognizing it as a social problem with health implications. The students will also identify barriers to care including and understand the association of housing and health. Particularly as it relates to the management of chronic disease.

Learning Activities: Students will be in clinic one day a weeks and participate in clinical opportunities with behavioral health and clinical pharmacy. The student may also interface with case managers and peer navigators and work with the street outreach team when opportunities are available.

Required textbooks and articles: See attachment.

How will the student's performance be assessed? How/When will formative feedback be given? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7194 Family Planning, Abortion, and Gynecological Care

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact:
Email: Trainees@@ppswcf.org
Phone: (941) 365-3913 ext. 2942
Primary Faculty Supervisor: Dr. Virgil Reid
Email: Virgil.Reid@ppswcf.org
Phone: (773) 612-9085
Maximum Enrollment: 1 per block
Pre-requisites: Consent of Instructor, OB/GYN
Clinic location subject to change-check w/contact Ms. Ayala.
TUES: 9AM @ PP Kissimmee 610 Oak Common Blvd. Kissimmee, FL 34741. Virgil Reid, MD
WED: 9AM @ PP East Clinic 11500 University Blvd, Orlando, FL 32817. Report to: Jackie Redlin, ARNP
THURS: 9AM @ PP Kissimmee 610 Oak Common Blvd. Kissimmee, FL 34741 Jackie Redlin, ARNP
FRI: 9AM @PP East Clinic 11500 University Blvd, Orlando, FL 32817. I. Cori Baill, MD

First Day: Monday: Report to PP East Clinic, 11500 University Blvd., Orlando, FL 32817 at 8:45 am to Jackie Redlin, ARNP.

Course description and goal of rotation: Planned Parenthood provides women and men with all aspects of family planning, gynecology, STI evaluation and treatment, pregnancy testing and option counseling and abortion care. Students will have an opportunity to work with the medical director, other physicians, and nurse practitioners, as well as observe ultrasonography, abortion counselling, and other staff. There will be a weekly case discussion/high risk/didactic portion with Dr. Baill. Planned Parenthood health centers provide well-person care, STI screening and treatment, abortion and miscarriage management services, cervical cancer screening, gender affirming hormone therapy, pre-exposure prophylaxis for HIV infection, and all types of contraception including vasectomy. Physicians and nurse practitioners will partner with students to carry out clinical activities. Students will gain proficiency diagnosing and treating common gynecologic concerns and observe outpatient procedures including IUD placement, endometrial biopsies, colposcopies, no scalpel vasectomies and pregnancy counseling and termination. Students will become proficient in speculum exams, breast exams, and other aspects of the routine gynecological physical examination. There will be a half day didactic/case presentation/discussion with Dr. Baill. Online ultrasound and counseling courses, as well as texts and articles will be included as applicable to clinical experiences.

MDE 7194 Family Planning, Abortion, and Gynecological Care continued…

Learning 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.
Patient care is in an outpatient setting including office procedures and basic lab facilities. Most of our patients are young women seeking family planning, cancer screening and GYN care including pregnancy termination. Menopausal health care, male contraception including no scalpel vasectomy and STI evaluation of both sexes are regular aspects of clinic care. Patients are from across the socioeconomic spectrum and many are attracted to Planned Parenthood because of its inclusivity and sensitivity to the LGBTQ community. There are opportunities to utilize medical Spanish skills.

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas:
Contraceptive options, STI evaluation and treatment per CDC Guidelines, medical and surgical abortion care and counseling, cervical cancer screening and evaluation and treatment of common gynecological conditions including outpatient procedures and testing.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate his/her care of patients and to continuously improve care based on ongoing self-evaluation.
Patient care at Planned Parenthood is evidence based. Protocols are updated annually and as needed when breakthroughs occur. Students will be provided access to protocols, training opportunities and will be directed to key articles and reviews. We anticipate four full days of clinical experience, reading/learning assignments to be completed outside of clinical time and a half day didactic session for practice, discussions, presentations and evaluation. One provider will oversee all didactic sessions to assess student progress (Dr. Baill).

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Students will provide effective and professional consultation with the healthcare team, effectively develop and document patient histories, physical exams, assessments and plan of care. And communicate compassionately and clearly with patients, their loved ones and family as indicated with attention to confidentiality, and sensitivity to potential legal ramifications.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.
Respect, altruism, compassion and integrity are all aspects of professionalism valued at Planned Parenthood. Each of us individually and collectively benefits from identifying areas for improvement in personal performance and peer interaction.

***Systems Based Practice*:** The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

MDE 7194 Family Planning, Abortion, and Gynecological Care continued…

Learning Activities: Students will attend general family planning clinics as well as dedicated clinics for medical abortion, surgical abortion, and no scalpel vasectomy. Menopause services, male services, STI evaluation and treatment, gender affirming hormone therapy, cancer screening and common gynecological

MDE 7194 Family Planning, Abortion, and Gynecological Care continued…

complaints are the typical presenting patient concerns. Clinics are held between 9A -5PM M-W, F or 10A-7P Th. Specific clinic hours may vary within those hours (begin later, end earlier) at various sites (East Orlando, Kissimmee).

Required textbooks and articles: Planned Parenthood protocols will be provided to our students. Dr. Baill will select relevant articles for didactic portion and discuss with students in a weekly conference for four hours (TBA) Fridays. The Friday conference will include student case presentations and literature review of relevant topics.

How will the student's performance be assessed? How/when will formative feedback be given? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All valuations will be completed electronically via an online evaluation system.

MDE 7822 Pain Management

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Arun Kalava
Email: breakthrupain@gmail.com
Phone: (813) 533-6259
Maximum Enrollment: 2 per block
Pre-requisites: N/A

First Day: Report to 375 S 12th Street, Tampa, FL 33602 at 9:00 am.

Course description and goal of rotation: The students will be introduced to patients who present with acute, sub-acute and chronic pain. During this rotation students will gain ability to take a history and physical examination of a patient presenting with pain. They will be able to place peripheral IVs for ketamine and lidocaine infusions offered to these patients. They will be able to assist Dr. Kalava in performing ultrasound guided and fluoroscopic guided nerve blocks, nerve stimulators, radio-frequency ablation and cyroanalgesia. By the end of the rotation, they should be able to learn basic IV skills, monitoring patients under IV Ketamine | IV Lidocaine and learn basics of use of ultrasound and fluoroscopy in performing various nerve blocks.

Learning 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: The medical student is expected to demonstrate medical knowledge relevant to Pain Medicine | Anesthesiology, as well as the application of this knowledge to patient care: The student will obtain and develop medical knowledge in the following areas:

• Insert peripheral IV catheters. Monitor patients under IV Ketamine. Monitor patients receiving IV Lidocaine; Learn about different nerve blocks

Practice Based Improvement: The medical student is expected to be able to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on constant self-evaluation and life-long learning.

• Students would be able to differentiate the various applications in managing patients with pain. This includes medication management, physical therapy and interventional techniques.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. The student will effectively document the patient history and plan of care and effectively communicate information with family members of the patient.

MDE 7822 Pain Management continued…

Professionalism: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

• Effectively work as part of a group in private physician owned practice. Collaborate with medical assistants. Educate patients and their family about post nerve block or IV ketamine infusion instructions.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

• Students will have exposure to how a private medical practice is run. How practitioners interact with medicare and other commercial insurances. How the 'business of medicine" is run.

Learning Activities: Students will participate in daily care of patients. Actively be involved in taking history, examining. They will be reviewing literature on rare cases as needed. They are welcome to pick up on an ongoing project or write up to publish in scientific journals.

Required textbooks and articles: Essentials of Pain Medicine 4th edition. Authors: Honorio Benzon, Srinivasa N Raja, Scott Fishman, Spencer Liu, Steven Cohen

How will the student's performance be assessed? How/When will formative feedback be given? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 8220 3 Cardiology

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact: Sylvia LeBlanc
Email: sleblanc@havcorlando.com
Phone: (407) 933-0900
Primary Faculty Supervisor: Dr. Deidrya Jackson
Email: deidrya.jackson@va.gov
Phone: (313) 671-0574
Contact Person: Dr. Jackson, (313) 671-0574;
vhaorlmedicaleducationcoordinators@va.gov
Maximum Enrollment: 1-2 per block (September-May only)
Pre-requisites: Consent of Instructor, IM/FM

First Day: Report to Lake Nona VA, 13800 Veterans Way, Orlando, FL 32827 at 9:00 am.

Course description and goal of rotation: Students will have exposure to chest pain hypertension, arterial fibrillation, heart failure, coronary disease and bypass surgery evaluation, diagnosis, and treatment. The student will encounter the most common medical/surgical conditions typically seen in Cardiology and will learn how to assess and develop a differential diagnosis and treatment plan for these patients. The rotation is hands-on, and the student will evaluate patients and present cases to the supervising attending physician as part of daily clinical activities. By the end of the rotation, the student will be more proficient in evaluating and planning treatment for common clinical conditions seen in Cardiology. The student is expected to utilize the professional literature to prepare a review on a specialty topic and give a brief presentation. 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 common concerns seen in an inpatient and outpatient Cardiology practice. Students are expected to attend grand rounds, morning report, and resident learning sessions.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge of the common types of disorders seen in inpatient and outpatient Cardiology.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

MDE 8220 Cardiology continued…

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. The student will effectively document the patient history and plan of care and effectively communicate information with family members of the patient.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society. The student will demonstrate respect, compassion, integrity and altruism in relationship with patients, families and colleagues, adhere to principles of confidentiality, recognize and identify areas of improvement in personal and in peer performance.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities: Students will participate in daily teaching rounds on wards. Students will prepare a literature review on a specialty topic and give a brief presentation. In the outpatient setting, the student will assist in the assessment of patients and in the development of a differential diagnosis and plan for diagnostic work-up and treatment planning with the preceptor.

Required textbooks and articles: Use will be made of the extensive online Cardiology resources in the UCF COM Health Sciences Library.

How will the student's performance be assessed? How/When will formative feedback be given? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 8220 9 Clinical Cardiology

Full Time (4 weeks)
(PO) Florida Cardiology
Grading Basis: P/F
Primary Faculty Supervisor: Dr. Karan Reddy
Contact Person: Karan Reddy, 407-467-0829;
karangreddy@gmail.com;
Maximum Enrollment: 1 per block

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

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.

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.

MDE 8281 Hematology/Medical Oncology

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Allison Carilli
Email: allison.carilli@va.gov
Phone: (407) 242-2833
Maximum Enrollment: 1 per block
Pre-requisites: Consent of Instructor, IM/FM
Availability: All blocks

First Day: Report to Lake Nona VA Clinic 2F, 13800 Veterans Way, Orlando, FL 32827 at 8:00 am

Course description and goals of rotation: Hem/Onc clinic and inpatient consults with 7 different providers. Will see a variety of soli d tumors. Hematologic malignancies and benign hematology. Opportunity for exposure to blood banking, lab pathology, radiology and interventional oncology. Students will be exposed to a variety of patients with both oncologic and hematologic conditions. Skills expected to be learned are assessment of tumor size (physical or radiographic), assessment of symptoms related to chemotherapy as well as tumor, review of peripheral blood smears and bone marrow biopsy and aspiration. Clinical knowledge gained will be on management of common and occasionally rare hematologic disorders, initial work up of solid and hematologic malignancies including staging, initial and subsequent treatment and management of complications from chemotherapy. Students will also be exposed to the appropriate integration of palliative care and hospice in regards to the oncology patient. There will also be opportunities for exposure to blood banking, hematology and coagulation lab services, interventional oncology (port placement, biopsies, palliative drainage etc.), tumor/heme pathology and collaborative tumor boards. Students will also be exposed to national guidelines for oncology care and will be asked to do a 5 minute presentation 2-3 times during the rotation on an oncology or hematology patient they saw in the past week.

Learning 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.

1. Directed history and physical of a consult.
2. Begin to develop an appropriate assessment and plan for a consultation or new oncologic patient.
3. Improve skills of breaking bad news.

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the

MDE 8281 M3 Elective in Hematology/Medical Oncology Rotation continued…

application of this knowledge to patient care. The student will develop knowledge in the following areas:

- Understand work up and management of anemia and other common cytopenias.
- Understand management of autoimmune cytopenias.
- Assessment and management of clotting and bleeding disorders.
- Initial workup of solid tumors.
- Common complications from chemotherapy

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

- Integrate national comprehensive guidelines in management of solid and hematologic malignancies.
- Begin to apply knowledge of trials to clinical practice.
- Be able to critically analyze oncologic journal articles and trials.

Interprofessional and Communication Skills*:* The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

- Demonstrates the ability to respectfully, effectively, and efficiently develop a therapeutic relationship with patients and their families.
- Communication of "bad news" with patients and families.
- Communication with other services including pathology, lab, radiology and surgery.
- Demonstrates respect for diversity and cultural, ethnic, spiritual, emotional, and age-specific differences in patients and other members of the health care team.
- Demonstrate the ability to effectively use the feedback provided by others.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

- Arrives on time and is dressed professionally (no scrubs, white coat optional).
- Willing to see all types of patients.
- Completes medical records honestly and punctually.
- Respect and appreciation of all patients and members of the health care team.

Systems Based Practice*:* The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

- Practices quality, cost effective healthcare; beings to understand the cost of oncology care today
- Advocates for and facilitates patient advancement through the health care system.

MDE 8281 M3 Elective in Hematology/Medical Oncology Rotation continued…

Learning Activities:

1. Clinical responsibilities: Student will be assigned to an attending each half day of clinic. Students will see patients alone or with the attending depending on the attending's preference. Students will typically see 1 new consult and 2-3 follow ups per half day clinic. Notes may be written by the student at the attending's discretion and per their desired format.
2. Inpatient rounds: students will rotate on inpatient consult service with our PA and attending physician 1-2 times per week. They will typically see 1 new consult and 1-3 follow up patients per half day.
3. Weekly conferences: students will attend various tumor boards (1-2 per week) and present one journal article during the rotation.
4. Friday afternoons will be dedicated to feedback (both to and from the student), case discussion and individual learning time.
5. Time will be scheduled in the blood bank, lab, pathology and radiology if consult service is slow or low clinic numbers or as the student expressed interest.

Required textbooks and articles:

1. Access to NCCN.org guidelines required (this is free, account should be created).
2. ASH pocket guides app recommended.
3. In Practice Oncology and Up to Date are other resources that are helpful as well as the "How I Treat" series from ASH for hematology topics.

How will the student's performance be assessed? How/When will formative feedback be given?
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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

MDE 7310 Rheumatology Outpatient

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact: Patricia Stark, BSRN
Phone: (352) 343-7735
Primary Faculty Supervisor: Dr. Kenneth Stark
Email: kenestark@gmail.com
Phone: (352) 343-7735
Maximum Enrollment: 1 per block (None in blocks 1 or 4)
Pre-requisites: None

First Day: Report to Lake Rheumatology, 1613 Banning Beach Road, Tavares, FL 32778 at 9:00 am.

Course description and goals of rotation: This 4-week M3 elective introduces the medical student to the field of Rheumatology. The rotation provides clinical experience in the assessment and treatment of outpatients with a variety of Rheumatology disorders. The rotation is hands-on and illustrates the role of the provider of Rheumatology in the clinical setting. During the 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 identify and manage common concerns. The student is expected to complete and EBM project during the rotation to present to the team.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas: The common types of disorders presenting in the outpatient settings of Rheumatology.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to

MDE 7310 M3 Elective in Rheumatology Outpatient continued…

continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities: Students will participate in daily outpatient assessment and treatment of patients with a wide of Rheumatology disorder. Student will prepare a literature review on a specialty topic and give a brief presentation.

Required textbooks and articles: Use will be made of the extensive only Rheumatology resources in the UCF Health Sciences Library.

How will the student's performance be assessed? How/when will formative feedback be given? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7257 Dermatology

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Blatnoy
Email: vitaly_blatnoy@yahoo.com
Phone: (407) 706-1770
Maximum Enrollment: 1 per block
Pre-requisites: None

First Day: Report to 7250 Red Bug Lake Rd. #1020 Oviedo, FL 32765 or 422 S. Alafaya Trl., #26, Orlando, FL, 32828 at 8:00 am.

Course description and goals of rotation: Student will learn to assess & develop a differential diagnosis and treatment plan for common conditions seen in inpatient and outpatient Dermatology. This rotation is hands-on & by the end of the rotation, the student will have a greater proficiency in evaluation and treatment of dermatologic conditions.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas: Common types of disorders presenting in the inpatient and outpatient settings of Dermatology.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

MDE 7257 M3 Elective in Dermatology continued…

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities:

1. The student will actively participate in the daily clinical assessment & treatment of inpatients and outpatients under supervision.
2. The student will prepare a literature review on a Dermatology topic and give a brief presentation.

Required textbooks and articles: Use will be made of the extensive online Dermatology resources in the UCF COM Health Sciences Library.

How will the student's performance be assessed? 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. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 8210 Advanced Physiology of the Critically Ill Patient

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Feroza Daroowalla
Email: Feroza.daroowalla@ucf.edu
Phone: N/A
Maximum Enrollment: Block 9 only
Pre-requisites: Consent of Instructor, IM/FM or Surg

First Day: Online

Course description and goals of rotation: Non-clinical integration of advanced physiology and ICU cases in online meetings with physiologists and intensivists to do case evaluations and work through mechanism of disease analysis.

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas:

a. Basic physiology, pathophysiology, and management of critical illnesses

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7392 Advanced Evidence-Based Medicine

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr.Stephen Rosen
Email: sgrosen@brighthouse.com
Phone: (609) 651-7339
Maximum Enrollment: 2 per Block, No Blocks June - August
Pre-requisites: Consent of Instructor, IM/FM, Pediatrics

First Day: Student should contact primary preceptor for location and meeting times

Course Description and goal of rotation: This four-week elective will use published literature to teach study design, statistical analysis, and adverse event reporting to relate evidence-based medicine to clinical care. Students will evaluate clinical trials in cardiology, endocrinology, gastroenterology; hematology/oncology; infectious disease, and rheumatology; 2) Evaluate clinical pharmacology studies.

1. Learn to critically review the medical literature
2. Understand basic biostatistics
3. Learn clinical pharmacology
4. Learn MedDRA (Medical Dictionary of Regulatory Activities) to assess adverse events
5. Understand how clinical guidelines are developed

Learning Objectives:

Patient Care:

1. Understand the generation of medical hypothesis
2. Understand power calculation, hazard ratios, non-inferiority trials
3. Understand adverse event reporting
4. Understand clinical pharmacology terminology (half-lives, maximum concentration, time to maximum concentration, and metabolism/excretion

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas: See above.

Practice Based Medicine: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and

MDE 7392 Advanced Evidence-Based Medicine continued…

life-long learning.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
Students will be expected to review and present two articles on a weekly basis. These articles will be chosen to highlight the above learning objectives.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession,and society. Students will understand the potential bias of sponsor funding of clinical trials.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Student will understand the costs of clinical trials in the broader issue of medication costs.

Learning Activities:

1. Literature review as above

Required textbooks and articles: N/A

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

MDE 7580 Interventional Physiatry

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Arpit Patel
Email: APatelPAIN@gmail.com
Phone: (240)353-8244
Maximum Enrollment: 1 per block
Pre-requisites: Consent of instructor, Neurology

First Day: Report to 3909 Galen Court, Sun City Center, FL at 8:00 am

Course description and goal of rotation: There is a growing interest for Physical Medicine and Rehabilitation and there is a lack of exposure in the core third year. This rotation would focus on musculoskeletal medicine along with interventional joint and spine based procedures to help patients with chronic pain. Goal of the rotation would be to learn clinical and radiographic anatomy and to encompass strong physical examination skills to develop a differential diagnosis. Will educate patient regarding fluoroscopic guided injections.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas: Musculoskeletal examination. Reviewing spine and joint anatomy on X-ray, CT and MRI. Will review how to correlate spine and nerve anatomy with interventional based procedures.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.
Develop a rapport with patients who suffer from chronic pain.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals:

MDE 7580 Interventional Physiatry continued…

Demonstrate respect, compassion, integrity and altruism in relationship with patients, families and colleagues, demonstrate respect for religious beliefs, adhere to principles of confidentiality, recognize and identify areas of improvement in personal and in peer performance.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Learn to implement time management skills in order maintain and run a clinic.

Learning Activities:

1. Journal clubs
2. Follow up and new patient visit intakes
3. Case presentations

Required textbooks and articles: Rathmell – Interventional Pain

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7703 Anesthesiology

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact: Sandra Eldridge
Email: Sandra.eldridge@hcahealthcare.com
Phone: (352) 401-8323
Primary Faculty Supervisor: Dr. Ettore Crimi
Email: ettorecrimi@gmail.com
Phone: (352) 401-8312
Maximum Enrollment: 1 per block, No blocks 1-3
Pre-requisites: Consent of instructor

First Day: Report to Ocala Regional Medical Center, 1431 SW 1st Avenue, Ocala, FL 34471 at 8:30 am / 7:00 am thereafter

Course description and goal of rotation: To teach basics of anesthesiology, clinical & technical skills, professional attitudes so that Students may gain exposure and proficiency to transition into a residency program. This is a 4-week rotation designed for 3rd and 4th year medical students.

During this rotation, students will be supervised by an attending. Students will be exposed and expected to participate in all phases of patient care in the perioperative period for surgical cases and other procedural interventions requiring the involvement of anesthesiologists. During the four weeks the education focus will progress, each week with a PBLD discussed each week.

- ***Week one****:* focuses on basic airway management, patient assessment, the operating room setup, familiarization of the anesthesia machine and standard monitors, and the induction and intubation of patients.
- ***Week two:*** focuses on refining airway skills, preoperative patient evaluation, and administration of general anesthesia and monitored anesthesia care.
- ***Week three:*** focuses on the postoperative care and recovery from anesthesia and further refining airway skills, including managing difficult airways and utilization of advanced airway equipment.
- ***Week four:*** focuses on the synthesis of all phases of the perioperative period and the clinical application of the knowledge acquired.

Learning Objectives:

Patient care:

MDE 7703 Anesthesiology continued…

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.

Students will be involved in administering anesthetic care for patients undergoing a wide variety of procedures in the operating room and other clinical sites. Students will participate in the basic management of the patient in all phases of the perioperative period. Students will be assigned cases where the surgical procedure and/or the patient's medical history are less complicated initially, as much as possible. As students gain experience, knowledge, and skills throughout the rotation the cases assigned will increase in complexity. The students should anticipate a broad exposure to patient types and procedures.

***Medical Knowledge**:* The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas: Students will demonstrate knowledge of the following topics:

1. Definition of MAC
2. ASA physical status classification system
3. Rapid sequence induction/intubation
4. The ASA difficult airway algorithm
5. Preoperative testing guidelines
6. Perioperative cardiac evaluation for patient's undergoing non-cardiac surgery
7. Laryngeal mask airway indications/contraindications
8. Regional neuraxial anesthesia
9. Doses, advantages, disadvantages, pharmacodynamic/kinetic properties of commonly used drugs, including, but not limited to:
    a. Induction agents: Propofol, Etomidate, Ketamine
    b. Neuromuscular Blocking agents: Succinylcholine, Cisatracurium, Rocuronium, Vecuronium, Pancuronium
    c. Opioid Analgesics: Fentanyl, Morphine, Hydromorphone, Meperidine
    d. Vasopressors: Atropine, Ephedrine, Phenylephrine, Epinephrine, Vasopressin
    e. Anti-hypertensive agents: Esmolol, Labetalol, Nicardipine
    f. Common perioperative medications: Midazolam, Neostigmine, Glycopyrolate, Metoclopramide, Ranitidine, Ondansetron, Droperidol
10. Mallampati classification system
11. NPO guidelines
12. Compound A
13. Machine check
14. Circle system
15. ASA Standard Monitors and monitoring guidelines
16. Invasive blood pressure monitoring
17. Central venous pressure monitoring
18. Capnography

MDE 7703 Anesthesiology continued…

19. Twitch monitoring
20. Extubation criteria
21. Recognition and management of common perioperative events: Hypertension, Hypotension, Tachycardia, Bradycardia, Hypoxemia , Dysrhytlunias
22. Hemodynamic responses to intubation/extubation
23. Phase 1 and 2 blockade with Succinylcholine

Practice Based Medicine: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

Students must demonstrate the ability to update their knowledge base by locating, appraising, and assimilating scientific evidence as it pertains to the patients in the operating room. Online computer access will be available in the perioperative area, so that up-to-date evidence-based medical information can be readily accessed.

Interprofessional Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Students will learn and demonstrate the ability to communicate needs efficiently, clearly, and professionally to the hospital and OR nursing staff. This includes not only verbal skills, but also written skills (including handwriting). Furthermore, students will learn and demonstrate the ability to clearly communicate with surgeons and faculty. Students will learn and demonstrate the proper methods of calling for help and activating emergency systems. Students will also become familiar and demonstrate communication skills essential to crisis management, such as closed-loop communication.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Students will demonstrate the ability to interact professionally with the hospital and OR staff, including but not limited to nurses, surgeons, x-ray technicians, anesthesia technologists. Furthermore, students will maintain a professional image at all times, inclusive of exhibiting ethical behavior, especially with respect to patients and their family members.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Students will learn an understanding of the economics of an anesthetic, including but not limited to the cost of equipment and medications,and how they relate to other specialties and the greater hospital budget. Safety/quality issues within the department, as well as hospital wide initiatives, will be introduced and discussed. Discussions in the OR will include:

1. Efficient navigation of the hospital system
2. Correct site/side verification techniques
3. Timing and administration of prophylactic antibiotics

MDE 7703 Anesthesiology continued…

Learning Activities: Student will be assigned daily to one Operating room. The assignment will be communicated one day in advance so that they student will review the surgical procedure and patients charts and formulate an anesthetic plan. The first case will start at 7 am. The student should arrive 30 minutes prior the first case to be able to discuss the anesthetic plan with the assigned preceptor and help to prepare the Operating room. The student will receive direct supervision from the Staff Anesthesiologist and actively participate in perioperative management with the Anesthesiology resident or CRNA.

Required textbooks and articles: Clinical Anesthesia Procedure of the Massachusetts General Hospital, Ninth Edition, Lippincott Williams & Wilkins.

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

1. ***Patient Care:*** Assessment tools: Direct observation, and reported on post-rotation evaluation from Faculty Direct observation, and reported on post-rotation evaluation from multiple sources such as nursing and hospital staff.
2. ***Medical Knowledge:*** Assessment tools: Direct observation and reported on post-rotation evaluation from Faculty direct observation and reported on post-rotation evaluation from multiples sources such as nursing and hospital staff. Post-rotation exam to be included in education file.
3. ***Practice-Based Learning and Improvement*****:** assessment tools: Direct observation and reported on post-rotation evaluation from Faculty direct observation and reported on post-rotation evaluation from multiple sources such as nursing and hospital staff. Presentation and discussion of pertinent topics with faculty.
4. ***Interpersonal and Communication Skills*****:** Assessment tools: Direct observation and reported on post-rotation evaluation from Faculty direct observation and reported on post-rotation evaluation from multiple sources such as nursing and hospital staff. Presentations and discussions with faculty.
5. ***Professionalism*****:** Assessment tools: Direct observation and reported on post-rotation evaluation from Faculty direct observation and reported on post-rotation evaluation from multiple sources such as nursing and hospital staff.
6. ***System-Based Practice:*** Assessment tools: Direct observation and reported in post-rotation evaluation from Faculty direct observation and reported on post-rotation evaluation from multiple sources such as nursing and hospital staff.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7716 Emergency Medicine

Full-time: 4 weeks
Grading Basis: P/F
Time: Contact Berliza Cruz & Dr. Rubero for specific reporting time.
Information/scheduling Contact: Berliza Cruz
Email: Berliza.cruz@hcahealthcare.com
Phone: (321) 697-1733
Primary Faculty Supervisor: Dr. Jose Rubero
Email: jose.rubero@ucf.edu
Phone: (321) 697-1748
Maximum Enrollment: Blocks 10-12 only
Pre-requisites: Consent of Instructor, IM/FM, Surgery, Pediatrics, **Must be scheduled through Clinician Nexus**

First Day: Report to Osceola Regional Medical Center, 720 W. Oak Street, Kissimmee, FL 34741

Course description and goal of rotation: This elective rotation will give students interested in pursuing a career in Emergency Medicine an excellent exposure to the breadth of this specialty's clinical practice. This elective rotation will give students interested in pursuing a career in Emergency Medicine an excellent exposure to the breadth of emergency clinical practice. The rotation will include a thorough introductory clinical orientation, clinical skills procedure lab and Emergency Ultrasound workshop. Students will complete 12 clinical shifts: 10 shifts in the adult ED and 2 in pediatric emergency medicine.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas:

- Differential diagnosis for emergent conditions
- Assessment and management of critical, acute and subacute medical conditions
- Emergency medicine procedures

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.
Daily faculty/resident evaluation and feedback will further allow the student to identify areas of strength and for improvement.

MDE 7716 Emergency Medicine continued…

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities:

1. Orientation/Clinical Synthesis shift
2. 11 Shifts
3. 6-8 patient evaluations/shift
4. Medical student didactics: Ultrasound, procedure workshop, simulation
5. Morning report presentation

Required textbooks and articles: Frist Aid for Emergency Medicine. Tintanelli's.

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

MDE 7822 Pain Management -

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact: Zohra Badawy
Email: Zorlandopain123@gmail.com
Phone: (407) 985-4700
Primary Faculty Supervisor Dr. Amr H. Badawy
Email: Drbadawyspinecenter@gmail.com
Phone: (407) 985-4700
Maximum Enrollment: 1 per block (blocks 5, 6, 8, 9, 11, and 12 only)
Pre-requisites: Surgery and IM/FM

First Day: Report to Orlando Pain & Spine Center, 4351 Hunters Park Lane, Orlando, FL 32837 at 9:00 am

Course description and goal of rotation: Students will be able to understand different aspects of pain medicine and observe many procedures in interventional pain management. We will discuss basics of anatomy and pharmacology related to pain medicine. Most of the procedures are done at my office using both fluoroscopic guidance and ultrasound guidance. Some procedures are done at surgery centers for implantable pain devices and can be arranged for interested students. Students will learn and observe how we approach pain management patients, history and physical exam, orders and discussion of imaging studies, decision making process and indications for referrals to other specialists. For those who cannot get exposed to radiation (Fluoroscopy) as during pregnancy will have to notify us immediately. Students will learn basics of interventional pain management including definitions, conditions we manage, procedures we offer. They will receive assignments to prepare some presentations in regard to new aspects in the field. We have interdisciplinary approach toward pain patients including Medical, Physical therapy, Injections, diagnostic blocks and implantable devices. For more information about the practice students can visit our web site and interact with us www.orlandopainandspine.com. I am working also on some research opportunities that might be available for some students.

Learning 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.
Our patient's populations range from 18 years old to 104, the oldest at our practice. Pain management patients they need to be approached with kindness, and understanding to their clinical issues that include pain, depression anxiety and sleep disorders.

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas:

MDE 7822 Pain Management continued…

Understanding of the importance of pain as fifth vital sign, basic concepts of chronic pain conditions. Mechanisms of chronic pain. Approach to chronic pain patient. How to prevent chronic pain and how to manage it. New concepts in pain management. Effect of pain on various aspects including sleep and phycology and how to manage.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

Students will have the opportunity, after observing pain consults and grasping some basic knowledge, to diagnose some chronic pain conditions and suggest management approach.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. They can demonstrate communication skills by interacting with some pain management patients and staff. They can communicate some information to staff and family members. They will have the opportunity to educate patients I regard to neuromodulator and intrathecal drug delivery as very effective methods in managing both physical and psychological aspects.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society. Students will be evaluated in regard to how can they able to advance in communicating with staff, patients and family in respectful manner.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. They will understand evidence-based approach in managing chronic pain patients. They will be expected to present some knew concepts in research and clinical pain medicine.

Learning Activities: Case presentations and literature review and possibility of helping with some future research projects.

Required textbooks and articles: No specific pain textbooks. Essentials of pain medicine by Benzon is a great simple resource. They can read first few chapters before the rotation for best results.

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation. We can develop some questionnaire before and after the rotation to evaluate knowledge.

MDE 7822 Pain Management continued…

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system. We can fill a standard form provided by the university.

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

MDE 7850 Understanding Psychopharmacology

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor (information/scheduling): Dr. Thomas J.Valente
Email: tjvalente@lsbc.net
Phone: (352) 315-7806
Information/scheduling Contact: Fredline Dasque
Email: fdasque@lsbc.net
Phone: (352) 315-7513
Maximum Enrollment: 1 per block
Pre-requisites: Consent of instructor, Psychiatry

First Day: Report to Life Stream Behavioral Center, 2020 Tally Road, Leesburg, FL 34748 at 9:00 am

Course description and goal of rotation: Advanced understanding of the diagnosis and treatment of mental health and substance abuse disorders. Please see company website, WWW.LSBC.NET for details of organization and services provided. This rotation is to dig deeper into the treatment of severe, chronic mental illness including current practice as well as ongoing clinical trials. Students will be exposed to both inpatient and outpatient services provided in a community mental health center. Students must have a professed desire to work in mental health.

Learning 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.
Students will have direct patient care, but since we utilize an electronic medical record, documentation will be demonstrated. Students will be given both formal and informal lectures on psychopharmacology will rounding at both inpatient and outpatient facilities.

Medical Knowledge: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge of the common types of disorders presenting in the outpatient and inpatient settings of Psychiatry.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.
Board style lectures and review questions will be given weekly with specific and directed critical readings.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and

MDE 7850 Understanding Psychopharmacology continued…

collaboration with patients, their families, and health professionals. Students will gain interviewing skills as well as attend interdisciplinary treatment team meetings to foster competence and communication with peers specialists, nurses, and behavioral technicians.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society. Cultural differences persist in psychiatric understanding/acceptance. This rotation will assist with cultural diversity.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities:

- Daily rounds and direct patient care, Monday through Friday with no on-call or night calls.
- Weekend rounds are optional and will be discussed upon initial acceptance.

Required textbooks and articles: Use will be made of the extensive only Psychiatry resources in the UCF COM Health Sciences Library, including Psychiatry On Line.

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

MDE 7941 Intensive Clinic Medicine

Full-time: 4 weeks
Grading Basis: P/F
Primary Faculty Supervisor: Dr. Rodrigo Baltodano
Email: colette_m@yahoo.com
Phone: (352) 394-0043
Maximum Enrollment: 1 per block
Pre-requisites: Consent of Instructor, IM/FM, Psychiatry

First Day: Report to The Baltodano Clinic, 3125 Citrus Tower Blvd. Clermont, FL 34711 at 8:30 am.

Course description and goal of rotation: The student will encounter the most common medical conditions typically seen in inpatient and outpatient Internal Medicine and learn how to assess, develop a differential diagnosis, and treatment plan for these patients. The student will assess patients and present cases to the supervising attending physician as part of daily clinical activities. This rotation is hands-on, and by the end of the rotation, the student will be more proficient in evaluating and planning treatment for common clinical conditions seen in Internal Medicine. The student is expected to utilize the professional literature to prepare a review on a specialty topic and give a brief presentation.

Learning 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: The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge of the common types of disorders presenting in the outpatient and inpatient settings of Internal Medicine.

Practice Based Improvement: The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

MDE 7941 Intensive Clinical Skills and History of Medicine continued…

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Systems Based Practice: The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Learning Activities: Students will participate in the daily assessment and treatment of both inpatients and outpatients under supervision of the attending physician. Students will also prepare a literature review on a specialty topic and give a brief presentation.

Required textbooks and articles: Use will be made of the extensive online Internal Medicine resource sin the UCF COM Health Sciences Library

How will the student's performance be assessed? How/when will formative feedback be given? Personal feedback at end of every day.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system. We can fill a standard form provided by the university.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Family Medicine Outpatient Elective

Clerkship Director: Jordan Loftis, M.D.

MDE 8900 9

Full-time (4 weeks)
(PO) Complete Care FL
Grading Basis: Pass/Fail
Primary Faculty Supervisors: Dr. Jordan Loftis
jloftis@completecarefl.com
Contact person: Jay Knappman, 321-985-9097
Maximum Enrollment: 1 each block (1,3,5,9 and 11)

First Day: Report to 2400 North Courtney Parkway, Merritt Island, Fl 32935 @ 8:00 a.m.

This rotation is designed to provide students with insights into the specialty of Family Medicine. They will work with the attending one on one to see patients that came in for management of chronic conditions, acute conditions and prevention medicine. They will have the opportunity to see patients, take a full comprehensive history, present to the attending and discuss an assessment and plan. Students will have the opportunity to present and discuss evidence-based medicine concepts with the attending.

Objectives:

Students will participate in the assessment and management of patients, with an emphasis on acute and chronic illnesses commonly seen in the primary care outpatient office setting. Students will meet with their assigned preceptor at the beginning of the rotation and discuss student's current knowledge & skills and their specific learning goals, as well as expectations from the preceptor and appointment time for feedback and evidence-based discussions. Students are expected to perform history and physicals, develop assessment and plans, document encounters in the medical record section assigned to students, and present findings to the preceptor. Students will initially perform history and physicals under the supervision of the faculty. When faculty considers the student competent in these skills, student will perform history and physicals independently. Student will always be directly supervised by faculty when performing any office procedure. Students are expected to read evidence-based information about each of their patient's condition and present to the faculty for discussion. Faculty will supervise the student's active participation in clinical patient encounters with one-on-one instruction and periodic feedback (once a week verbally in an informal setting and once a month in writing via OASIS for student's grade).

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

ELECTIVES

Internal Medicine

Primary Care, Community & Preventative Care Medicine Elective

MDE 8900 9

Full-time (4 weeks)
(PO) Lake America Family Physicians
Grading Basis: Pass/Fail
Primary Faculty Supervisors: Dr. Alka Aggarwal
alka@lakeamerica.com
Contact person: Lorna Roldan, manager@lakeamerica.com
Maximum Enrollment: 8 each block

First Day: Report to 865 Oakley Seaver Dr., Clermont, Fl 34711 @ 8:00 a.m.

This rotation is designed to provide students with insights into the specialty of Family Medicine. Students will be exposed to real-world primary care/outpatient medicine. Students will get history and physical of patients, formulate a differential diagnosis, propose a treatment plan and discuss with attending physician and chart encounters in SOAP note format. Students will also screen patients for preventative measures according to USPSTF guidelines based on age/gender when they are due for their annual physical. Students will participate in counseling and education patients on lifestyle modifications that can be implemented to improve overall patient health.

Objectives:

Students will understand how to diagnose and treat common primary care acute complaints and manage chronic disease. Students will apply knowledge of pharmacology to decide if certain medication should be added or discontinued based on patient presentation. Students will apply EBM algorithms in deciding further diagnosis and treatment plans. Students will demonstrate ability to apply evidence-based medical resources in making decisions regarding further management plans. Ability to apply feedback regarding history-taking or SOAP-note writing to improve critical thinking and organization skills. Students will interview patients and review their patients' chart in the EMR. They will assimilate all the information they gather to make an assessment and plan regarding the patient and discuss their findings and proposed care plan. Students will be expected to research EBM resources such as UpToDate or AAFP to help fill in their knowledge gap based on the clinical cases they work on.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Integrative Health, Medicine and Wellness Elective

Clerkship Director: Michael Cole, M.D.

MDE 8900 3

Full-time (4 weeks)
(VA) Lake Baldwin VA
Grading Basis: Pass/Fail
Primary Faculty Supervisors: Dr. Michael Cole
Michael.Cole8@va.gov
Contact person: Dr. Cole, 407-646-5075
Maximum Enrollment: 1 each block (6, 8, 10 and 12)

First Day: Report to Lake Baldwin VA, Building 500, room 1463 @ 9:00 a.m.

This rotation is designed to provide students with an overview and practice of Integrative Health, Medicine and Wellness in a VA hospital setting working in conjunction with chiropractic physicians, acupuncturists, mental health providers, Whole Health coaches and a team of allied healthcare providers. The main focus will consist of treating common medical conditions and chronic pain in a veteran population which are amendable to integrated care including, gaining an understanding of the pathophysiology, differential diagnosis, and effective integrative health treatment strategies. A special emphasis will be placed on integrative health, wellness and the utilization of the different modalities to help achieve optimal health for veterans and the reduction of opioids.

Objectives:

The medical student will learn how to obtain a history and physical pertinent to Integrative health and wellness. Medical students are expected to learn how to develop treatment plans specific to the needs of the vereran's health conditions incorporating specific health promoting and disease preventing integrative medical therapies. Gain a basic awareness and understanding of the application of the different integrative medical therapies, modalities and Whole Health. Work as an effective member of an integrative health team. Find the most current information on integrative medical care and wellness. Develop an understanding of how an IDT team works and its purpose in the VA hospital in the treatment of chronic pain and illness in veterans. Gain an appreciation of treating US veterans and understand how their physical/mental/emotional injuries are unique and different than the general population.

The medical student is expected to provide supervised patient care, present patient cases to the attending, be able to formulate a differential diagnoses and propose an appropriate workup and treatment plan, present and discuss a research article or case presentation, attend weekly lecture sessions led by faculty.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Endocrinology Elective

MDE 8900 9

Full-time (4 weeks)
(PO) Private Office
Grading Basis: Pass/Fail
Primary Faculty Supervisors: Dr. Deepa Taneja
drdeepataneja@yahoo.com
Contact person: Dr. Taneja, 407-921-2845
Maximum Enrollment: 2 each block (no June-August)

First Day: Report to Florida Diabetes Thyroid and Endocrine center, 7485 Sandlake Commons, Orlando, 32819 @ 8:30am

This rotation is designed to provide students with insights into the specialty of Endocrinology. The rotation is hands on and illustrates the role of a provider of Endocrinology in a clinical setting. During the rotation, students will be monitored by the faculty and be responsible for their daily clinical activities. By the end of the rotation, it is expected that medical student will have developed a knowledge base and clinical skills allowing them to identify and manage common concerns in endocrinology including relevant anatomy, relevant physiology, and pathophysiology, eliciting a past medical, past surgical, family and social history for new patients, formulating appropriate differential diagnosis, determining appropriate pharmacologic and nonpharmacologic therapy, and providing patient education. Students will also be come familiar with documentation. Students are expected to attend learning sessions. The student is expected to complete an EMB project during the rotation to present to the team by the end of the rotation.

Objectives:

Students will obtain knowledge in therapeutic effects, side effects of common medications used in endocrinology, recognize signs and symptoms of diseases and treatment, develop and present treatment plan for common endocrinological disorders such as hypothyroidism, hyperthyroidism, type 2 diabetes and dyslipidemia. They will be able to learn how to read blood glucose logs on continuous glucose monitoring devices as well as insulin pumps. Students will get to observe fine needle aspiration biopsy of thyroid nodules and thyroid ultrasounds performed in clinic. Will also gain knowledge on pituitary function, adrenal function, osteoporosis, hormone replacement therapy, amongst others.

Neuo-Radiology Elective

.

MDE 8767
Full-time (4 weeks)
(VA) Veteran's Affairs – Bay Pines
Grading Basis: Pass/Fail
Primary Faculty Supervisors: Dr. Igor Sirotkin
Igor.sirotkin@va.gov
Maximum Enrollment: 1 each block

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.

Reproductive Endocrinology & Infertility Elective

MDE 8110
Full-time (4 weeks)
(PO) Private Practice
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Mark Trolice, 407-672-1106;
DrTrolice@TheIVFcenter.com
Contact Person: Laurel Stadtmauer , (407) 672-1106 ext 309;
drstadtmauer@theIVFcenter.com
Maximum Enrollment: 1 per block (not available in October)

First Day: Report to 5901 Brick Court, Winter Park, @ 8 am

The rotation is designed to provide medical students with insights into the specialty of OB/GYN. It will provide unique clinical experience of providing optimum care for patients with reproductive problems in a teaching environment. You will learn the consulting skills needed to formulate a diagnostic and therapeutic plan. Learn to effectively communicate information to patient, family, attending physicians and nursing staff. You will become familiar with a variety of diagnostic tests and therapeutic interventions.

Learning Activities

Students will offer daily presentation of patients to the attending, effectively document the patient history and plan of care, and learn to effectively communicate information to the patient and family members, if applicable.

For surgeries, the student is expected to be fully cognizant of the patient, indication and purpose for surgery, and familiarity with the surgical technique. Weekly, the student will provide a literature review on a specialty topic, chosen the student and attending, and give a brief presentation. At the end of the rotation, the student will present an interesting patient and provide a thorough review of the disease process and treatment.

Hospice and Palliative Care Elective

MDE 8150 9
Full-time (4 weeks)
(PO) Reflections Lifestage Care
First Day: Report to 1250-B Grumman Place, Titusville, FL 32780 @ 9:00 am
Primary Faculty Supervisor: Dr. Lauren Loftis,
Grading Basis: Pass/Fail
(321) 269-4240, lloftis@reflectionslsc.org
Contact person: **Dr. Loftis,**
Maximum Enrollment: 1 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.

MDE 8280 Clinical Hematology and Medical Oncology

Full-time: 4 weeks
Grading Basis: P/F
Information/scheduling Contact: Amy Lanzarone
Email: Alanzarone@flcancer.com
Primary Faculty Supervisor Dr. Maen Hussein
Email: mhussein@flcancer.com
Phone: (352) 753-9777
Maximum Enrollment: 1 per block
Pre-requisites: IM/FM

First Day: Report to Florida Cancer Specialists, 1400 N US Highway 441, Suite 540, The Villages, Florida 32159 at 9:00 am

Course description and goal of rotation: Rotation in outpatient setting, community oncology practice, tumor board weekly, patients with different types of malignancies and blood disorders, some patients are enrolled in clinical trials. Student will have the opportunity to take history and perform physical examination, will walk through differential diagnosis, will be asked to prepare brief presentations about certain topics related to diseases in patients who were seen in the office by the student, the student will also review peripheral smears when applicable, will have the chance to observe bone marrow biopsies and will have the opportunity to work with the research coordinators.

Learning 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*:** The medical student is expected to demonstrate medical knowledge as well as the application of this knowledge to patient care. The student will develop knowledge in the following areas:
General hematology and oncology, new oncologic therapeutics, molecular genomics and role in cancer treatment.

***Practice Based Improvement*:** The medical student is expected to demonstrate the ability to investigate and evaluate their care of patients and to continuously improve care based on ongoing self-evaluation and life-long learning.
Student will have the opportunity to take history and perform exam under supervision, will present the case and will be assessed and directed towards area that need improvement in those skills, then discussion of the case will follow. There will be assignment and tasks for the student to prepare mainly to strengthen areas of weakness.

MDE 8280 Clinical Hematology and Medical Oncology continued…

Interprofessional and Communication Skills: The medical student is expected to demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
Student will have the opportunity to interact with patient's family, staff and of course the patient, will also observe visits where treatment plans and decisions are made, will also see firsthand multidisciplinary approach since there will be interaction with radiation oncology.

Professionalism: The medical student is expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.
Student will demonstrate respect to the patients and their families, the staff, no judgment and to focus on patient care regardless so the patients' belief religious or political.

***Systems Based Practice*:** The medical student is expected to demonstrate an awareness of and responsiveness to the larger context of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.
Student will have the opportunity to interact in tumor board and outside tumor board with other specialties, (radiation oncology, pathology, radiology, surgery).

Learning Activities: Student will work in an office setting, will obtain history and perform physical examination, interpret lab tests and radiological tests, and will come with differential diagnosis.

Required textbooks and articles: none for now.

How will the student's performance be assessed? How/when will formative feedback be given? The medical student will be evaluated by his/her engagement in the entire learning opportunity including presentations, preparedness for clinic, and participation in educational conference. Formative feedback for continuous improvement will be given throughout the rotation.

Summative Evaluation: A final written evaluation will be provided at the end of the rotation. All evaluations will be completed electronically via an online evaluation system.

Wound Care

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 ; 407-631-3228
Contact person: (321) 330-6518
VHAORLMedicalEducationCoordinators@va.gov
Maximum Enrollment: 2 per block

First Day: Report to Module 3F at the VA Lake Nona Clinic, 3rd floor @ 7:00 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.

Pediatric Telehealth Elective

.

MDE 8412

Full-time (4 weeks)
(NCH) Nemours Childrens Hospital
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Joann Murren-Boezem
(407) 319-7852 , joanne.murren-boezem**@nemours.org**
Contact person: Maria Kierulf, (407) 567-3882; Maria.Kierulf@nemours.org
Maximum Enrollment: 1 each block
Prerequisite: Peds Clerkship

First Day: 10am virtual orientation via Teams (invite sent prior). Nemours will send more information.

This rotation is designed to provide medical students with insights into the specialty of Pediatric Telemedicine.

- The goals of the rotation include understanding the history of telemedicine and introducing students to the application of telemedicine in the pediatric setting.
- This rotation will include developing skills in obtaining a patient history, performing a virtual physical exam, being familiar with telemedicine templates, smart sets and patient education resources utilized in documenting a note in the electronic medical record, understanding appropriate consenting, billing and coding and troubleshooting technical challenges.
- The rotation will illustrate the role of the pediatric telemedicine provider in the clinical setting.
- During the rotation, students will be assigned to an individual faculty mentor to guide them and be responsible for their clinical activities. Students are encourage to participate in as many telemedicine encounters as possible. Students will have the opportunity to see patients in a simulated setting prior to seeing actual patients. Students will receive feedback from faculty. Students are expected to maintain patient logs. Students will become familiar with peripheral devices that can be used to assist telemedicine exams. Students will have the opportunity to sit in on physician meetings related to the telemedicine program as determined by faculty.
- By the end of the rotation, it is expected that the student will have developed a knowledge base about telemedicine and clinical skills allowing them to identify and manage common pediatric conditions and concerns appropriate for telemedicine. Students will understand the history of telemedicine, terminology, legal issues, limitations and current uses. Students will become familiar with ethical concerns and best practices. Students will understand the impact that a pandemic can have in telemedicine.
- Students are expected to read articles provided, review photos for visual diagnosis, and discuss the evaluation and management of common conditions treated through the telemedicine platform.

Pediatric Telemedicine Continued

- The student is expected to complete a pre-test prior to the start of the rotation and a post-test at the completion of the rotation and the student is expected to complete a case presentation about a common condition assessed through telemedicine.
- Interested students will have the opportunity to participate in ongoing research and/or quality improvement projects, depending on the needs of the department.

Pulmonary Elective

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 ; 407-631-2020
Contact person: Kory Karingten;
vhaorlmedicaleducationcoordinators@va.gov
Maximum Enrollment: 1 per block

First Day: Report to 2G on the clinic side of the VA.

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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Pediatric Pulmonary Elective

MDE 8425 7
Full-time (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 and shatha.yousef@nemours.org
Contact person: Maria Kierulf, (407) 567-3877; 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.

Pediatric Orthopaedics Elective

MDE 8485 7
Full-time (4 weeks)
(NCH) Pediatric Emergency Department
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Alec Stall, Alec.Stall@nemours.org **; Cell 443-801-6516**
Contact person: Maria Kierulf, (407) 567-3877; 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.

Pediatric Surgery Elective

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
Contact person: Maria Kierulf, (407) 567-3877; Maria.Kierulf@nemours.org
Maximum Enrollment: 1 each block

First Day: Report to Nemours Children's Hospital lobby @ 7:00 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.

Pediatric Neurosurgery Elective

MDE 8491 7
Full-time (4 weeks)
(NCH) Nemours Children's Hospital
@ 8:30 am
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Christopher Gegg,
christopher.gegg@nemours.org
Contact Person: Maria Kierulf, (407) 394-0335;
Maria.Kierulf@nemours.org
Maximum Enrollment: 1 per block
Prerequisite: Planning to specialize in Neuro

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.

Forensic Pathology

MDE 8533 9

Full-time (4 weeks)
(PO) District Six Medical Examiner Office
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Jon Thogmartin
Contact Person: Dr, Thomgmartin,
(727) 582-6800; jthogmar@co.pinellas.fl.us
Maximum Enrollment: 1-2 each block (no block 7)

First Day: Report to District 6 Medical Examiner's Office at 9:00am. 10900 Ulmerton Road, Largo, FL

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 clinicopatholgic 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 assig 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.

Integrated Pathology Elective

MDE 8534 5

Full-time (4 weeks)
(HCA) Central Florida Regional Hospital
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Bo Hong, 407-562-0937, bo.hong@hcahealthcare.com
Contact person: Jeannie Perry, (407) 562-0959;
Jeannine.Parry@hcahealthcare.com
Maximum Enrollment: 1 each block (no Jan, July, Nov or December)

First Day: Report to Central Florida regional hospital, 1401 W Seminole Blvd, Sanford, FL 32771 @ 9:30 am

Student will participate in preparation and evaluation of inpatient and outpatient submitted pathology specimens; preparation and evaluation of inpatient laboratory specimens (blood, urine, etc.) during a regular 40 hour work week.

Objectives:

This rotation is designed to provide medical students with insights into the specialty of Pathology

- Basic understanding of gross features of neoplasms
- Basics of histology lab processing, expected turnaround time
- Basic understanding of microscopic features of neoplasms and of useage of immunohistochemistry and molecular biology testing in differential diagnosis and in tumor biomarkers for therapeutic purposes
- Correlation of relevant clinical information and imaging studies to reach diagnosis
- Understanding pathology reports
- Understanding clinical usage of rapid intraoperative frozen sections
- Understanding of processes and interpretations for laboratory testing of blood, urine, etc.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Clinical Ophthalmology Elective

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 Jose Roman at least 2 weeks before the start of the rotation.
Primary Faculty Supervisor: Dr. Mont Cartwright
Contact Person: Jose Roman,
(407) 902-9608; 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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Physical Medicine and Rehabilitation, Physiatry Elective

MDE 8582

Full-time (4 weeks)
(VA) Lake Nona VA
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Terri Griffith
Terri.Griffith@va.gov **; 407-631-3184**
Contact person: Jose Rivera-Huertas, 407-631-3186
jose.Rivera-Huertas@va.gov
Maximum Enrollment: 1 each block (February-May only)

First Day: Report to Orlando VAMC, PM&R Clinic 3D (3rd Floor) @ 7:30am

This rotation is designed to provide medical students with insights into the specialty of PM and R, Physiatry. The rotation will be an all outpatient clinic rotation. Medical students will rotate through the following clinics: TBI, amputee, chronic pain, and physiatry clinics; and they will observe electrodiagnostic studies, interventional pain procedures, and peripheral joint injections. Medical students will be expected to see patients, present to attendings and write progress notes. Medical students will learn to take a history and perform the physical exam pertinent to physiatry. This will include a basic functional assessment, evaluation for activity limitations and impairments and a focused musculoskeletal examination. Medical students should develop a basic understanding of functional mobility and be able to discuss treatment recommendations to include indications of rehab therapy, bracing, medications and/or injections. Medical students will attend weekly lectures provided by faculty and be expected to select one paper/research article for discussion or provide one case presentation during their rotation.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Clinical Elective in Vascular Surgery

MDE 8605 3

Full-time (4 weeks)
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Frederick Fisher; Frederick.Fisher@va.gov; 609-472-5433
Contact Person: (407) 629-1599 x1143; VHAORLMedicalEducationCoordinators@va.gov
Maximum Enrollment: 1-2 per block

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.

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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Plastic Surgery 4th Year Elective

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
drdavidplank@gmail.com ; 407-960-6936
Contact person: Lily Montijo
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 (Lake Nona Medical Center) 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.

Peds Urology Elective

MDE 8675

Full-time (4 weeks)
(NCH) Nemours Children's Hospital
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Pamela Ellsworth,
Pamela.Ellsworth@nemours.org ,
Contact person: Maria Kierulf,
Maria.Kierulf@nemours.org
Maximum Enrollment: 1 each block (no August or September)

First Day: Report to the clinic at 7am

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.

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.

Anesthesia Elective

MDE 8702 3

Full-time (4 weeks)
(VA) VA Lake Nona
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Helen Vo
Helen.Vo@va.gov
Contact person:
VHAORLMedicalEducationCoordinators@va.gov
Maximum Enrollment: 1 each block
Prerequisite: Surgery Clerkship

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 has 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.

Anesthesia Elective—Continued

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
    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

Diagnostic Radiology
MDE 8763 3

Variable (4 weeks)
(VA Bay Pines) Radiology Department
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Velasco
Maria.Velasco@va.gov
Contact person: suzette.rivers@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 9am.

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 particulate pin 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, , 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.

Pediatric Ultrasound

MDE 8775 7

Full-time (4 weeks)
(NCH)
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Monica Epelman
Monica.epelman@nemours.org
Contact person: Maria Kierulf
(407) 567-4301-1509; 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.

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; 850-766-2614
David Lebowitz, David.Lebowitz@ucf.edu
Maximum Enrollment: no limit (Block 6 and 8 only)

First Day: Will meet viz zoom on Monday @ 9:00am. The course is fully virtual.

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

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.

Palliative and Pain Management Elective

MDE 8152
Full-time (4 weeks)
(UCF) UCF College of Medicine
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Feroza Daroowalla,
Feroza.daroowalla@ucf.edu
Contact person: **Dr. Daroowalla and Dr. Suresh Kannan**
suresh.kannan@va.gov
Maximum Enrollment: Min 1, max 10 (Block 8 only)
Prerequisite: IMFM

First Day: Zoom information to be provided

This rotation is designed to provide medical students with insights into the specialty of Palliative Medicine/Pain Management

Goals:

- This rotation will include on line case work, discussion and practice (simulated practice) for the following for the Palliative Medicine patient. These will be adjusted and scaled according to the student's experience and the length of the elective:
    - 1.Pain and Symptom Management
    - 2. Palliative Care Communication
    - 3. Psychosocial, Spiritual and cultural aspects of care
    - 4. Terminal Care and Bereavement
    - 5. Palliative care principles and practice
- The student will obtain and develop medical knowledge in the following areas:
    - 1. Basic precepts and goals of palliative care-list and elaborate
    - 2. Common Therapeutic uses and misconceptions about opioid's-recognize and address
    - 3. Clinical features of imminent death and family needs-recognize and address
    - 4. Spiritual and Cultural needs of patients-identify and address, optimize communications
    - 5. Interdisciplinary team in palliative care-recognize and optimize communications

Students will work in a small group to practice communication skills around difficult conversations such as: goals of care, end of life decisions, family meetings for seriously ill patients, pain medication use.

Nanomedicine Elective

MDE 8209
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
Contact Person: Kerri Drylie; Kerri.Drylie@ucf.edu
Maximum Enrollment: 10 per block (October and February only)

First Day: Students should contact Kerri Drylie.
Students will meet via zoom.

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 nanotechnologicies 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.

Advanced Clinical Anatomy

MDE 8520 0

Full-time (4 weeks)
(UCF COM)
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Jeffrey Plochocki
Contact person: Jeffrey Plochocki,
Jeffrey.plochocki@ucf.edu
Maximum Enrollment: 4 each block

First Day: Students must contact Dr. Plochocki 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.

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Non-Clinical Advanced Surgery Elective

MDE 8607

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
Maximum Enrollment: min of 4, max of 30 (Blocks 6, 7, 8, 9, 10, 11 and 12)
Prerequisite: Surgery Clerkship

First Day: Zoom meeting at 9am (email with meeting ID will be sent prior to start of rotation. Details 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

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Write and Publish a Research Article

MDI 7011
Full time (4 weeks)
(UCF) UCF College of Medicine
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Melanie Coathup, melanie.coathup@ucf.edu ; 407-364-7317
Maximum Enrollment: 8 per block

First Day: A zoom link will be provided.

The goal of this elective is to provide students with the knowledge and skills required to design and write a research manuscript in a format, and to a quality suitable for publication within a peer-reviewed journal. This goal will be achieved through students working in collaboration with a member/s of the Biionix (Bionic Implants, Interfaces and Materials) Cluster. The Cluster consists of 15 faculty members and is interdisciplinary in nature; comprised of professors from UCF's Department of Mechanical and Aerospace Engineering, Materials Science and Engineering, within the College of Medicine (also Nemours, AH and OH) and Limbitless Solutions. The overall aim is to offer students a hands-on experience in writing and completing a research article on a topic of their choice as well as learning about the mechanisms involved in the peer review process and in article publication. At the beginning of the elective, students will receive a taught class on the "principles of how to write a research paper" and will then be assigned to a faculty mentor who will guide them on a day to day basis during the construction and writing of the manuscript and over the 4 week period.

In the first instance, students will have the opportunity to choose from a list of manuscript topics formed by the Cluster and provided by Dr. Coathup, or to collaboratively develop a new concept to worn on. A wide variety of research topics will be available, ranging from the use, synthesis and development of novel biomaterials, biosensors, robotics, movement, computational modeling, various cutting edge techniques involved in tissue regeneration and repair as well as clinically based topics; all focused towards making healthcare smarter and safer. Manuscripts will mainly consist of literature or systematic reviews, but may also include those following study data collection-if the data already exists or is expedient to obtain. If preferred, it will also be possible for more than one student to work on one manuscript.

By the end of the elective, students will have developed a strong knowledge-base on the content, style and form required to write a research manuscript, how to critically analyze and appraise research papers, how to gather, interpret and present data in addition to developing in-depth scientific knowledge of their chosen subject area. By the end, the goal will be for the students to have formed a strong draft of a manuscript and post-elective, students will be expected to work with the mentor to ensure its publication in a journal or book (or other appropriate published form). Where appropriate, students will also be encouraged to submit their findings to local, national and international conferences. Subsequent research presentations will contribute to improving communication and presentation skills as well as in providing students with the opportunity to engage and network with the scientific and/or clinical community.

Orthopaedic Research Elective

Orthopedic Science and Research

MDR 8570
Full-time (4 weeks)
(UCF) UCF College of Medicine
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Dr. Melanie Coathup;
Melanie.Coathup@ucf.edu
***Contact Person: Dr. Coathup ;* 407-364-7317**
Maximum Enrollment: 20 per block (Blocks 2, 3, 4, 6, 7, 8, 10-12 only)

First Day: Students should contact Dr. Coathup. Zoom link will be provided for 11am meeting.

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 orthpaedic 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, thy 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.

College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

Internal Medicine Outpatient Elective

MDE 7371
Full-time (4 weeks)
(UCF) UCF College of Medicine
Grading Basis: Pass/Fail
Primary Faculty Supervisor: Charles Lerner, M.D.
drlerner@earthlink.net, **(813) 401-3755**
Maximum Enrollment: 2 per block (none in block 2)

First Day: Horizon Primary Care: 10000 Colonial. Suite 187 Ocoee, FL at 8:00 am.

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:

7. What are the current orthopaedic treatments for cartilage, bone, tendon and muscle?
8. How are we falling short?
9. What is the role of orthopaedic research in patient care?
10. What are the current approaches under research?
11. How do we evaluate that research?
12. 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 orthpaedic 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, thy 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.

UCF College of Medicine
UNIVERSITY OF CENTRAL FLORIDA

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 ; *(407) 797-5893*
Contact person: Mandy Lane
407-384-7388 ext 712;
Amanda.lane03@outlook.com
Maximum Enrollment: 1 each block (no December)
Prerequisite: Surgery Clerkship

First Day: Report to 100 N. Dean Road, Suite 200B, Orlando, FL 32825 at 8:00 am on Tuesday.

This rotation will build on the knowledge of the 4th 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 a ll 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.