



Clinical Courses

Medical School Registrar's Office Phone: (585) 275-4541 601 Elmwood Avenue, Box 601 Rochester, New York 14642

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CLINICAL PROGRAM

GENERAL INFORMATION

UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY

Medical School Registrar's Office (585) 275-4541 Box 601, 601 Elmwood Avenue, Rochester, New York 14642

		linical Calendar 2024 - 2025	
DATES	Phase 3	Phase 4	Observed Holidays
06/10/24 - 06/16/24 06/17/24 - 06/23/24		Acting Internship or EDD400 or FAM400 or Critical Care Selective*	6/19 Juneteenth
06/24/24 - 06/30/24 07/01/24 - 07/07/24		or electives	7/4 Independence Day
07/08/24 - 07/14/24		Acting Internship or EDD400 or	
07/15/24 - 07/21/24		FAM400 or Critical Care Selective*	
07/22/24 - 07/28/24		or electives	
07/29/24 - 08/04/24 08/05/24 - 08/11/24			
08/03/24 - 08/11/24 08/12/24 - 08/18/24		Acting Internship or EDD400 or	
08/19/24 - 08/25/24	Students	FAM400 or Critical Care Selective*	
08/26/24 - 09/01/24	Follow	or electives	
09/02/24 - 09/08/24	Various		9/2 Labor Day
09/09/24 - 09/15/24	Clerkship	Acting Internship or EDD400 or	. ,
09/16/24 - 09/22/24	Tracks	FAM400 or Critical Care Selective* or electives	
09/23/24 - 09/29/24	and		
09/30/24 - 10/06/24	Elective	Acting Internship or EDD400 or	
10/07/24 - 10/13/24	Blocks	FAM400 or Critical Care Selective*	
10/14/24 - 10/20/24		or electives	
10/21/24 - 10/27/24 10/28/24 - 11/03/24			
10/28/24 - 11/03/24 11/04/24 - 11/10/24		Acting Internship or EDD400 or	
11/04/24 - 11/10/24 11/11/24 - 11/17/24		FAM400 or Critical Care Selective*	
11/18/24 - 11/24/24		or electives	
11/25/24 - 12/01/24			11/27 & 28 Thanksgiving
12/02/24 - 12/08/24		Acting Internship or EDD400 or	, , , , , , , , , , , , , , , , , , , ,
12/09/24 - 12/15/24		FAM400 or Critical Care Selective* or electives	
12/16/24 - 12/22/24		of electives	
12/23/24 - 12/29/24	Vacation	Vacation	12/21/23 - 1/5/24 Break
12/30/24 - 01/05/25	Facation		12/21/20 1/3/21 break
01/06/25 - 01/12/25		Acting Internship or EDD400 or	
01/13/25 - 01/19/25		FAM400 or Critical Care Selective*	
01/20/25 - 01/26/25 01/27/25 - 02/02/25		or electives	1/20 MLK Day
02/03/25 - 02/02/25			
02/03/23 - 02/09/23 02/10/25 - 02/16/25			
02/17/25 - 02/23/25	Students	IHS400 Improving Health Systems	
02/24/25 - 03/02/25	Follow	(Required)	
03/03/25 - 03/09/25	Various	A 11 1 1 1	
03/10/25 - 03/16/25	Clerkship	Acting Internship or EDD400 or FAM400 or Critical Care Selective*	
03/17/25 - 03/23/25	Tracks	raiviauu or critical care selective*	
03/24/25 - 03/30/25	and		
03/31/25 - 04/06/25	Elective		
04/07/25 - 04/13/25	Blocks	Electives ONLY	
04/14/25 - 04/20/25			
04/21/25 - 04/27/25			
04/28/25 - 05/04/25 05/05/25 - 05/11/25		INT400 Successful Interning (Required)	
05/12/25 - 05/18/25		Conferral 5/16/2025	Commencement 5/16 & 17
05/19/25 - 05/25/25		Comertar 5/ 10/ 2025	
05/26/25 - 06/01/25	Phase 3 Assessment	1	
06/02/25 - 06/08/25	Vacation	1	
	Jucation	4	

Phase 3&4 Clinical Calendar 2024 - 2025

* Critical Care Selectives are ANS400 and CCM400 - see Course Catalog for blocks offered

Clinical electives are an integral part of the UR SMD curriculum. Participation in clinical electives fosters academic growth in a number of areas. All departments in the medical school sponsor electives for clinical students. Current clinical electives range from experiences in clinical research to active involvement in community and/or international health. Electives are offered in a diverse group of clinical settings from academic health centers to community hospitals. In addition to the wide variety of clinical electives outlined in this bulletin, students and faculty members may design a clinical elective experience based on student interest. Students may **not** engage in a formal elective sponsored by a close relative. All electives **must** meet specific guidelines. Students may **not** be paid for any elective for which they are receiving academic credit. We encourage students to work with faculty members in custom-designing electives to suit your individual professional development needs. Self-designed elective proposals must be reviewed and approved, **in advance**, by an appropriate URSMD faculty member and your Advisory Dean. Students interested in designing special clinical electives should contact the Registrar's Office for information regarding elective requirements.

The content and format of each student's clinical elective program is created through a collaborative effort of the student with his/her advisory dean. Many factors contribute to the construction of an individual student's elective program. Each student's special clinical and career interests are among these factors. Additional considerations in the construction of a clinical elective program include the following:

- provision of a clinical experience of special interest that may not be otherwise covered in the curriculum
- provision of greater depth or breadth of experience in required curricular areas
- correction of an academic weakness as identified through the 2nd year or 3rd year comprehensive assessment
- provision of a mentoring relationship in patient care, research or education
- initiation or continuation of basic or clinical science research.

DOUBLE HELIX CURRICULUM—TRANSLATIONS AND TRANSITIONS: GRADES

COURSES AND ELECTIVES

Phase 1, Phase 2, 3rd, and 4th Year Courses

Courses are graded: Pass/Pass Marginal/Fail/Incomplete/Withdraw/Withdraw Failing. Students who perform in the top 10% of their class by criteria determined by the course director(s) and outlined in the syllabus will have a designation of "Letter of Achievement." This is not noted on the official transcript nor in the Medical Student Performance Evaluation (MSPE) but is made available to the Alpha Omega Alpha Honor Society selection committee.

All grades must be submitted within six weeks of the end of the course.

Third and Fourth Year Electives

Electives are graded: Pass/Pass Marginal/Fail/Incomplete/Withdraw/Withdraw Failing

The following grade definitions will be used for courses and electives:

Pass (P) - Fully satisfactory performance

Pass Marginal (Pm) - Must be remediated to a fully satisfactory Pass. A Pass Marginal can only be remediated to a grade of Pass. The Pass Marginal grade is for internal tracking purposes. A remediated Pm grade will be reflected on the transcript of an enrolled student or a graduate as a Pass (P).

Exceptions

- Pm grades that have **not** been remediated **before** a student withdraws, is dismissed or status as a medical student ends, will be reflected on the transcript and in the permanent record as grades of **Incomplete** (**I**)
- When preparing the enrollment history of a student who has withdrawn, been dismissed or whose status has ended, the school will report Pm grades of remediated courses. The transcript will retain the remediated grade(s) of **Pass**.

Withdraw (W) - Students who start a course and withdraw before completing the course, will be assigned a grade of W on their transcripts. Students will NOT receive partial credit for the weeks completed.

Withdraw-Failing (WF) – When a student has been enrolled for at least 50% of a course and elects to withdraw with a failing performance, a grade of WF should be assigned. If and when the course is retaken and completed, the student will be assigned the grade earned in the retaken course. The transcript will have the WF grade as well as the grade assigned in the retaken course. For example: 2014 Human Structure and Function Grade WF; 2015 Human Structure and Function Grade P.

Fail (F) –A Double Helix Curriculum course grade of "Fail" (F) cannot be remediated. The course must be repeated. The transcript will record the grade of "Fail" under the academic year when the course was taken. Successful completion of a failed course will be noted by a "Pass" on the transcript under the academic year when the course was re-taken. Pass is the highest grade that can be assigned.

Incomplete (I) - The faculty retains the option to assign grades of incomplete for students who are doing satisfactory work and who cannot complete the course requirements in the appropriate

timeframe for compelling reasons. Compelling reasons include circumstances beyond the student's control (health, an excused absence, personal emergency, etc.). After the course requirements are fulfilled, only the final grade will appear on the transcript.

NOTE: Students must receive passing (Pass) grades in all courses before being promoted to the next level. Students who retake courses must achieve fully satisfactory grades (Pass) or face dismissal recommendations by the MSPRB. A Pass marginal grade is not a fully satisfactory grade. Students may repeat a course, clerkship, or a year only once. If a student fails to earn fully passing grades (Pass) in a re-taken course, clerkship, or entire year, the student will be dismissed from the school by the MSPRB.

CLERKSHIP AND ACTING INTERNSHIP (formerly SUB-INTERNSHIP)

Clerkships and Acting Internship (formerly Sub-internships)

Clerkships and Acting Internships (formerly Sub-internships) are graded: Honors, High Pass, Pass, Pass Marginal, Fail, Incomplete, Withdraw, Withdraw Failing, To Be Determined (for clerkships only).

All Acting Internships (formerly Sub-internships) must be four consecutive weeks. Acting Internships (formerly Sub-internships) will be graded on the five-point scale grades for all Acting Internships (formerly Sub-internships) taken. If the student chooses to complete more than one Acting Internship (formerly Sub-internship), the first will be counted as the Acting Internship (formerly Sub-internship) required for graduation. The second will be counted toward elective credit.

The following grade definitions will be used for clerkships and Acting Internships (formerly Subinternships):

Honors: Academic and clinical performance rated as exceptional by all evaluators. Outstanding personal and professional qualities. Shows promise to excel in the most competitive residencies and will receive vigorous departmental support in applying for these. (Beginning in AY 2021-22 approximately 33% of students in a clerkship will achieve this grade, acting internship (formerly sub-internship) grading distributions vary.)

High Pass: Academic and clinical performance rated as exceptional in several areas, at least very good in all others. Personal and professional qualities are excellent. Capable of succeeding in any residency and will receive strong departmental support. (Beginning in AY 2021-22 approximately 33% of students in a clerkship will achieve this grade, acting (formerly sub-internship) grading distributions vary.)

Pass: Academic and clinical performance ranging from acceptable to very good in all areas (and may be exceptional in some areas). Personal and professional qualities are at least very good. No significant deficiencies. Most students receiving this grade will be capable of succeeding in any residency but will be challenged by the most competitive, and will receive strong departmental support although will be advised not to limit applications to the most highly competitive programs. Some students receiving this grade would not be comfortable or successful in the most competitive residency programs, will be advised to apply to less competitive (but still very good) residencies, and will receive departmental support. (Beginning in AY 2021-22 approximately 33% of students in a clerkship will achieve this grade, acting internship (formerly sub-internship) grading distributions vary.)

Pass Marginal: Some significant deficiencies identified, requiring remedial work (to be determined by the clerkship director and/or the clerkship grading committee, albeit not repeat of the entire clerkship) before a Pass grade for the clerkship can be awarded. A Pass marginal (Pm) can only be remediated to a grade of Pass, and must be remediated for promotion. Pass marginal will not appear on the final transcript.

Exceptions

- Pm grades that have not been remediated before a student withdraws, is dismissed, or status as a medical student ends, will be reflected on the transcript and in the permanent record as grades of Incomplete (I)
- When preparing the enrollment history of a student who has withdrawn, been dismissed, or whose status has ended, the school will report Pm grades of remediated courses. The transcript will retain the remediated grade(s) of Pass.

The remediation weeks for a Pass Marginal (Pm) clerkship grade **cannot** count as elective time. In addition, credit-bearing Acting Internships (formerly Sub-internships) **cannot** be used for remediation of Pm clerkship grades. The remediation can only count for the clerkship.

Withdraw (W): Students who start core experiences or electives and withdraw before completing the courses will be assigned grades of W on their transcripts. Students will NOT receive partial credit for the weeks completed.

Withdraw Failing (WF): When a student has been enrolled for at least **50%** of a clerkship and elects to withdraw with a failing performance, a grade of WF will be assigned. When the clerkship is retaken and completed, the student will be assigned <u>the grade earned</u> in the retaken clerkship. The transcript will have the WF grade as well as the grade assigned in the retaken clerkship. For example:

2020 Adult Inpatient Clerkship: Medicine Block AI –**WF** 2021 Adult Inpatient Clerkship: Medicine Block AI –**HP**

Fail: Very significant deficiencies, requiring that the student repeat the entire clerkship. A course grade of "Fail" (F) **cannot** be remediated. The course must be repeated. The transcript will record the grade of "Fail" under the academic year when the course was taken. Successful completion of a failed course will be noted by a "Pass" on the transcript under the academic year when the course was re-taken. Pass is the highest grade that can be assigned. (In a typical year, 0-2% of students will achieve this grade.)

Incomplete: Used at the discretion of the clerkship director, usually when a student who has otherwise done passing or better work has been unable to fulfill all course requirements in the appropriate timeframe for compelling reasons. Compelling reasons include circumstances beyond the student's control (health, an excused absence, personal emergency, etc.). After the course requirements are fulfilled, only the final grade will appear on the transcript. A grade of Incomplete (I) is **not** to be used for students who fail the NBME subject exam, need to re-take it, and have an otherwise satisfactory clerkship performance.

To Be Determined (TBD): Clerkship grades of "*To Be Determined*" (**TBD**) will be recorded for students who have fully satisfactory clerkship performance (Honors, High Pass, or Pass) but who fail the NBME subject exam. Students with assigned grades of TBD will have one attempt to retake and pass the subject exam and still earn a grade of Honors, High Pass, or Pass. Consequences of failing a second attempt at an NBME subject exam will be discussed by the clerkship director with the student and will follow other policies in place.

TBD is an internal grade that will not be a part of the permanent record and will be changed to a

final grade of Honors, High Pass, or Pass if the NBME subject exam is passed on the second attempt.

NOTE: Students must receive passing (Pass) grades in all clerkships before being promoted to the next level. Students who retake courses must achieve fully satisfactory grades (Pass) or face dismissal recommendations by the MSPRB. A Pass marginal grade is not a fully satisfactory grade. Students may repeat a course, clerkship, or a year only once. If a student fails to earn fully passing grades (Pass) in any re-taken course, clerkship, or entire year, the student will be dismissed from the school by the MSPRB.

Approved by the Curriculum Steering Committee on July 20, 2021

Attendance in Clinical Rotations Policy

Students on clerkships (i.e., any clinical rotation) do **not** routinely receive any time off. **Full** attendance during **all** aspects of clerkships is expected as part of fulfilling professional role obligations regarding educational and patient care responsibilities. In the case of unexpected absences for urgent reasons (e.g., illness), the student must make every effort to notify the clerkship director, his/her administrative assistant, the senior resident and/or his/her Advisory Dean of their absence, and upon return to the clerkship director. Time up to two days away from each rotation (no more than one day away for rotations shorter than four weeks) may be granted by the clerkship director for special circumstances as arranged in advance. It is expected that the student making such a request will do so as much in advance as practical, and will be prepared to discuss options for remediating the work that is missed. Longer time away will not be granted except under extraordinary circumstances and at the discretion of the clerkship director.

Please note that this means that fourth year students should plan their residency interviewing for open slots in their schedule; they should not plan out of town interviews while taking a clerkship.

Visiting Students

The University of Rochester School of Medicine and Dentistry (URSMD) will offer onsite visiting student rotations for the 2024-25 academic year starting June 10, 2024.

Visiting students must be final year medical students in good academic standing from an LCME accredited medical school or osteopathic school in the U.S. or Canada.

All visiting rotations are coordinated through the AAMC's Visiting Student Learning Opportunities (VSLO). VSLO charges a fee for this service. In addition, The University of Rochester charges a non-refundable \$100 administrative fee per scheduled elective.

Visiting students may spend up to <u>6 weeks</u> of clinical electives at the University of Rochester School of Medicine and Dentistry and our affiliated hospitals. For a description of electives offered at URSMD please see our Clinical Course Catalog at the <u>Medical School</u> <u>Registrar's Website</u>.

Dental students please contact the Medical School Registrar's Office. If you are an International Visiting Student click <u>here</u>.

Criminal background checks must be submitted with application.

Only students attending an international medical school with which the University of Rochester School of Medicine and Dentistry (URSMD) has a formal exchange agreement will be considered for elective experiences. Such students must be in the final year of medical studies and will be allowed to do no more than twelve weeks of elective experiences. International students must direct their application requests to the appropriate people at their home institution to learn if their school is affiliated with the URSMD. If so, then student must apply through the appropriate home office.

University of Rochester School of Medicine and Dentistry students are given first choice of available elective openings. Thus, all visiting medical students are encouraged to select two alternate clinical electives in addition to their desired elective course when submitting an application.

Visiting students must register with the University Health Service and additional information/requirement can be found on the University Health Services web page http://www.rochester.edu/uhs/primary-care/contact-uhs/

Information for Visiting Students:

On the first day of your elective you are required to check in with the elective/clerkship coordinator.

• Medical Center ID and Parking Office:

You will be required to go to the Medical Center ID Office, Room G-7009 to obtain your temporary ID badge. You will also be required to go to the Parking Office located in College Town, on Celebration Drive to obtain your pass. You will need to provide vehicle make/model/license tag in order to obtain parking access. There is a cost for your temporary ID badge and parking pass.

- **Housing**: It is the responsibility of the student to find housing. Information on available temporary housing options provided in acceptance email and on the VSLO website.
- **Professional attire:** To include a short white lab coat (hip length), is required, unless in scrubs. You may utilize the white coat from your home school.
- Scrubs: You may bring your own scrubs, however, should the approved elective require you to use the University of Rochester's issued scrubs, please check with and obtain scrub access from the departmental office.

The Medical School's Registrar's Office does not provide access to scrubs during your approved elective period.

Pagers: You must bring your own pager. The Medical School Registrar's Office does not provide pagers.

Access to secured areas within the medical center facilities (OR, SICU, clinics, etc) may only be provided by your elective department. If required, please c o n t a c t your course director and/or support staff for assistance.

- Medical Center Library: Information may be located online, <u>https://www.urmc.rochester.edu/libraries/</u> <u>miner.aspx</u> Library hours: 9:00am – 4:00pm, M-F and 10:00am - 2:00pm on the weekend. After-hours access request may be submitted by the department.
- Your temporary student ID badge <u>MUST</u> be returned to the Medical School Registrar's Office or the elective coordinator at the end of your approved elective period. Should your ID badge not be returned at the end of your elective period, your evaluation form will be held from both you and your home school.

Hospital abbreviations are identified below and indicate the location of the elective:

HH: Highland HospitalSMH: Strong Memorial HospitalUNITY: Unity Health System

PRO: Private Office **MCH**: Monroe Community Hospital **RGH**: Rochester Regional Hospital

Course Information

Course Director Marie Christine Mayer M.D. Contact Person Martha M. Dake, 276-6869 Martha Dake@URMC.Rochester.edu **Class Year Name** Anesthesiology Clerkship Class Code ANS601 **Elective Tags** Teaching **Block Length** 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? They will receive detailed email 1 week prior to first day of rotation with full information. What time should students report? 7:00 AM Who should they report to? Clinical Coordinator Trainee or preassigned Faculty or Resident

Goal

The general goal of this elective is to provide you with the opportunity to learn those aspects of anesthesiology with which all physicians should be familiar because they are a part of a general medical practice.

Understand that by signing up to take this rotation you have fully committed to fulfill the time required to fulfill the course requirements. Notification for time off to fulfill other obligations MUST be received 2 weeks prior to the start of the rotation and cleared by your advisor Failure to comply with this understanding could result in a failing grade. We don't offer evenings or weekends to make up any missed time.

Learning Objectives

By the end of the rotation the student should be able to:

- Demonstrate appropriate techniques for airway management in unconscious patients, including ventilation by mask, insertion of artificial airways and laryngeal masks, and oro-tracheal intubation.
- Manage ventilation in unconscious patients, including deciding on ventilator settings and using non-invasive monitors and arterial blood gases to determine the appropriateness of ventilation.
- Identify and interpret items on the anesthetic record with respect to their impact on post-operative care, including drugs used and fluids given intraoperatively.
- Explain the appropriate management of acute blood loss, and the calculation of maximum allowable blood loss.
- List the differential diagnosis of hypoxia and explain findings/tests which distinguish among the different

causes.

- Describe the pharmacology of commonly used induction agents and narcotics.
- Discuss the appropriate use and monitoring of muscle relaxants for emergency and non-emergency intubations.
- Describe the clinical application and interpretation of EKG, pulse oximetry, and capnography.
- Discuss the appropriate use of local anesthetics, including the calculation of the maximum allowable dose, description of the signs/symptoms of toxicity, and the treatment of toxicity.
- Be familiar with common airway securing devices and how/when to use them.
- Understand the differences and indications for general versus regional anesthesia versus sedation.
- · Be familiar with the common drugs utilized in the daily practice of anesthesia
- Be familiar with the common resuscitative drugs used (i.e. vasopressors, antiarrhythmics, inotropes).
- Be familiar with common diseases we encounter daily (i.e. diabetes, HTN, COPD) and how they affect the care we deliver. This is the focus of the PEC day-long experience.

Schedule of Activities

Students are assigned to work with an Anesthesiology Resident, a CRNA, or a member of the Faculty, at SMH from 7:00 AM until 5:00 PM on weekdays.

Students will perform preoperative evaluations, participate in intraoperative care, and perform postoperative follow-up on their patients.

Procedures (such as intravenous line placement, endotracheal intubation, arterial line placement) will be performed by the student at the discretion of the resident or attending, and only after any assigned training is completed.

Didactic Activities

1) Airway workshop during first week.

- 2) Anesthesiology Grand Rounds on Thursday mornings from 7:00 to 8:00
- 3) Two sessions at the Center for Medical Simulation at SMH:
 - 1) Airway management workshop
 - 2) Crisis management in the operating room. (If scheduled)

4) Prior to the first day of the clerkship, the students will be given learning objectives and case scenarios relating to anesthesiology. The issues raised by these cases should be researched independently by the student and discussed with the resident preceptor or faculty member during the course of the clinical day.

Required Reading

1. National Medical Series for Independent Study: Anesthesiology (This will be LOANED) to all students to utilize as a reference during the rotation.

2. Select chapters from Basics of Anesthesia, 3rd ed., by RK Stoelting and RD Miller (Book can be borrowed from Gillies Library in the Department of Anesthesiology at SMH).

3. Students will also be granted access to the Anesthesia Tool Box during the first week of the rotation. This tool is an invaluable learning resource for any program. You will receive an email alert with instructions to create a password for logging in. This initiative has been recently introduced for Medical Students on rotation with us, and we look forward

to hearing your feedback after you've had the opportunity to explore it.. Following your rotation, your access will remain open and available for use until the end of the academic year if you are a URMC student. If you are a visiting student, you will have access to this resource until the conclusion of your Anesthesiology Clerkship rotation.

Student Evaluations

To receive a grade of PASS:

- 1. Students must turn in a log sheet documenting that the learning objectives have been covered.
- 2. Students must participate in all didactic activities.
- 3. Students must receive a satisfactory clinical evaluation from their preceptor(s) during the clerkship.
- 4. Students must complete an attendance record.

5. To receive a grade of Pass, students must turn in the Log sheet with signatures from preceptors in a PDF format at the end of each week. Both the student and preceptos will receive red cap evaluations to complete. Failure to turn in the weekly Log to secure evaluations from preceptors would result in a failing grade.

ANS603 Obstetric Anesthesiology

Course Information

Course Director Melissa Ann Kreso M.D. Contact Person Martha Dake, 276-6869 martha_dake@urmc.rochester.edu **Class Year Name Obstetric Anesthesiology** Class Code ANS603 **Elective Tags** Inpatient Service, Patient Care Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Unit 3-1600 ask to call the OB Attending on call What time should students report? 0700 Who should they report to? **OB Senior Resident 6-5239**

Goal

To understand the theoretical and practical aspects of pain relief for labor and delivery and perioperative safety during cesarean section.

Understand that by signing up to take rotation you have fully committed to the time required to fulfill the course requirements. Notification to fulfill other obligations MUST be received by email at least 2 weeks prior to the start of the rotation. Failure to comply with this understanding could result in a failing grade.

Learning Objectives

By the end of the rotation the student should be able to:

1. Perform a preanesthetic evaluation of a pregnant patient.

2. Discuss the anesthetic implications of maternal medical conditions and formulate appropriate anesthetic plans for labor analgesia or cesarean section.

3. Identify OB patients who require anesthetic consultation, and describe how to obtain it.

4. Describe the anatomy and physiology of labor pain, including differences between first and second stages.

5. Discuss the full range of labor analgesia techniques including psychoprophylaxis, parenteral narcotics, inhalation agents, epidural and spinal anesthesia.

6. Discuss the pharmcology of local anesthetics and narcotics commonly used in epidural and spinal anesthesia.

7. Describe the clinical significance of maternal hypotension and its prevention and treatment.

8. Discuss the anesthetic implications of maternal physiologic adaptations to pregnancy including anesthetic potencies, airway management, and risk of aspiration pneumonitis.

9. Describe maternal lumbar anatomy in relation to the administration of epidural and spinal anesthesia.

10. Perform epidural and spinal anesthetics for labor analgesia, with appropriate supervision.

11. Perform anesthesia for cesarean section, with appropriate supervision.

12. Describe methods of postoperative analgesia after cesarean section.

13. Discuss the major complications of epidural and spinal anesthesia, including evaluation and treatments.

Schedule of Activities

Students are assigned to the OB Anesthesia Service at SMH, with hours of 7:00 a.m. to 4:00 p.m. on weekdays. The students do not have weekend or night on-call responsibilities. The students are regular members of the clinical care team in OB Anesthesia with assigned preceptors (resident, fellow or attending anesthesiologists). The emphasis is on active participation, including procedural skills.

Didactic Activities

Students participate in the daily OB Anesthesia didactic sessions each weekday, with assigned readings from the assigned textbook. In addition, students discuss their learning objectives with the preceptors throughout each day.

Required Reading

Loaner copies pf the current textbook are available. Students are encouraged to utilize the resources in the OB Anesthesia Education Office including an extensive subspecialty library, videotapes and anatomic models.

Students will also be granted access to the Anesthesia Tool Box during the first week of the rotation. This tool is an invaluable learning resource for any program. You will receive an email alert with instructions to create a password for logging in. This initiative has been recently introduced for Medical Students on rotation with us, and we look forward to hearing your feedback after you've had the opportunity to explore it. Throughout this rotation, Dr. Kreso requests that you focus on the information related to OB Anesthesia. Following your rotation, your access will remain open and available for use until the end of the academic year if you are a URMC student. If you are a visiting student, you will have access to this resource until the conclusion of your OB Anesthesia rotation.

Student Evaluations

To receive a grade of Pass, students must turn in the Log sheet with signatures from preceptors in a PDF format at the end of each week. Both the student and preceptos will receive red cap evaulations to complete. Failure to turn in the weekly Log to secure evaluations from preceptors would result in a failing grade.

ANS606 Pain Management

Course Information

Course Director Sarah A. Kralovic M.D., M.S. Contact Person Martha Dake, 276-6869 Martha Dake@urmc.rochester.edu **Class Year Name** Pain Management Class Code ANS606 **Elective Tags** Consultation Service, Multidisciplinary, Outpatient Service, Patient Care Block Lenath 2 wks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? URMC Pain Treatment Center (PTC) 180 Sawgrass Drive, Suite 210 Students will receive a welcome email with instructions prior to the start of the rotation ... What time should students report? 7:00 AM on Monday at the URMC Pain Treatment Center (PTC) 180 Sawgrass Drive, Suite 210 Who should they report to? Pain fellow or pain attending on site.

Goal

To become familiar with the intricacies of pain assessment and multidisciplinary management of patients with chronic, non-malignant or malignant pain.

In terms of our attendance policy, since this is a short elective rotation and we want to optimize your learning as much as possible, we allow **1 missed day** for sickness, interviews, etc. Anything missed beyond this 1 day would require the **entire rotation to be repeated or rescheduled at a later date**. We also do not offer evening or weekend makeups as this is an outpatient ambulatory rotation that only operates during normal business hours.

Learning Objectives

By the end of this short rotation student should:

- 1. Be able to assess a patient's pain by conducting a thorough history and physical examination.
- 2. Formulate patient-focused and goal-directed pain management plans under close supervision of a fellow /NP/ faculty member.
- **3.** Describe the major classes of pain (i.e. nociceptive, neuropathic, etc).
- Discuss the pharmacology, indications and common side effects of adjuvant medications (i.e. opioids, NSAID's, neuroleptics, muscle relaxants, antidepressants, anxiolytics, etc).

5. Be familiar with alternative and complementary treatment modalities available for pain management including

physical therapy, TENS unit, cognitive behavioral therapy, acupuncture etc.

6. Discuss common indications for interventional techniques used in the treatment of various pain conditions.

Schedule of Activities

Students are assigned to the outpatient pain service at the URMC Pain Treatment Center located at 180 Sawgrass Drive, Suite 210. Clinic hours of operation are Monday- Friday from 08:00 AM to 5:00 PM. During the rotation, students become an integral part of the multidisciplinary evaluation team comprised of residents, fellows, nurse practioners/physician assistants, and the attending pain physician. They are not expected to take any inpatient or pager call during this rotation. A detailed education schedule will be provided at the start of the rotation and formal lectures/education occur daily (7-8 AM on Mondays, 7:30-8:00 AM Tuesday, Wednesday, Friday) prior to clinical duties. The anesthesiology department also hosts grand rounds every Thursday from 7-8AM which is broadcasted in the main work room at the PTC. Additionally, there is also the potential to observe both fluoroscopic and ultrasoundguided pain procedures that are performed in our procedure suite right on site.

Didactic Activities

Emphasis is on active participation in the following activities:

- Lectures daily: 7-8 AM on Mondays and 7:30-8:00 AM Tuesday, Wednesday, Friday.
- Thursday: Anesthesiology grand rounds from 7-8 AM broadcasted in the main work room at the PTC.
- Hands on teaching in the clinic and the procedure room.

Required Reading

Copies of book chapters to be reviewed during the rotation can be made after consultation with the fellow.

Student Evaluations

Students are responsible for keeping a log of cases and procedures that they participate in.

Students have the opportunity to evaluate both new and established patients and generate multidisciplinary pain treatment plans with feedback and guidance from the pain attendings.

Students are actively involved in the educational/didactic series.

Students receive a grade depending on a composite evaluation by their preceptors.

ANS610 Hemodynamic Monitoring

Course Information

Course Director Heather L. Lander M.D. Contact Person Martha M. Dake, 276-6869 Martha Dake@urmc.rochester.edu **Class Year Name** Hemodynamic Monitoring Class Code ANS610 **Elective Tags** Inpatient Service, Patient Care Block Length 1 week Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? See Welcome Letter, 7:00 a.m. Monday morning to the On-call cardiac anesthesiologist What time should students report? 7:00 a.m. Who should they report to? On-call cardiac anesthesiologist

Goal

To master concepts in advanced cardiovascular physiology and invasive hemodynamic monitoring in the clinical setting of the operating room.

Understand that by signing up to take this rotation you have fully committed to the time required to fulfill the course requirements. Notification for time off to fulfill other obligations MUST be received by email at least 2 weeks prior to the start of the rotation. Failure to comply with this understanding could result in a failing grade.

Learning Objectives

By the end of the rotation the student should be able to:

- Understand the technical aspects of arterial line and pulmonary artery catheter insertion.
- Understand the clinical applications, complications and preventative measures involved in invasive hemodynamic monitoring.
- Interpret hemodynamic data.
- Apply the hemodynamic data to the care of the surgical or critically ill patient.

• Understand the role of transesophageal echocardiography for intraoperative hemodynamic monitoring.

Schedule of Activities

Students work in the operating room at SMH under the direction of the cardiac anesthesiologist starting at 7 a.m. to approximately 5 p.m. on weekdays. Emphasis is on hemodynamic monitoring and its application to the care of the cardiac surgical patient.

Didactic Activities

Emphasis is on clinical experience and "bedside" teaching. One-on-one or one-on-two tutorials supplement this experience. In addition, students may participate in workshops using the anesthesia human patient simulator focusing on hemodynamic assessment and cardiovascular management.

Required Reading

2 Book Chapters from <u>Cardiac Anesthesia</u>: <u>Principles and Practice, 2nd Edition</u>, Fawzy G. Estafanous, MD; Paul G. Barash, MD; and J.G. Reves, MD., as well as supplemental documents by the University of Rochester Cardiac Anesthesia faculty.

Student Evaluations

To receive a grade of Pass, students must participate in clinical cases, attend tutorials sessions, document that the learning objectives have been covered, interpret and discuss case studies in cardiovascular medicine, and submit a log of their cases and attendings. Course materials will be sent via e-mail the week before the course.

On the last day of your roation email Martha M. Dake the recorded log attendance in a PDF format with the names of those you worked with. The names listed will be sent an evaluation to to establish grade and comments based upon their interactions with you. The information they provide will then be loaded into MedSIS.

Course Information

Course Director Jason M. Rotoli M.D. Contact Person Dr. Jason Rotoli Jason Rotoli@URMC.Rochester.edu Lauren Bestram Lauren Bestram@URMC.Rochester.edu 585-275-0358 **Class Year Name** Independent Study Focusing on Deaf Health **Class Code** DHP601 **Elective Tags** Research-Basic science **Block Length** Must obtain permission from Dr. Rotoli before scheduling Students 5 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report? Arrange with Research Advisor at NCDHR What time should students report? TBA Who should they report to? Research Advisor

Goal

Prequisites: Enrollment in Deaf Health Pathway (DHP) and completion of Deaf Health Seminars 1, 2 & 3; or permission of the Pathway Director. Follow the below steps:

- 1. Obtain approval from Dr. Rotoli
- 2. Complete application to enroll in the Deaf Health Pathway (intention to complete)
- 3. E-mail the DHP Director (Dr. Rotoli) and your mentor (if different) your intended elective dates as early as possible.
- 4. Complete and e-mail your proposed goals for completing the Pathway
- o What are your personal goals for completing the Pathway?
- o What goals have you accomplished to date-for example, completing the 3 seminars on Deaf Health.
- o What are the gaps between what you have done and your goals?

o How will you use your elective time to bridge those gaps? Outline how you will spend your elective time over the four weeks to reach your elective goals.

? Depending on the complexity and clarity of your proposal, a meeting may be necessary prior to the start of your elective.

Students interested in completing a Deaf Health elective outside of Rochester must complete the extramural elective drop/add menu in MedSIS and receive approval from Dr. Rotoli, the Advisory Dean and the Registrar's Office

Goal: Students will spend four weeks investigating topics of Deaf health derived from clinical, educational, linguistic, and cultural opportunities at the University of Rochester Medical Center and local community. The overall goal is for each student to develop an appropriate level of comfort and competency in working with members of the Deaf community.

Learning Objectives

To foster interest in Deaf health and expose students to pressing issues which may impact the future healthcare practices for Deaf patients. Specific objectives will be created as a part of the student's proposal (see below), derived from clinic/hospital-based observerships (Deaf/signing clinician, patient care interpreting), mentored research or community-based projects and engagement with community-based programs.

Schedule of Activities

Students will arrange activities with their research supervisor at the NCDHR.

Didactic Activities

Required Reading

As appropriate to the individual project of the student. Resources collected by medical students during previous Deaf Health Pathway electives are available upon request.

Student Evaluations

<u>Upon completion of the elective</u> (two week deadline from end date) all items required must be submitted to the Pathway Director, Dr. Rotoli, before a final grade can be submitted to the Registrar. Grades are awarded on a Pass/ Fail scale.

DNS600 Dentistry, Oral and Maxillofacial Surgery

Course Information

Course Director Joseph J. Fantuzzo D.D.S., M.D. Contact Person Vanessa Buckholz **Class Year Name** Dentistry, Oral and Maxillofacial Surgery Class Code **DNS600 Elective Tags** Outpatient Service, Patient Care, Teaching Block Length 2 or more weeks Must contact Dept. For Approval Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Strong Memorial Hospital Ambulatory Care Building 4th Floor What time should students report? 9:00 a.m. Who should they report to? Lisa Lord

Goal

To understand the relationship of oral health care and oral surgery to general total health care and the general practice of medicine and how oral health care and oral surgical care is inter-related with total health care.

Learning Objectives

By the end of the rotation the student should be able to:

? Perform a complete intra-oral and extra-oral head and neck examination.

? Identify the following anatomical structures in patient and on x-ray: enamel, dentine, gingiva, pulp chamber, cemetum, buccal mucosa, labial frenum, pterygo-mandibular area, palatine tonsil, soft palate, hard palate, uvula, parotid, and submandibular glands and duct orifices, anatomical spaces associated with head and neck infection.
 ? Recognize and diagnose basic fractures of craniofacial skeleton based on clinical and readiographic findings.

? Discuss the oral manifestations of systemic disease or its treatment in patients receiving head and neck radiation, cancer chemotherapy, bone marrow transplant, HIV infection, diabetes, autoimmune disorders, e.g. Sjoren?s Syndrome.

? Understand the role of the oral and maxillofacial surgeon in the treatment and reconstruction of diseases of the maxillofacial region, including implants, cleft and craniofacial anomalies, and maxillofacial trauma.

Schedule of Activities

Students are assigned to the Strong Memorial Hospital, Department of Dentistry clinical facility and will work with the general practice, oral surgery and specialty providers of dental care starting at 8:30 am. They will be guided by the chief resident in Oral and Maxillofacial Surgery and General Practice Residency and work with these to examine

patients, diagnose and treat dental diseases, assist in surgical procedures and attend all rounds and lectures.

Didactic Activities

Students will be oriented by the Dentist-in-Chief and Chairman of the department or Chief of the Oral and Maxillofacial Surgery Division on the first day of the rotation. They are expected to read about and discuss the learning objectives with their preceptor. Students will attend all the ongoing didactic activities in the department during the clerkship. These include resident lectures 8:00 - 9:00 am, Oral and Maxillofacial Surgery Rounds and other seminars.

Required Reading

Students will be provided with review articles in the areas related to the learning objectives on arrival in the department.

Student Evaluations

To receive a grade of Pass, students must keep a log of their activities, participate in the case conferences and seminars and receive a satisfactory evaluation from the residents with whom they work.

Course Information

Course Director Maricelle U. Abayon D.M.D., M.S. **Contact Person** Dr. Maricelle Abayon, DDS, MS Maricelle_Abayon@urmc.rochester.edu. **Class Year Name** Hospital General Dentistry Class Code DNS601 **Elective Tags** Outpatient Service, Patient Care, Teaching Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Schedule will be emailed What time should students report? 8:30 a.m. Who should they report to? Person listed on schedule

Goal

To provide dental students with a didactic and practical experience in geneal and hospital dentistry in an outpatient hospital general dentistry service.

Learning Objectives

The student should gain experience in treatment planning and treating patients with complex medical and dnetal needs under a variety of conditions and using a variety of patient managment techniques. The objective will be achieved through the following activities:

- 1. Participation in all didactic activities of the Division of Geneal Dentistry during their rotation.
- 2. Observation and supervised treatment of patients in the Hospital Dental Service of Strong Memorial Hospital.
- 3. Participation in the Consultation Service of the Eastman Dental Center.
- 4. Observation of treatment of genteral dentistry patients in the operating room.

5. Observation of treatment of patients undergoing conscious sedation by the Dental Service in the Ambulatory Center of Strong Memorial Hospital.

Schedule of Activities

Students will be assigned a preceptor who is a senior resident in the General Practice Residency program. The preceptor will insure that the student participates in the activities listed above.

Didactic Activities

Students will participate in all conferences, seminars and lectures with theGeneral Practice residents.

Student Evaluations

Externs are required to keep a log of their clinical activities and attendance in didactice activities to satisfactorily complete the externship.

DNS606 Oral Medicine

Course Information

Contact Person

Class Year Name Oral Medicine Class Code **DNS606 Elective Tags Outpatient Service** Block Length 2 wks Must contact Dept. For Approval Students 0 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? What time should students report?

Who should they report to?

Course Information

Course Director Catherine A. Moore M.D. Contact Person Katie Libby Phone (585) 275-4739 Room Number G.7522 Katherine Libby@urmc.rochester.edu **Class Year Name** Teaching Tutorial Class Code DPT600 **Elective Tags** Teaching **Block Length** 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Students will be notified via e-mail prior to the start of the elective. It will be expected that the students in this elective participate in most of the scheduled activities for the course (M-F, 8am-noon). What time should students report?

Who should they report to? Catherine Moore, MD

Goal

Demonstrate knowledge and skill in tutoring and teaching 2nd year medical students.

Learning Objectives

At the end of the course, students should be able to:

- Tutor students who require extra help in Disease Processes and Therapeutics
- · Effectively assist in laboratory instruction when needed
- Learn to write and grade examination questions
- Effectively tutor a PBL group for 2nd year medical students and critique PBL if applicable

Schedule of Activities

Students will attend DPT daily from 8-12 during their 2 week block, including labs, TBL and PBL if applicable to the scheduled block. They will work with 2nd year medical students to provide extra help if requested. Students will work together to review lecture content as the block progresses, and then review and write examination questions with the block leaders and/or course director. Students could be expected to grade one or two essay questions from the exam based on the timing of the exam in the scheduled elective block.

DPT604 Writing Elective

Course Information

Course Director Catherine A. Moore M.D. **Contact Person** Katie Libby Phone (585) 275-4739 Room Number G.7522 Katherine Libby@urmc.rochester.edu **Class Year Name** Writing Elective **Class Code DPT604 Elective Tags** Teaching **Block Length** 1 week Students 3 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Students will be notified of their assignment details via email by the end of the day Monday. What time should students report?

Who should they report to?

Goal

THIS COURSE CAN ONLY BE TAKEN ONCE

To learn the craft of creating and editing lecture notes that will be included in the course syllabus, and have the opportunity to improve your understanding of the specific pathophysiology related to the diseases.

Learning Objectives

- Understand how to create a PBL and tutor guide or create/review lecture notes and work with faculty to confirm.
- Have the opportunity to improve your understanding of the specific pathophysiology related to the diseases in the PBL

Course Information

Course Director Paul Josef Blackcloud M.D. Contact Person Natasha Garcia 275-0193 natasha garcia@urmc.rochester.edu **Class Year Name** Clinical Dermatology Class Code DRM601 **Elective Tags Outpatient Service** Block Length 2 weeks Students 3 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? A welcome letter will be sent prior to your start date with a schedule. Our locations are College Town 40 Celebration DR, or Red Creek 400 Red Creek DR., Suite 200. **Please note if you do not receive an mail prior to your rotation, please report to our College Town Clinic. What time should students report?

8:00-8:50am - In person morning lecture (sometimes its via zoom) AM Clinic Start time: 9:00am PM Clinic Start time: 1:00pm

Who should they report to?

Please contact Natasha Garcia with any questions or concerns via global email, or by phone.

Goal

URMC Dermatology Rotation for Medical Students

Prior to starting your clerkship, Natasha Garcia will email you a detailed daily schedule.

**Please note if you do not receive an mail prior to your rotation, please report to our College Town Clinic.

URMC Dermatology Rotation for Medical Students

Morning lecture start at 8AM via zoom (unless informed differently).

Zoom ID https://urmc.zoom.us/j/98625916350

If morning lecture is in person, please report to 40 Celebration Drive, Rochester, NY 14620, at College Town following morning lecture to our resident room. morning lecture schedule will be provided by either Natasha Garcia, or our chief residents Irina Lerman or Alexandra Bender.

Clinic Addresses:

College Town - 40 Celebration Drive (entrance at back of building).

Red Creek - 400 Red Creek Drive (location on 2nd floor).

Clinic Hours:

AM Clinic – 9AM

PM Clinic – 1PM

Course goals:

To familiarize students with the sources of dermatologic knowledge through peers, faculty members, textbooks, and websites.

Students should develop a basic dermatologic vocabulary that enables them to appropriately describe skin lesions. For example, students should be familiar with primary and secondary skin lesions and the difference between them. It is also important to learn basic terms such as erythema, violaceous, zosteriform, verrucous, etc.

Course Organization:

1. 8AM Lectures (daily): mandatory conference for our dermatology residents, nurse practitioners in training and rotating medical students. **Via Zoom (using Zoom ID** https://urmc.zoom.us/j/98625916350), **unless instructed otherwise.**

2. Dermatology Grand Rounds (1x monthly): Grand Rounds are held most <u>1st Wednesday</u> afternoons of the month via Zoom **(using same Zoom ID** https://urmc.zoom.us/j/98625916350) from 3-5 pm. Medical students have time for self-study between noon and 3 pm on these days.

3. Recommended basic dermatology source:

AAD online learning modules: Basic Dermatology Curriculum https://www.aad.org/member/education/residents/bdc

<u>VisualDx</u>

4. Mandatory assignments:

On your last day of your rotation: Submit a write-up on an interesting patient that you've encountered so far in your rotation (**send directly to Dr. Paul Blackcloud** (paul_blackcloud@urmc.rochester.edu). Write-up sample attached.

Complete the 2 week General Dermatology modules found here: https://www.aad.org/member/education/residents/ bdc. You can send your completed certificate to Dr. Blackcloud (email listed above).

Clinic Organization (role of medical student)

Majority involves shadowing and learning by observation – each student should pair up with a resident (2nd or 3rd year, preferably)

Student should be allowed an opportunity to present at least 1 patient daily (unless clinic is running behind)

Student can help with clinic flow i.e. biopsy photo (via Haiku app), and draw up lidocaine

Medical students should have access to a laptop daily because of the daily Zoom conferences that now occur.

Learning Objectives

By the end of the rotation the student should be able to:

- Diagnose and differentiate common skin diseases
- Develop a practical understanding and rational for the treatment of common skin diseases
- Acquire the ability to gain more specific skills including the preparation and interpretation a KOH slide.

Schedule of Activities

Include patient work-ups and discussion with the instructor. Time for reading will be set aside by preceptor, and viewing of a set of teaching powerpoints.

Required Reading

Students will be given pertinent reading assignments during the rotation.

EDD600 Advanced Emergency Medicine Clerkship

Course Information

Course Director Julie R. Pasternack M.D. Contact Person Kate M. Rose Kate Rose@urmc.rochester.edu **Class Year Name** Advanced Emergency Medicine Clerkship Class Code EDD600 **Elective Tags** Patient Care **Block Length** 4 weeks Students 5 Prerequisites EDD400 Emergency Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Student Fellow, Visiting Where should students report? Clerkship Coordinators office, College Town, 44 Celebration Drive, Suite 2.100. On first Day orientation Shapiro Conference Room, College Town, 44 Celebration Drive, Room 2.007A/B. What time should students report? TBD Who should they report to? Julie Pasternack, MD Clerkship Director Lisa Lincoln, MD Assistant Clerkship Director

Goal

GOAL:

To expand upon the experience of the Emergency Medicine Clerkship with emphasis on assuming internship-level responsibility for the diagnosis, treatment, consultation with other services, disposition of patients, and advanced procedural responsibilities commonplace in the Emergency Department.

Learning Objectives

LEARNING OBJECTIVES:

By the end of this clerkship, the student should be able to:

· Identify patients/conditions for which emergency management is indicated.

· Document in a clear and concise fashion pertinent historical and physical findings for a patient's presenting complaint.

· Identify patients/conditions for which consultation is indicated.

· Demonstrate appropriate techniques for procedures (slit lamp exam, lumbar puncture, thoracentesis, chest tube placement, laceration repair, splinting) when indicated.

· Assist with resuscitations.

· Identify arrhythmias and address initial management.

· Discuss the differential diagnosis of emergent chest pain, respiratory distress, acute abdomen, mental status changes, shock and open fractures.

· Identify community resources (Alternatives for Battered Women, Rape Crisis, Substance Abuse Rehabilitation, Community Health Nurses, Poison Control).

· Discuss the role of the Emergency Medical Services (EMS) in Monroe County.

Schedule of Activities

SCHEDULE OF ACTIVITIES

This is a patient-oriented emergency medicine experience individualized to the students' particular interest in emergency medicine.

Students will generally work 14 clinical shifts over 4 weeks and participate in 1 6-hour ambulance ride-along per 2 weeks of the rotation.

Close supervision by residents and faculty preceptors will facilitate acquisition of clinical judgment and technical skills. Each student will be matched with an attending or third year emergency medicine resident for each shift.

Clinical shifts will be 8 hour shifts including days, evenings, and nights. Emphasis is on active participation in all aspects of patient care.

Students will have exposure to toxicology practices.

Students will gain experience with advanced procedures frequent in the Emergency Department (endotracheal intubation,central venous access, etc.)

Didactic Activities

DIDACTIC ACTIVITIES

Attendance to and participation in all Thursday resident lectures and conferences will be required. These include case conference, EKG readings, grand rounds, journal club, morbidity and mortality, research forum, toxicology conference, and trauma conference.

Required Reading

REQUIRED READING

Textbook: Tintinalli JE, Kelen GD, Strapczynski JS. Emergency Medicine: A Comprehensive Study Guide, 6th edition.

Chapters:

- 1 Emergency Medical Services (pages 1-5)
- 8 Cardiopulmonary Resuscitation in Adult (pages 44-48)
- 9 Pediatric Cardiopulmonary Resuscitation (pages 57-64)
- 24 Disturbances of Cardiac Rhythm Conduction (pages 169-192)
- 30 Anaphylaxis and Acute Allergic Reactions (pages 242-246)
- 43 Puncture Wounds Bites (pages 330-336)
- 45 Approach to Chest Pain and Possible Myocardial Ischemia (pages 341-351)
- 47 Acute Coronary Syndrome (pages 356-365)
- 58 Respiratory Distress (pages 443-451)

68 – Acute Abdominal Pain (pages 515-519)

110 - Pediatric Fever (pages 749-752)

221 – Altered Mental Status and Coma (pages 1440-1448)

259 – Early Evaluation and Management of Orthopedic Injuries (1739-1752)

Total Reading = 106 pages.

Tintinalli's Emergency Medicine textbook can be borrowed from the Department of Emergency Medicine and accessed through the Miner Digital Library.

Student Evaluations

STUDENT EVALUATIONS

This is a PASS/FAIL course.

To receive a grade of satisfactory the student must maintain perfect attendance, turn in a log sheet documenting that the learning objectives have been covered, and receive satisfactory clinical evaluations from their preceptors during the rotation.

EDD611 Emergency Ultrasound Elective

Course Information

Course Director Kayla J. Dewey M.D. **Contact Person** Course Coordinator - Kate Rose (Kate Rose@urmc.rochester.edu Course Director - Kayla Dewey, kayla_dewey@urmc.rochester.edu **Class Year Name Emergency Ultrasound Elective Class Code** EDD611 **Elective Tags** Patient Care Block Length To add this course, please contact the Course Coordinator (Kate Rose) with proposed 2 week block for approval. Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? SMH Emergency Department What time should students report?

Who should they report to?

Goal

To expose students to the breadth of point-of-care ultrasonography and how it is applicable to the practice of emergency medicine, and to gain hands-on experience in obtaining images on emergency department patients and then work towards image interpretation in real time.

Learning Objectives

By the end of the clerkship the students should:

- 1. Gain basic knowledge of the physics of ultrasound
- 2. Understand difference between point-of-care versus comprehensive exams

3. Gain basic skills in image acquisition for POCUS exams (FAST, echo, biliary, aorta, renal, pelvic, MSK/DVT, procedural guidance)

4. Understand use of POCUS by emergency physicians

Schedule of Activities

- 1. Attendance at weekly QA meeting (Thursday afternoons)
- 2. 8 hands-on scanning shifts in the ED with EM ultrasound faculty, fellows, or residents
- 3. Completion of patient logs including follow-up information

4. Completion of required reading assignments (see Required Reading)

Didactic Activities

Some lectures will be given by ultrasound faculty and residents during weekly conference and QA meetings but most teaching will be hands-on with one-on-one scanning sessions between the student and the faculty. Hands-on teaching will be supplemented by use of e-books and videos listed below under required reading.

Required Reading

E-books provided to students:

Introduction to Bedside Ultrasound vol 1: intro video, chapters 1, 2, 3, 6, 7, 8, 10, 11, 12

Introduction to Bedside Ultrasound vol 2: chapters 1 and 15

Point of Care OB Ultrasound: chapters 4 and 6

5minutesono.com videos: knobology, FAST, EFAST, cardiac views, cardiac function, pericardial tamponade, gallbladder, AAA, hydronephrosis, bladder volume, fetal heart rate, soft tissue

Optional readings:

1. American College of Emergency Physicians. Use of ultrasound imaging by emergency physicians. Policy 400121. Available at: http://www.acep.org

2. American College of Emergency Physicians. Emergency ultrasound imaging compendium. Available at: http:// www.acep.org

3. Bassler D, Snoey ER, Kim J. Goal-directed abdominal ultrasonography: Impact on real-time decision making in the emergency department. J Emerg Med 2003; 24: 375-378

4. Ma OJ et al. Prospective analysis of a rapid trauma ultrasound examination performed by emergency physicians. J Trauma 1995; 38: 879-885

5. Labowitz AJ et al. Focused Cardiac Ultrasound in the Emergency Setting: A Consensus Statement of the American Society of Echocardiography and American College of Emergency Physicians. J Am Soc Echo 2010; 23(12): 1225-1230

6. Phelan MP, Emerman CL. Focused aortic ultrasound to evaluate the prevalence of abdominal aortic aneurysm in ED patients with high-risk symptoms. Am J Emerg Med 2006; 24: 227-229

7. Stein JC et al. Emergency Physician Ultrasonography for Evaluating Patients at Risk for Ectopic Pregnancy: A Meta-Analysis. Ann Emerg Med 2010;56:674-683

Student Evaluations

To receive a grade of Pass, students must turn in a log sheet documenting the scans they have completed along with clinical information about the patient and any follow-up imaging that was obtained. They must also successfully complete the requirements of participation in scanning shifts and ultrasound QA meetings.

EDD615 Introduction to Emergency Medicine

Course Information

Course Director Julie R. Pasternack M.D. **Contact Person** Kate M. Rose Kate_Rose@urmc.rochester.edu **Class Year Name** Introduction to Emergency Medicine **Class Code** EDD615 **Elective Tags** Patient Care **Block Length** 2 weeks- Must get Department's Approval Students 10 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year Where should students report? TBD What time should students report? TBD Who should they report to? Julie Pasternack, MD Clerkship Director

EDD616 Foundational skills in Emergency Medicine

Course Information

Contact Person Kate M. Rose Kate_Rose@urmc.rochester.edu **Class Year Name** Foundational skills in Emergency Medicine **Class Code** EDD616 **Elective Tags** Patient Care **Block Length** Must Get Department's Approval Students 0 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? TBD What time should students report? TBD Who should they report to? Julie Pasternack, MD Clerkship Director

EDD617 Pandemic Response

Course Information

Course Director Julie R. Pasternack M.D. **Contact Person** Kate M. Rose Kate Rose@urmc.rochester.edu **Class Year Name** Pandemic Response **Class Code** EDD617 **Elective Tags** Multidisciplinary Block Length 1 or 2 weeks Must Get Department Approval Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? TBD What time should students report? TBD Who should they report to? Julie Pasternack, MD Clerkship Director

Goal

1) Assigned readings, and journal articles about pandemic medicine with a final project focusing on the question: "what 4 things do you think are most important in response to a pandemic?" and "what ideas do you have to improve the current pandemic response?" They would need to cite references for their answers, which would be discussed in a zoom didactic.

2) Work clinically in the tent with the interprofessional teams. Students would work with nursing and techs to help with blood draws, start IVs, get EKGs, put patients on monitors, talk to social work, help with discharge planning, etc. If there are laceration repairs or other small procedures, they could also do those with the provider teams. We would provide all of the students with N95 masks.

EDD619 Planetary Health for the Practicing Clinician

Course Information

Contact Person

Class Year Name Planetary Health for the Practicing Clinician Class Code EDD619 Elective Tags Medical Humanities Block Length 2 Weeks Students 10 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Course Description:

This course hybrid online and in-person course will provide a broad range of the health implications of climate change that we are currently seeing and will continue to see in the future as clinicians. In addition, we will overview the healthcare industry's contribution to climate change as well as highlight opportunities to enhance communication abilities to better serve as physician advocates with respect to climate change and human health. Traditional lectures via zoom, flipped classroom design instruction, journal clubs as well as field trips to local organizations involved in sustainability measures will be employed to deliver learning material to students.

Course Objectives:

1. Describe the ways in which human health is impacted by climate change and the concept of planetary health.

2. Understand the healthcare industry contribution to climate change

3. Describe the concept of environmental justice and environmental racism. Identify the communities disproportionately affected by climate change and climate change effects on disease burden/severity within these populations.

4. Interpret and evaluate scientific writing about climate change and health.

5. Develop skills to communicate climate change and health data to a lay audience.

6. Identify ways physicians can intervene on local level and the resources locally that would assist in interventions

7. Project proposal - in some media form, translate climate change and health topic for physician and/or lay audience, write a proposal for a larger project

Schedule of Activities

Week 1
Day 1 - Morning
Overview of Course
Introduction
Health Care Industry and Climate Change
Sustainable Initiatives in Health Care
Afternoon
Rotoclave Tour
Monroe County Landfill tour
Day 2- Morning
Waterborne Disease and Climate Change
Climate Change Impact on the Great Lakes
Susan Cushman Guest Lecture
Afternoon
Genesee Brewery
Day 3 - Morning
Air pollution, climate Change and Human Health
Heath Related Disease and Human Health
Afternoon
Journal Club
Day 4 - Morning
Severe Weather Events and Climate Change
Climate Change Refugees
Mental Health and Climate Change
Afternoon
Possible tour of Center for Refugee Health
Day 5 - Morning
Vulnerable Populations
Environmental Justice -Climate and Race

Sandy Jee Lecture - Child Health Afternoon Overview of final Project Week 2 Day 6 - Morning Advocacy Day Communication skills and Physicians (possible Alan Alda exercise?) Overview of Institution, State and US Climate Policies **Guest lecturers** Afternoon Draft a letter to a politician Day 7 -Zoo day with Jeff Wyatt Day 8 - Morning Food insecurities Food deserts Afternoon Journal Club Day 9 - Morning **Biodiversity and Pandemics** Afternoon Work on Presentations Day 10 Presentations

Didactic Activities

Course Description:

This course hybrid online and in-person course will provide a broad range of the health implications of climate change that we are currently seeing and will continue to see in the future as clinicians. In addition, we will overview the healthcare industry's contribution to climate change as well as highlight opportunities to enhance communication abilities to better serve as physician advocates with respect to climate change and human health. Traditional lectures via zoom, flipped classroom design instruction, journal clubs as well as field trips to local organizations involved in sustainability measures will be employed to deliver learning material to students.

Student Evaluations

Student Evaluation:

This course will be pass/fail and your participation and engagement with the material will be taken into consideration to determine your overall performance. To receive a grade of "pass", for each lecture you must

-Be present and participate in each lecture

-Participate in journal club

-Attend off site activities

-Prepare and present final project

EDD620 Respiratory Distress and Ventilator Management in the Emergency Department

Course Information

Contact Person YULIYA PECHENY. MD vuliva pecheny@urmc.rochester.edu **Class Year Name** Respiratory Distress and Ventilator Management in the Emergency Department Class Code EDD620 **Elective Tags** Inpatient Service **Block Length** 1 week Students 8 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Earlier exposure and reflection of critically ill respiratory patients will allow the student to feel more comfortable taking care of this patient population by understanding pathologies and differentials of respiratory distress cases as well as their management. Since a lot of these cases require ventilatory support, it is also important to have a foundational understanding of ventilator management with the ability to recognize and troubleshoot various complications.

Learning Objectives

- 1. Discuss basic lung physiology and lung pathologies
- a. Students will know the foundations of lung function and lung pathology
- **b.** Students will <u>be able</u> to understand different lung pathologies
- C. Students will come to appreciate the distinctions of various lung pathology presentations clinically
- 2. Discuss foundations of ventilator use
- a. Students will know the general basics of a ventilator's function and use
- b. Students will be able to adjust settings on a ventilator
- C. Students will come to appreciate the indications for a ventilator in clinical scenarios
- 3. ICU rounds

- **a.** Students will \underline{know} the indications of intubation requirement
- **b.** Students will <u>be able</u> to apply previous knowledge and analyze patient's ventilator settings and labs with clinical situation
- C. Students will come to appreciate the complexity and nuances of ventilator management
- 4. Simulation cases of respiratory distress and ventilator settings
- a. Students will know how to identify various respiratory distress cases
- b. Students will be able to identify when intubation is necessary and set appropriate ventilator settings
- C. Students will come to appreciate how to troubleshoot ventilatory problems
- 5. Prepare own simulation
- a. Students will know how to apply knowledge of respiratory distress into a simulation
- **b.** Students will <u>be able</u> to create a simulation by combining previous knowledge
- C. Students will come to appreciate building/creating a scenario based on their foundational understandings

Schedule of Activities

Students will have morning and afternoon sessions during the weekday with varied topics of discussion and hands on activities relating to respiratory distress and ventilator management. The sessions will begin at 9:00 am followed by a lunch break at noon and conclude at 3:00 pm. Simulation days will run from 8:00 am with a lunch break at noon and conclude at 4:00 pm.

Didactic Activities

Students will attend a lecture series on lung physiology and pathology as well as ventilator foundational concepts. They will work with a respiratory therapist to understand mechanics and settings of the ventilator. Blood gases will be incorporated into the training. Students will be able to experience and apply this knowledge base in actual clinical scenarios in the ICU. Ultimately, students will participate in simulation workshops with different respiratory distress cases and create their own.

Required Reading

No required readings, however students will receive specific readings and resources for their own use prior to the start of the elective.

Student Evaluations

To receive a grade of Pass, students must attend the didactic lectures, participate in the simulations, and create an independent simulation to run.

EHS601 Occupational and Environmental Medicine

Course Information

Contact Person Debbie Klein, 487 - 1010, debbie klein@urmc.rochester.edu **Class Year Name** Occupational and Environmental Medicine Class Code EHS601 **Elective Tags** Patient Care **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Strong Occupational and Environmental Medicine Calkins Corporate Park 400 Red Creek, Suite 220 Rochester, NY 14623 What time should students report? 0830 Who should they report to? Bruce A. Barron, MD, MS

Goal

Demonstrate knowledge and skills in performing occupational and environmental clinical assessments.

Learning Objectives

Discuss the different types of services offered by occupational and environmental medicine programs (preventive, medical, and rehabilitative). Discuss the role of toxicology, industrial hygiene, and ergonomics as it relates to occupational and environmental medicine. Demonstrate an understanding of the New York State Workers' Compensation system, including successful completion of a C4 report to the Workers' Compensation Board.

Schedule of Activities

The student will participate in clinic activities within the Division of Occupational and Environmental Medicine.

Didactic Activities

There will be formal didactic sessions including lectures on hearing conservation programs and audiogram interpretations, principles of industrial hygiene and toxicology, preventive medicine, agricultural medicine, ergonomics, and occupational biopsychosocial assessments. Additionally, the student may attend monthly Occupational and Environmental Medicine Clinical Updates and Grand Rounds.

Required Reading

Students will be given pertinent reading assignments during the rotation.

Student Evaluations

The student will be evaluated through direct observation of physical assessments, case presentations, and participation in didactic sessions.

ENTEXT Otolaryngology Acting Internship

Course Information

Course Director Glenn Todd Schneider M.D., M.S. Contact Person Sheila K. McCart, 585-276-5181, sheila mccart@urmc.rochester.edu **Class Year Name** Otolaryngology Acting Internship Class Code ENTEXT **Block Length** 4 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? students will be emailed information from chief residents What time should students report? students will be emailed information from chief residents Who should they report to? Charles babb@urmc.rochester.edu; Bartholomew bacak@urmc.rochester.edu;

Goal

Rotation Goals

- 1. Present a 30 minute talk at Otolaryngology Grand Rounds on the last Thursday of the month. This talk will include a brief presentation of a patient seen while on service and a discussion of current management or controversies as related to this patient.
- 2. Become an active member of the in-patient team by demonstrating rounding skills, helping with consults, and assisting in the operating room.
- **3.** Talk through the management of basic inpatient consults with the medical school liaison as outlined in the learning objectives at the end of the rotation.
- 4. Talk through the steps of basic in-patient procedures with the medical school liaison as outlined in the learning objectives at the end of the rotation.

Learning Objectives

Learning Objectives:

- 1. Understand inpatient management of post-operative Otolaryngology patients including relevant labs, imaging, monitoring, and medications. As well as identifying common signs of early and late post-operative complications.
- 2. Learn how to prepare and perform inpatient rounding including efficient patient presentations, collection of relevant labs and imaging findings, and knowing what equipment is necessary when examining patients.

- 3. Know how to manage and evaluate common in-patient Otolaryngology consults including tracheostomy,
 - parotitis, mastoiditis, invasive fungal sinusitis, pre-septal cellulitis, and basic facial trauma.
- 4. Learn to perform the steps of basic consult procedures at a PGY-1 level including: drainage of a peri-tonsillar abscess, tracheostomy change, control of tracheostomy bleed, and control of epistaxis.

Schedule of Activities

Rotation Structure

Head and Neck Team

The Head and Neck Cancer team is typically a busy service with ICU, stepdown, inpatient floor status and consult patients based on WCC5 at SMH. General ENT consults at SMH are taken by this team every Monday / Wednesday / Friday which will provide the sub-intern with common issues seen in a tertiary hospital. The student should plan to round and present on at least four consult and postoperative patients for which they were involved in the initial evaluation and/or surgical management. The goal will be to have the student have at least one of these four patients be an ICU or step-down status patient to follow to understand the goals of critical care for ENT patients which they may see in their internship. On non-operative days, the sub-intern will participate with the residents in the Wilmot Cancer Center head and neck clinic and help with consults.

Inpatient Specialty Service

In the rare week that the Head and Neck team does not have inpatient operative cases or clinics (conferences, attendings on vacation, etc), the sub-I will participate with inpatient operative cases at Strong with the specialty team attendings. They will also be expected to help with Strong consults with the specialty team if participating in the ORs on Tuesdays and Thursdays. They will continue to round with the Head and Neck team and present patients on the Head and Neck service only.

Required Reading

Pre and Post Service Requirements / Suggestions

- **1.** ENT Elective (2 weeks): students applying to ENT are strongly encouraged to participate in this two week elective either in their 3rd or 4th year to get an ambulatory experience.
- 2. ICU / Medicine / General Surgery: students applying to ENT are also strongly encouraged by our department to rotate for at least 2 weeks in their 4th year on an ICU / Inpatient Medicine / General Surgery service to prepare for non-ENT rotations during their intern year.

Student Evaluations

Grading

Honors, High-Pass, Pass, Fail

Grading will be based on:

- Written feedback on daily performance, improvement throughout the rotation, preparation for rounds and OR cases, and ability to perform at a PGY-1 level will be collected from the residents, attendings, and OR/Floor staff at the end of the rotation.
- 2. Written feedback on student's 30 minute talk will be evaluated based on the ability of the student to present the case in an efficient manner, ability to answer questions from our residents and staff, as well as understanding of the current literature on this topic.

FAM601 Primary Care Sports Medicine

Course Information

Course Director Stephanie M. MacDonald D.O. Contact Person Anne Holcomb 585-279-4704 Kate Lewis@urmc.rochester.edu **Class Year Name** Primary Care Sports Medicine Class Code FAM601 **Elective Tags Outpatient Service, Patient Care** Block Length 2 Weeks Students 1 Prerequisites (ALL) MED300 Medicine Clerkship, NEU300 Neurology Clerkship , PED300 Pediatrics Clerkship , SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Clinic locations vary - see schedule What time should students report?

Who should they report to?

Goal

Goal: To understand the scope of primary care sports medicine, gain experience with a variety of acute and chronic musculoskeletal complaints, exposure to musculoskeletal ultrasound, and sports sideline and training room coverage (when available).

Learning Objectives

Learning objectives:

- 1. Learn to take an appropriate patient history of a musculoskeletal complaint
- 2. Perform physical examination of the shoulder, hip, knee, hand/wrist and foot/ankle.
- **3.** Be able to develop a basic differential diagnosis for common musculoskeletal complaints for both pediatric and adult patients.
- 4. Become familiar with clinical and X-ray findings of common sports injuries and other musculoskeletal complaints
- 5. Discuss outpatient management options for common sports injuries and other musculoskeletal conditions
- Discuss clinical indications for point of care ultrasound in sports medicine and application to the musculoskeletal exam.

- 7. Participate in training room and local sports event coverage (when available)
- 8. Describe how sports medicine physicians work with an interdisciplinary team to take care of athletes

Schedule of Activities

Schedule of Activities:

This is an ambulatory elective and students will be assigned to several different primary care sports medicine faculty members over the course of the two weeks, typically with hours from 8 AM – 4:30 PM. Schedules will vary slightly depending on the season and depending on sports schedules. Students may also attend training room sessions once per week, and have the opportunity to help provide game coverage for a variety of local sporting events which may occur on nights or weekends (depending on time of year).

Didactic Activities

Didactic Activities: (A brief description of any formal lectures, rounds, seminars, etc.)

Primary care sports medicine division departmental didactics every Tuesday morning from 7-8 AM via Zoom.

Other lectures may be added in depending on the time of month, including grand rounds or other one-time lectures. Students will be informed of additional lectures at the start of the rotation.

Required Reading

Required Reading: All texts available online through Miner Library website, Netter's textbook available to borrow at start of rotation

Required:

From <u>Netter's Sports Medicine</u> 2nd edition, by Madden, Putukian, McCarty, and Young: Chapter 1 (The Team Physician), chapter 2 (The Certified Athletic Trainer and the Athletic Training Room), chapter 42 (Musculoskeletal Injuries in Sports), chapter 63 (Diagnostic Imaging in Sports Medicine), chapter 64 (Sports Ultrasound).

<u>Bates' Guide to Physical Examination and History Taking</u>, 13th edition, by Bickley: chapter 23 (Musculoskeletal system)

Not required, but for additional reference during rotation (on loan at start of rotation):

All other chapters in Netter's Sports Medicine, 2nd edition

The 5-Minute Sports Medicine Consult, 2nd edition (Bracker, Achar, Pana, Taylor).

Student Evaluations

Student Evaluations: To receive a passing grade students must attend Tuesday morning didactic lectures, training room or game coverage if assigned, and receive a passing clinical evaluation from their preceptors during the elective based on the learning objectives provided.

FAM608 Family Medicine Outpatient Elective

Course Information

Contact Person

Anne Holcomb 585-279-4833 Anne Holcomb@urmc.rochester.edu **Class Year Name** Family Medicine Outpatient Elective Class Code FAM608 **Elective Tags** Outpatient Service, Patient Care, Primary Care Block Length 2 weeks (4 weeks with Dept. Approval) Students 1 **Prereauisites** (ALL) MED300 Medicine Clerkship, NEU300 Neurology Clerkship , OBG300 Obstetrics and Gynecology Clerkship , PED300 Pediatrics Clerkship , PSY300 Psychiatry Clerkship SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, International Visiting, Visiting Where should students report? If not otherwise advised, they should report to Highland Family Medicine Center, 777 S. Clinton Avenue, Rochester, NY 14620. What time should students report? 7:45AM Who should they report to? Anne Holcomb or scheduled preceptor

Goal

To develop further and refine skills in the diagnosis and management of common problems in urban, inner-city, and/or rural ambulatory community-based Family Medicine practice.

Learning Objectives

By the end of the rotation the student should be able to:

1) Diagnose and treat 20 most common presenting concerns in family practice

2) Demonstrate skills in cultural competency, including caring for patients of various races, ages, ethnicities, and socioeconomic levels

3) Demonstrate understanding of the impact of health insurance, as well as the "safety net" of care for those patients who are uninsured or underinsured, and how this affects patient care

4) Demonstrate understanding of the psychosocial and health literacy barriers to health care that may be endemic in specific populations, such as those living in the inner city

5) Demonstrate understanding of when to use ancillary health providers, such as social workers, home nursing services, outreach workers, and what services they can provide

6) Provide advocacy for patients

7) Identify and assess risk factors such as domestic violence, substance abuse, and illiteracy. Provide appropriate counseling and referral

8) Identify and learn appropriate management of common office procedures

<u>FOCUSED EXPERIENCES AVAILABLE</u>: (**must** be arranged before the elective begins, and are subject to provider availability)

- OB/Women's Health
- Inner-city, Urban, and Rural settings
- Procedures in Primary Care (as available & in combination with others)
- Refugee Health
- Geriatrics with possible home visits

Schedule of Activities

The student will see patients under the supervision of urban, inner-city, or community-based family physician preceptors in the Rochester area. Practice hours vary, as do on-call arrangements. This is primarily an outpatient experience. Students will participate in resident teaching activities one 1/2-day session per week as schedule indicates.

Didactic Activities

Generally, brief case presentations to the primary preceptor, during or shortly after the patient encounter, will constitute the majority of teaching activities. It is expected that formal feedback sessions will occur at the midpoint and at the end of the elective.

Additionally, students are expected to attend the weekly Family Medicine Residency Teaching on Thursday afternoons at Highland Family Medicine.

Required Reading

Aquifer Family Medicine cases and provided articles. Further information will be sent via email prior to starting the elective.

Student Evaluations

In order to receive a grade of Passing, the student must attend all sessions, receive a satisfactory evaluation from the preceptor(s), and return his or her evaluation of the elective prior to grades being posted.

FAM612 Family Medicine Inpatient Adult Medicine

Course Information

Contact Person

Kate Lewis 585-279-4704 kate lewis@urmc.rochester.edu Class Year Name Family Medicine Inpatient Adult Medicine Class Code FAM612 **Elective Tags** Inpatient Service, Patient Care Block Length 2 weeks (4 weeks with Dept. Approval) Students 1 Prereauisites (ALL) MED300 Medicine Clerkship, NEU300 Neurology Clerkship , OBG300 Obstetrics and Gynecology Clerkship , PED300 Pediatrics Clerkship , PSY300 Psychiatry Clerkship , SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, International Visiting, MD/PhD in Research, Visiting Where should students report? Lobby of Highland Hospital. Further information regarding coordination with resident team will be sent via email. What time should students report? Student will be advised - normally report to Highland Hospital Lobby by 7 am of the day they start Who should they report to? Student will be advised when they receive their schedule.

Goal

To develop further and refine skills in the diagnosis and management of common problems in an adult inpatient medical service.

Learning Objectives

By the end of the rotation the student should be able to:

- 1) Conduct a focused history and physical exam pertinent to the patient's presenting concerns
- 2) Diagnose and treat the 20 most common presenting concerns in inpatient family practice
- 3) Provide appropriate preventative medicine and screening to patients
- 4) Identify situations where consultation and referral are indicated and make those arrangements
- 5) Provide evidence of ability to engage in self-directed learning, including setting personal goals
- 6) Take primary responsibility in providing appropriate medical care to inpatients in the hospital on the medical service
- 7) Apply the biopsychosocial model of complete care for patients in the hospital

Schedule of Activities

The student will become an integral part of a Family Medicine resident team. In the mornings, the student will participate in inpatient rounds with the family residents during their time in the hospital. Students will be able to participate in resident teaching activities at least one 1/2-day session per week. Students will be expected to come in one weekend day each week.

Didactic Activities

Generally, brief case presentations to senior residents and the primary preceptor, during or shortly after the patient encounters, and during inpatient rounds, will constitute the majority of teaching activities.

The students also take part in the teaching activities including morning report, noon report, and signout rounds, as well as attend Thursday afternoon Family Medicine Residency Teaching as able.

Required Reading

You will be asked to read materials on the medical conditions encountered in the hospital. You will be asked to create a written and oral summary detailing of your findings and create a care plan for the patient.

· You can find the reading materials on point of care resources such as UpToDate, DynaMed, Essential Evidence Plus, Pub Med Clinical Queries

Student Evaluations

In order to receive a grade of Passing, the students must complete the following:

- Be on time
- Actively participate in resident inpatient service,
- Receive satisfactory feedback and evaluations from resident and faculty preceptors,
- Return his or her evaluation of the elective before grades are posted,

FAM620 Family Medicine in Rural Honduras

Course Information

Course Director Douglas Leonard Stockman M.D. Contact Person Elizabeth Brown, MD elizabeth brown@urmc.rochester.edu **Class Year Name** Family Medicine in Rural Honduras Class Code FAM620 **Elective Tags Outpatient Service** Block Length 2-5 weeks Must contact Dept. For Approval Students 2 Prerequisites (ALL) MED300 Medicine Clerkship, SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year. 4th Year Where should students report? **COMPETITIVE APPLICATION PROCESS FOR SPOTS - contact Elizabeth Brown elizabeth_brown@urmc.rochester.edu The student is responsible for all costs for the Honduras trip. The price varies with plane flight costs and in-country costs but is in the \$1,200 - \$1,500 range usually. What time should students report? 8:00 am Who should they report to? Dr. Stockman

Goal

To develop an understanding of medical care in a rural remote setting of a developing country, and to understand the interaction of acute medical care with public health.

The student is responsible for all costs for the Honduras trip. The price varies with plane flight costs and in-country costs but is in the \$1,200 - \$1,500 range usually.

Learning Objectives

By the end of the rotation the student should be able to:

· Conduct a focused history and physical exam pertinent to the patient's presenting concerns, using an interpreter, if not fluent in Spanish.?

· Be able to provide simple instructions in Spanish for common patient concerns, such as how to take a medication.

· Develop an understanding of how to provide medical care in a setting where no laboratory testing or imaging services are available.

· Educate non-medical community members on a health topic.

· Gain an understanding of how to do a community assessment.

· Provide evidence of ability to engage in self-directed learning, including setting personal goals.

Schedule of Activities

The student will see patients at the clinic in San José, San Marcos de Sierra, Honduras, under the supervision of a faculty family physician. The nearest hospital is a two-hour drive away on a rough dirt road. Students are expected to see patients during the day and to contribute to oncall coverage at night, which includes obstetrical services. Afternoons are spent, first for one half of the group and then for the other, in community health activities in the surrounding villages.

This elective is only offered for two weeks in October and April; the exact times of the trips will vary year to year.

Didactic Activities

Prior to the trip, there will be 1-3 meetings of all those participating in the trip. The student MUST be able to attend these sessions. These meetings include reports on what has been done at the site previously, as well as the goals for the current trip. In addition, repacking and distribution of medications and supplied donations occurs at these meetings. The student is expected to be able to complete assigned preparticipation reading material to gain a better understanding of the culture and region. Following the trip, there is a post-trip debriefing that the student is required to attend.

Required Reading

As assigned by Dr. Stockman.

Student Evaluations

In order to receive a grade of Pass, the student must attend all pre- and post-trip sessions, participate in the entire trip, and receive a passing evaluation from the Family Medicine faculty.

SCHEDULING: Students interested in this course must call (585) 442-7470 x721 to check on preceptor availability before enrolling. In the past, funding has been available through the University of Rochester Medical School's International Health Advisory Committee, but the securing of funding is the responsibility of the student. A non-refundable deposit of \$250 is required to secure a spot on the elective, and will be due 3 months prior to the trip.

Course Information

Contact Person

Caroline Donohue@urmc.rochester.edu Kate Lewis kate lewis@urmc.rochester.edu 585-279-4704 **Class Year Name** Family Medicine Acting Internship Class Code FAMEXT **Block Length** 4 weeks Students 1 Prerequisites (ALL) MED300 Medicine Clerkship, NEU300 Neurology Clerkship , OBG300 Obstetrics and Gynecology Clerkship , PED300 Pediatrics Clerkship , PSY300 Psychiatry Clerkship , SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Highland Hospital lobby (more information will be provided by email prior to starting) What time should students report? Prior to 7:00 AM, more information to be provided via email Who should they report to? Resident preceptor, more information to be provided via email

Goal

Goals: To provide senior level medical students interested in Family Medicine (FM) with a clinical experience working on the inpatient family medicine team. The sub-intern will assume primary responsibility for assigned inpatients, including cross-cover, well newborns and low risk maternity patients, under the direct supervision of upper level residents and attending physicians.

Learning Objectives

By the end of their sub-internship rotation, students should be able to:

-Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care

-Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient

-Identify indications for diagnostic testing and write initial orders for co-sign

-Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications, with supporting rationale

-Write accurate and well-organized admission and progress notes; update progress notes daily

-Recognize when a patient is sick vs not sick, perform the initial evaluation, and develop an initial management plan while asking for help

-Recognize appropriate disposition for a patient (when ready for discharge, needs ICU, appropriate for the floor, ready for a procedure, etc.)

-Prioritize tasks in the care of multiple patients in order to provide efficient, safe, and equitable care

-Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team

-Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter appropriately, avoids jargon)

-Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance

-Apply knowledge of the anatomy, physiology, indications, contraindications, risks, and benefits relevant to common procedures in family medicine in discussions with patients and preceptors

-Demonstrate how to obtain informed consent (basic surgical procedures, bedside procedures, blood transfusion, treatment plan, etc.)

-Understand team dynamics, limitations of the team, resources available, and where to go for help when needed

-Demonstrate insight into one's own strengths and weaknesses, asking for help when needed and responding to feedback in a professional manner

-Acknowledge ambiguity and be open to questions and challenges from the patient and team

-Utilize evidence-based resources to answer clinical questions

-Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest.

Schedule of Activities

The FM inpatient service at Highland Hospital has several components: caring for hospitalized adults on the medicine service, low-risk obstetrics patients on Labor and Delivery and their newborns in the nursery, and seeing patients in continuity clinic with the team's senior residents. The Sub-internship experience includes all of these components, outlined here and described in more detail below.

-First 2 weeks: Inpatient medicine Team C, with one afternoon per week in continuity clinic with the team's R2/R3

-Second 2 weeks: Inpatient medicine Team C and newborn nursery, with one afternoon per week in continuity clinic with the team's R2/R3

-Inpatient OB - as schedule allows and patients in labor in afternoons and 1 evening per week. Goal 4 deliveries for 4 week long rotation.

Inpatient Medicine Team C Highland Hospital

Inpatient Team C takes call every day until 4pm. Students are expected to receive sign-out on their patients by 7am from the overnight night float resident.

Please page your senior resident after you have received sign out to review your patients and plan for the day. Please plan on meeting your senior resident in the lobby at Highland hospital by 6:45am on your first day.

Supervising team consists of an R3, R2, R1 and FM attending

The team admits all patients who receive their primary care at Highland Family Medicine and Brown Square Health Center. The team takes admissions until 4 PM daily including the weekend.

New admissions are assigned by the R3 between the sub-intern, R1, and R2. Initial patient load will start with 2

patients and then increase to up to 4 patients consistent with typical R1 workload at the beginning of the year. The sub-intern's assignment will not exceed 5 patients total.

Responsibilities: The sub-intern is responsible for writing the admission note and all orders for their patients and having the orders cosigned by the R3. The sub-Intern is responsible for daily rounding on their patients, writing daily progress notes, communicating with attending and specialists, and creating/updating the hand-off to evening/night float residents. Sub-intern is first call for their own patients. On afternoons when the R1 or R2 is in clinic, the sub-intern will share first call for resident patients as well, with the R3 and FM attending as back up.

-Team C rounds take place at 9:30 every morning and sub-intern will be responsible for presenting their patients during rounds.

Call and weekends: The sub-intern will work one weekend day (when the R3 is rounding) and have the other weekend day off.

Cross Cover Experience: An important part of inpatient medicine is "cross-cover," or being responsible (first-call) for patients that you did not round on personally, or who are not being carried by your team. Sub-interns will participate in cross-coverage once weekly, by partnering with the Team A family medicine residents. Team A takes long-call once or twice weekly, from 11:30AM-8PM on weekends and 4:30PM-8PM on week days. Sub-interns can choose which day of the week they will stay late to cross-cover and are expected to coordinate this with the Team A senior resident each week. When on cross-cover, they will receive sign-out and to be "covering provider" or first-call for up to eight patients.

Obstetrics and Newborn Rounding

Supervising team consists of the FM OB attending and FM resident CCP for the mother and newborn.

Starting during week 3, the sub-intern will also be responsible for rounding on up to 2 newborns per day, assigned after discussion with the FM OB attending on call. Rounds will be done between 8:30-9:30 or in the afternoon with the OB attending on call and will not conflict with medicine rounding. Sub-Interns will be responsible for pre-rounding and note writing on these patients.

As obstetrics is unpredictable, there will not be scheduled time devoted to being on the labor floor. The FM OB attending on call will involve students in labor and delivery management of FM patients, with goal of students being involved with 4 deliveries during the 4-week rotation. Due to medicine team responsibilities, this will be an option in the afternoons and up to 1 evening per week. The best way to coordinate with the FM OB attending is to text them each morning to check-in. The residents on Team C can help with finding their contact information for you.

Continuity Clinic

Sub-interns will be assigned one afternoon each week to accompany their team's second or third-year resident to family medicine outpatient clinic. They are expected to actively participate in seeing patients by independently seeing 2-4 patients per session, presenting to their resident, and writing notes on the patients that they see.

Work hours and coverage:

Student will be required to have 12 hours off if they stay late for a delivery before they may come in to round on medicine team. It will be the student's responsibility to communicate proactively with the Team C attending and senior resident in this case.

When the Sub-intern is participating in the care of a laboring patient or required by duty hours to be away from the medicine service, they will be expected to sign out their medical patients to the senior Team C resident, just as FM residents do when they manage continuity patients on OB.

Didactic Activities

The sub-intern attends teaching conferences with the resident team, including:

-FM morning report on Mondays from 7:30-8:30am on East 4. The sub-intern will present one case during the rotation.

-Noon conferences on South 5 (sometimes virtual, lunch available to those who attend)

-Sign out rounds at 4 PM in the Napadano room

-Thursday didactics: There are residency didactics every Thursday afternoon at Highland Family Medicine. Review with your senior resident which sessions would be valuable for you to attend (verses remaining in the hospital cross-cover/admit patients or working on L&D).

Required Reading

Students are expected to read independently to learn about the presentation, diagnosis and management of diseases related to the patients for whom they care during their rotation. Options for independent reading:

-Uptodate

-AAFP American Family Physician Journal Articles

-Essential Evidence Plus

-Aquifer Cases

-PubMed Clinical Queries

-Cochrane Reviews

Student Evaluations

Evaluations:

Sub-interns are evaluated by their supervising residents and attending physicians using the MedHub online system. Grades are assigned after consensus from the grading committee based on these evaluations.

Course Information

Course Director Brian M. Ward Ph.D. **Contact Person** Dr. Brian Ward Brian Ward@URMC.Rochester.edu Lauren Bestram Lauren Bestram@URMC.Rochester.edu 585-275-0358 **Class Year Name** Teaching Tutorial in Host Defense Class Code HDC601 **Elective Tags** Teaching **Block Length** 1 week Must contact Dept. For Approval Students 8 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? To be arranged What time should students report? 9:30 am Who should they report to? Dr. Brian Ward

Goal

Note You are able to sign up for more than one week of elective credit, however, you will have to submit a separate add request for each one.

To give the student an opportunity to revisit the course content taught in Host Defense. To allow the student an opportunity to teach medical students in the Problem Based Learning or Small Group setting.

Learning Objectives

- 1. The student will have reviewed relevant Host Defense Material.
- 2. The student will have taught in either the PBL or lab setting.
- 3. The student will have assessed the performance of the students they taught.
- 4. The student will have developed a teaching module for Host Defense.

Schedule of Activities

Note You are able to sign up for more than one week of elective credit, however, you will have to submit a separate add request for each one.

The student will be responsible for attending the preparation meetings for the labs or PBLs they will teach. Participants will be responsible for a written evaluation of the students to be given in a timely manner. Students are expected to attend any lectures in Host Defense that will benefit them

Didactic Activities

Assist with either test preparation, PBL case preparation, and laboratory improvement.

The student will teach in the PBL or lab setting. They will develop a module to be used in Host Defense. This module could be for a small group activity, a laboratory or a PBL case.

Required Reading

The preparation reading for the PBL or labs they will teach. Any reading necessary for the development of the teaching module.

Student Evaluations

The students will be evaluated by their performance as judged by their evaluations of the students, and student evaluation of them

Course Information

Course Director Daniel M. Yawman M.D. Contact Person Dr. Daniel Yawman Daniel Yawman@URMC.Rochester.edu Lauren Bestram Lauren_Bestram@URMC.Rochester.edu 585-275-0358 **Class Year Name** Interpretive Services Experience **Class Code** LHP605 **Elective Tags** Patient Care **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to? Dr. Daniel Yawman

Goal

BLOCK LENGTH: 2 Weeks

DATES OFFERED: Students must contact Dr. Yawman and Lauren Bestram before scheduling.

PREREQUISITES: Enrollment in LatinX Health Pathway (LHP) and completion of LatinX Health Seminars 1 & 2

Follow the below steps:

1. Complete application to enroll in the LatinX Health Pathway

2. Complete LatinX Health Seminars 1 & 2

3. E-mail the LHP Director (Dr. Yawman) and Lauren Bestram your intended elective dates as early as possible.

Goal: To expose students to Spanish speaking patients from various countries so they can be exposed to different dialects and increase their understanding of medical and colloquial Spanish.

Description: This is a 2 week elective set up with the Spanish Interpreters through SMH Interpreting Services. The student will shadow the medical interpreter whenever interpreting services are needed on campus. The student will not be interpreting for patients.

Learning Objectives

1. To increase medical and colloquial Spanish vocabulary.

- 2. To expose students to communication barriers that exists in the Latino community.
- 3. To improve proficiency of comprehension by exposure to different dialects.

Required Reading

To be determined.

MED601 Hospital Medicine Night Float Elective

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Benita Shelley Email: benita shelley@urmc.rochester.edu **Class Year Name** Hospital Medicine Night Float Elective Class Code **MED601 Elective Tags** Inpatient Service, Patient Care Block Length 1-2 Weeks Students 1 Prerequisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Rodgers Library (Room 7-2322) What time should students report? 8:30 pm Who should they report to? Page the R1 resident to get sign out and contact the R3 resident after arrival.

Goal

The Hospital Medicine Night Float elective is an opportunity for students to expand their Internal Medicine knowledge and refine the clinical skills established in the Medicine clerkship, while assuming greater responsibilities for their patients. Each student should act as the primary caregiver for their patients, documenting history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team, including the patient's family. This rotation will also enhance skills in management of cross-cover issues, handoffs, and increase exposure to fresh admissions.

Goals:

Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.

Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.

Improve communication skills in documentation and handoffs, work within an interdisciplinary team, and communicate clearly with patients and their families.

Demonstrate the ICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.

Expand Internal Medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.

Gain experience with cross-coverage, night call, and more exposure to freshly admitted patients.

Learning Objectives

By the end of the elective, students should be able to:

- Independently evaluate patients and synthesize information from?an?organized history,?physical,?and? diagnostic tests?into a problem representation and prioritized differential diagnosis specific to the patient?
- Identify indications for diagnostic testing and write initial orders for co-sign?
- Write accurate and well-organized admit and cross-cover notes
- Recognize when a patient is sick vs. not sick, perform the initial evaluation,?and develop an initial management plan while asking for help
- Prioritize tasks in the care of multiple patients in order to provide efficient, safe,?and equitable?care?
- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e.?uses interpreter appropriately, avoids jargon)?
- Provide?a verbal and written?handoff?that highlights sick patients, items to follow-up, and appropriate anticipatory guidance?
- Recognize?the social context in which a patient's presentation exists?and utilize appropriate resources to provide comprehensive care?
- Demonstrate insight into one's own strengths and weaknesses, asking for help?when needed?and responding to feedback in a professional manner?
- Acknowledge ambiguity and?be?open to questions and challenges from the patient and team?
- Utilize?evidence-based?resources to answer clinical questions?
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes? IICARE)?

Schedule of Activities

Students are expected to complete 9 shifts over the course of their 2-week elective. Dr. Readlynn will provide you with a schedule but please let her and the course coordinator know if you need to change. Students are often given Fridays off because the resident team is different on those nights, but these can be used if needed. Shifts are 8:30pm-8:30am, allowing time for attendance at Upper Level Morning Report as an educational conference. This is held in the AM Report Room on the 7th Floor. Please check the chief's door for changes

Didactic Activities

Students will attend upper level morning report from 7:30-8:30am before returning home from their shifts.

Student Evaluations

Evaluations will provide narrative comments on performance, including next steps for improvement. Grades are pass/ fail.

MED603 Inpatient Medicine Elective

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Benita Shelley benita shelley@urmc.rochester.edu **Class Year Name** Inpatient Medicine Elective Class Code **MED603 Elective Tags** Inpatient Service, Patient Care Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, International Visiting, Visiting Where should students report? Strong Memorial Hospital - prearrange meeting with senior resident What time should students report? 8:30am Who should they report to? Senior Resident

Goal

This elective is an opportunity for students to expand their internal medicine knowledge and refine their clinical skills while assuming greater responsibilities for their patients. They will function as acting interns on the team during this 2-week elective. Therefore, they should act as the primary caregiver for their patients, documenting the history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team.

Goals

- Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.
- Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.
- Improve communication skills in documentation, requesting consultation, working within an interdisciplinary team, and with patients and their families.
- Demonstrate the IICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.
- Expand internal medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.
- Develop skills in caring for patients from various experiences and practice reflecting on our patients' experiences.

Learning Objectives

By the end of this elective, students should be able to:

- Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient.
- Identify indications for diagnostic testing within this specialty and write initial orders for co-sign.
- Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications with supporting rationale.
- Write accurate and well-organized specialty-specific admit and progress; update progress notes daily.
- Recognize when a patient is sick vs. not sick, perform the initial evaluation, and develop an initial management plan while asking for help.
- Begin to recognize the appropriate disposition for a patient (when ready for discharge, needs ICU, suitable for the floor, prepared for a procedure, etc.).
- Prioritize tasks in the care of multiple patients to provide efficient, safe, and equitable care.
- Share information clearly and respectfully to patients, their families, consultants, and the interdisciplinary team.
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter services appropriately, avoids jargon).
- Provide a verbal and written handoff that highlights sick patients, items to follow up, and appropriate anticipatory guidance.
- Understand team dynamics, limitations of the team, resources available, and where to go for help when needed.
- Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care.
- Acknowledge ambiguity and be open to questions and challenges from the patient and team.
- Utilize evidence-based resources to answer clinical questions.
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes IICARE)

Schedule of Activities

First day: Arrive at 8:30am to meet with senior resident and team.

Students will work with their team Monday-Friday + 1 weekend day. This includes having one long-call day.

The latest students should arrive after the first day is 6:50am as night float leaves at 7am.

Didactic Activities

Please see the Blackboard course for didactic activities.

Student Evaluations

Students will receive a pass-fail grade based on evaluations from the residents and faculty they worked with. Faculty and resident evaluations are weighted equally.

Course Information

Course Director Anthony P. Pietropaoli M.D. Contact Person Bill Fuller 275-2050 willard fuller@urmc.rochester.edu **Class Year Name** Medical Intensive Care Unit **Class Code MED605 Elective Tags** Inpatient Service, Patient Care Block Length 4 weeks Students 2 Prerequisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Please call or e-mail Bill Fuller a few days prior to the start of the rotation for details. What time should students report? 8 AM Who should they report to? TBD

Goal

* Students doing an ICU rotation for their acting internship will need 2 weeks of an additional rotation, which can be fulfilled with 2 consecutive weeks of MED603 or MED601. *

At the end of this rotation, the student should be able to articulate the initial diagnostic approach to and management of patients with acute hypoxemic respiratory failure, acute on chronic respiratory failure (e.g. exacerbation of COPD), acute respiratory distress syndrome (ARDS), sepsis and septic shock, and multisystem organ dysfunction. Basic principles of ventilator management including basic ventilator settings and trouble shooting will also be expected.

Learning Objectives

The student will join the Medical Intensive Care Unit Team at Strong Memorial Hospital. The MICU Team consists of an Attending, Fellow, and Interns and Residents in Internal Medicine or Emergency Medicine and manages all patients in the MICU on 8-1600, 7-1600 and step-down patients on 8-3400. The student will accompany the team on rounds and assist the intern/resident team with new admissions during the day. Opportunities for night call will also be available. The student will be expected to write thorough but succinct admission notes and daily progress notes on their patients, and present their patients to the Attending and Fellow during formal work rounds in the morning and informal afternoon/evening rounds. The student will not be expected to write orders or perform procedures (e.g. central line insertion), but can assist the intern/resident team. The student will be expected to provide a 5-10 minute overview of evidenced based management of one of his or her cases once per week on rounds (total of two

presentations). The student may have the opportunity to participate in family meetings at which end-of-life care is discussed. Student will be expected to attend regularly scheduled conferences (e.g. Daily Medical ICU lectures at 3 PM, City Wide Chest Conference on Wednesday morning at 8 AM, and Critical Care Conference on Wednesdays at 4 PM), and may also have the opportunity to present an interesting case at these conferences.

Schedule of Activities

Daily rounds five days per week on the MICU beginning at 9 a.m. end ending by about 1:00 p.m. Evening work rounds at about 5 p.m.

Didactic Activities

Formal didactic sessions include City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference Fridays at noon. Informal teaching sessions as part of rounds and daily lectures by the attending or fellow.

Required Reading

Student Evaluations

Student's performance will be graded by: (i) their participation in rounds and ability to complete a coherent admission notes and daily progress notes in a timely basis; (ii) direct observation of their clinical skills including history taking and physical exam; and (iii) effectiveness as a team player.

Course Information

Course Director Nicholas E. Nacca M.D. Contact Person

Class Year Name Medicine Toxicology Elective Class Code **MED612 Elective Tags** Teaching **Block Length** 2 Weeks Students 1 Prerequisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year. 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Guide to Medical Toxicology Rotation

Roles and Responsibilities

Attend daily table rounds at 9 am M-F

Tox rooms G.5426 (Toxicology Resource Room)

Participation in rounds

It is expected that you will become familiar with all the patient's clinical presentations, medication lists, laboratory results. On your first day, the toxicology list will be shared with you. You may be asked for patient details during rounds, as well as to write progress notes on select patients. There will be resident rotators from various backgrounds and levels of training that will support you during this rotation.

Different attendings have different rounding styles. Please be prepared that there may be significant "downtime" during which you are encouraged to work on asynchronous learning modules, independent reading, or rotational assignments (presentation).

Attend all educational sessions

On your first day the weeks educational sessions will be reviewed with you. If for some reason they are not, please ask the attending or the residents.

PEAK online modules

Sign in on the first day of your rotation

The modules are hosted at Physician Education and Assessment Center (PEAC.)

Go to https://emcc.peaconline.org/register?and register under User Group

"University of Rochester Emergency Medicine Residency"

Use passcode "Roc."

Complete by the end of the rotation

Presentation and drug information questions

Presentation and Drug Information assignments:

During this rotation, there is ample downtime to complete these assignments during office hours.

Rotators present a ~20 min low stress PowerPoint presentation/discussion at the end of the rotation. The topic of which must be assigned/chosen in the first week. The PowerPoint based presentation will be given on or before the last Friday of your rotation.

Schedule of Activities

Curriculum- The below lists topics that should be familiar to the student by the end of the rotation. This information may be addressed via in person didactics, asynchronous learning modules, or independent reading/review.

Toxidromes/GI?Decontamination

Acetaminophen/Salicylates?

Acetaminophen

Discuss clinical stages of acute acetaminophen toxicity?

Discuss the relevance of?4 hour?APAP level?

Discuss the use of?Rumack-Matthew nomogram and its relevance to patient outcomes?

Discuss treatment guidelines for?acetaminophen?poisoning based on the time to presentation after ingestion?

Discuss the role of GI decontamination depending in time from ingestion?

Discuss the use of the antidote N-acetlycysteine?and its clinical effectiveness?

Discuss indications of liver transplant in patient with acetaminophen overdose?

Salicylates

Discuss presentation of Salicylate toxicity?

Signs and symptoms of salicylate overdose and its time course?

Discuss GI decontamination in the management of late presenting Salicylate Toxicity?

Discuss pathophysiology of salicylate toxicity and Acid-Base disturbance?

Treatment of Salicylate poisoning?

Obtain initial and repeat salicylate levels to determine trend.?

Initiate sodium bicarbonate to maintain a urinary pH of 7.5-8, serum pH 7.50-7.55.?

Hypokalemia and its significance in aspirin toxicity.?

Consider/ discuss use of activated charcoal and whole bowel irrigation.?

Discuss indications for Hemodialysis?

Discuss salicylate induced acute lung injury (non-cardiogenic pulmonary edema)?

TCA?/Bupropion/Antidepressants??

Discuss the need for aggressive and early management of widened QRS?complex(>100?msec?is critical)?

Sodium Bicarbonate bolus is 1-2mEq/kg followed by an infusion of 3 amps bicarbonate in 1L D5W at 1.5-2 times maintenance; must follow blood pH closely and adjust accordingly??

Discuss the risk of seizures with EKG changes?

Increases with QRS >100?msec?

Risk of ventricular?dysrrthymias?increases with QRS >160?msec?

Discuss various GI decontamination methods and their indication?

Orogastric lavage should be considered in life threatening exposures even if time of ingestion >30 minutes; Activated Charcoal and/or MDAC should be considered?

Discuss the reasoning for:?

Avoiding phenytoin for seizures?

Avoiding physostigmine for Anticholinergic side?effects? (causes cardiac arrest in case reports)?

Discuss the pharmacology and importance of Sodium Bicarbonate in patients with TCA overdose?

Sodium bicarbonate provides sodium load for blocked sodium channels in the myocardium and for decreasing drug binding to the myocardium; does not work to alkalinize the urine and increase elimination?

Discuss alternatives to sodium bicarbonate (eg: 3% hypertonic saline)?

Discuss management of hypotension with TCA overdose?

Describe additional interventions that may be considered if the patient continues to deteriorate (eg: fatty acid emulsion)?

CO/CN?toxicity?

Discuss treatment and management of CO poisoning with concomitant cyanide toxicity?

Discuss the role of early intubation in management CO poisoning and smoke inhalation??

Discuss the use and advantage of hydroxocobalamin in cyanide toxicity and CO poisoning?

Discuss the rationale of worsening respiratory status with the use of nitrates in patients with concomitant CO poisoning?

Discuss management of metabolic acidosis in patients with cyanide toxicity?

Discuss the use of hyperbaric oxygen therapy in the management of CO poisoning and its guidelines for use? Discuss management of a burn victim and criteria for transferring the patient?to? burn?center? Discuss the use of paralytics (eg?Succinylcholine) in burn patients? Cardiac Meds?CCB/BB/Digoxin? Discuss clinical features of various antihypertensive toxicities and how to differentiate it? Discuss clinical features of CCB overdose, its management and treatment including Vasopressors and HIET Discuss differential diagnosis for bradycardia, atrioventricular block and hypotension? Pharmacologic management of bradycardia in patient with CCB overdose? Discuss specific therapies for CCB overdose vs. beta blocker overdose?

MED615 Geriatrics

Course Information

Contact Person susan_darby@urmc.rochester.edu **Class Year Name** Geriatrics Class Code **MED615 Elective Tags** Multidisciplinary, Outpatient Service, Patient Care, Primary Care **Block Length** 2 weeks Students 1 **Prereauisites** MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Students will report to Monroe Community Hospital 435 E. Henrietta Rd What time should students report? Schedule will dictate Who should they report to? U/R Medical Administration 2nd Floor, Faith Building,2W Susan Darby 760-6353

Goal

This is a two week elective designed to expose students to geriatrics in various care settings in the Rochester community and to allow students to understand the medical and biopsychosocial needs of the aging population and apply the principles of geriatrics into clinical practice.

Learning Objectives

By the end of the rotation the student should be able to:

Distinguish normal from pathologic aging.

Demonstrate appropriate communication and interpersonal skills when interacting with older adults.

Perform an appropriate physical exam with attention to physical signs of aging, functional assessment and mental status.

Recognize early reversible signs of geriatric syndromes and identify appropriate interventional strategies to prevent/ postpone institutionalization.

Describe the work up and management of common geriatric syndromes such as dementia, delirium, falls, urinary incontinence, malnutrition and polypharmacy.

Actively participate as a team member in the Geriatric Assessment Clinic and in the care plans of the nursing home and rehabilitation patients.

Experience various community resources available for the care of older adults at home.

Schedule of Activities

Schedules will be provided upon arrival to the rotation

Didactic Activities

Students will participate in didactic sessions in the Division of Geriatrics including weekly Geriatric Grand Rounds, Geriatric Journal Club and Fellows' Conference.

Required Reading

Will be sent via email with schedule

Student Evaluations

Preceptor evaluations

Course Information

Course Director Christopher G. Montgomery M.D. Contact Person Temwa Chisi, 5-2756 Temwa Chisi@URMC.Rochester.edu **Class Year Name** Clinical Cardiology Class Code **MED630 Elective Tags Consultation Service** Block Lenath 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Monday mornings first day to Cardiology Morning Report, in the Cardiology Conf Room, G1510 offices. What time should students report? 8:00 AM Who should they report to? Consult Team Fellow at Morning Report on first day

Goal

To instruct students in general aspects of clinical cardiology, and to give them familiarity with techniques used in this discipline, especially electrocardiography.

Learning Objectives

By the end of the rotation the student should be able to:

Have a knowledgeable approach to the patient with cardiovascular disease, and be able to take a cardiovascular history and perform a physical examination.

Be familiar with the major diagnostic categories of cardiovascular disease, and have information about the diagnostic approaches and therapy of these conditions.

Have considerable information about interpretation of electrocardiograms, and some familiarity with other specific diagnostic tests, including treadmill exercise, Holter monitoring, echocardiography, nuclear cardiology tests, and cardiac catheterization.

Develop an approach to preventative cardiology, a discipline with which all physicians should be familiar.

Schedule of Activities

On first day of rotation, go to Room G-1510 for Morning Report at 8 AM.

Students make rounds with faculty members of the Clinical Service at Strong Memorial Hospital. There are ample opportunities to work up individual cases, to attend conferences, and to learn from faculty about diagnostic testing,

Didactic Activities

The Cardiology Unit has a full schedule of conferences, most of which will be instructive to students and of interest to them. There are also frequent one-on-one instruction sessions with faculty of the Clinical Service, especially in the area of electrocardiography.

Required Reading

None specifically required, but the textbooks by Braunwald and by Hurst are an excellent source of reference material.

Student Evaluations

Grades for overall course performance are given at the end of the rotation by course directors.

Course Information

Contact Person Dr. Sabu Thomas 585-273-2703 sabu thomas@urmc.rochester.edu **Class Year Name** Heart Failure Management **Class Code** MED634 **Elective Tags** Consultation Service, Inpatient Service Block Length 2 weeks Students 1 **Prereauisites** MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? G1510 What time should students report? 9am Who should they report to? Fellow on Service Goal

To instruct the students in the proper medical and surgical management of inpatients and outpatients with chronic and acute heart failure.

Learning Objectives

By the end of the rotation the student should be able to:

- 1. Understand the initial evaluation of the patient with new-onset heart failure.
- 2. Understand the treatment options for acute heart failure
- 3. Select proper medical therapy for patients with heart failure
- 4. Understand the proper role of inotropic therapy, cardiac transplantation, and ventricular assist devices
- 5. Appreciate the epidemiology of heart failure
- 6. Understand the important role of preventive measures in treating patients with heart failure, or those at risk for heart failure
- 7. Understand the different causes for cardiomyopathy
- 8. Appreciate the differences between patients with heart failure with and without preserved systolic function.

Schedule of Activities

Students will round with the inpatient heart failure and transplantation attendings and will also be able to attend the heart failure outpatient clinics. Attendance at diagnostic procedures such as right heart catheterizations and coronary angiography will be encouraged and students may also observe cardiac transplantations when they occur.

Didactic Activities

The cardiology unit has a full schedule of conferences including a weekly heart failure and transplantation conference. There are also frequent one-on-one instruction sessions with faculty of the Clinical Services.

Required Reading

None specifically required, but journal articles on recent topics of interest will be distributed regularly.

Student Evaluations

Grades for overall course performance are given at the end of the rotation by course directors.

Course Information

Course Director Hanna Z. Mieszczanska M.D. Contact Person David Merulla david merulla@urmc.rochester.edu 341-7759 Maria Hagen maria_georgantopoulos@urmc.rochester.edu 341-7741 **Class Year Name** Hypertension and Clinical Preventive Cardiology **Class Code MED635 Elective Tags** Outpatient Service, Patient Care, Primary Care **Block Length** 2 weeks Students 1 Prerequisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Students should email Dr. Hanna Miesczanska two weeks prior to start of course to arrange starting point. What time should students report? 8:00 a.m. -- Generally at Cardiology Morning Report Who should they report to? Dr. Mieszczanska, Dr. Robert Block or covering provider

Goal

To develop an in-depth understanding of the evaluation and treatment of patients with hypertension in the outpatient setting. This includes severe and resistant hypertension, drug resistant hypertension, and secondary hypertension. There will also be focus in initial drug choices for patients with primary hypertension. Additionally, there will be a focus on a patient's overall cardiovascular risk management including management of lipids, smoking cessation, and behavioral approaches to preventive health. Finally, to become familiar with the diagnostic and therapeutic options available for patients with hypertension and hyperlipidemia. Students will also be assigned to the preventive cardiology outpatient clinics but will also have the opportunity to spend time in procedural and specialty areas as clinically indicated ..

Learning Objectives

By the end of the rotation the student should be able to:

1. Understand the goals in treating patients who present to the outpatient setting with preventive cardiology and hypertension issues.

2. Perform appropriate evaluation in patients needing cardiovascular risk minimization.

3. Construct a treatment approach for patients who need cardiovascular risk modification.

Understand appropriate selection of cardiovascular and other diagnostic tests for these patients.

5. Recommend appropriate medical and surgical treatment for patients with a need for better blood pressure and risk factor management.

Schedule of Activities

Students will attend clinic with cardiology faculty including members of the hypertension program, preventive cardiology faculty, general cardiology faculty, as well as interventional cardiologists involved in the treatment renal and peripheral artery diseas. Students may also round, on infrequent occasion, on the inpatient cardiology and vascular services whenever there are patients of interest in the hospital. There will be additional opportunities to attend clinical conferences and to spend time in the vascular, cath, testing, and electrophysiology laboratories.

Didactic Activities

The Cardiology Division has a full schedule of conferences, and most will be of interest to students in this rotation. There will be frequent one-on-one instruction with faculty of the Clinical Services.

Required Reading

None specifically required, but journal articles of interest will be distributed throughout the rotation.

Student Evaluations

Grades for overall course performance are given at the end of the rotation by course directors.

MED637 Combined Electrocardiography/Cardiology Clinic

Course Information

Course Director Roy Steven Wiener M.D. **Contact Person** Jackie Doran 276-1645 Jackie Doran@URMC.Rochester.edu **Class Year Name** Combined Electrocardiography/Cardiology Clinic Class Code **MED637 Elective Tags** Teaching **Block Length** 1 week Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Variable - see description under Descriptions/schedule What time should students report? 8:00 am Who should they report to? Variable - see list of participants under descriptions/schedule

Goal

Goals/Objectives

- 1. To improve electrocardiographic interpretation skills
- 2. To provide an electrocardiographic experience in a clinical context of patient evaluation
- 3. To expand upon clinical cardiology skills as they related to an outpatient setting

Learning Objectives

- 1. To improve electrocardiographic interpretation skills
- 2. To provide an electrocardiographic experience in a clinical context of patient evaluation
- 3. To expand upon clinical cardiology skills as they related to an outpatient setting

Note: STUDENT SHOULD CALL TO CHECK ON AVAILABILITY OF DESIRED DATES

Schedule of Activities

Course Duration/Schedule

1. Elective duration may vary from 1-2 weeks, depending on availability of preceptor and student, to be individually arranged.

2. Usually only one student per preceptor will be assigned.

3. Available weeks will be dictated by preceptor availability <u>STUDENT SHOULD CALL TO CHECK</u> <u>ON AVAILABILITY OF DESIRED DATES</u>

Course Expectations/Organization

1. Prior to elective start date, the student is expected to contact the elective coordinator and individual preceptor to obtain confirmation, location details and a packet of "unknown" electrocardiograms for interpretation (provided by the elective coordinator).

2. The student will attend the majority of the preceptor's outpatient cardiology clinics that are scheduled throughout the rotation as dictated by the preceptor. This may vary from 3-5 half days/week.

3. The student will play an active role in all aspects patient evaluation, treatment and communication with referring physicians.

4. The course will have an emphasis on electrocardiographic interpretation for each patient evaluated.

5. The student will be responsible for interpreting a pre-specified packet of "unknown" electrocardiograms outside of clinic, to be reviewed with the preceptor prior to completion of the elective.

6. As time and availability permit the student will also have an opportunity to observe outpatient cardiac testing including echocardiography, stress testing and nuclear imaging.

Participating Attending Preceptors / Contact Information

1. James P. Eichelberger, MD 2400 S Clinton Ave. Clinton Crossings Building G, ground floor. Phone: 275-4290. Email: James_Eichelberger@urmc.rochester.edu (office contact: Michelle Snyder, 275-4290)

2. Tom Curran, MD: 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact Jackie Doran, 276-1645)

3. Maurice Vaughan, MD: 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact: Jackie Doran, 276-1645)

4. J Franklin Richeson, MD: 2400 S Clinton Ave. Clinton Crossings Building G, ground floor. Phone: 341-7700 (Office Contact: Amy Gregory 275-0732)

5. Roy Weiner, MD 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact: Jackie Doran 276-1645)

6. Hanna Mieszczanska, MD 2400 S Clinton Ave. Clinton Crossings Building G, ground floor. Phone: 341-7700

Required Reading

The student will be responsible for interpreting a pre-specified packet of "unknown" electrocardiograms outside of clinic, to be reviewed with the preceptor prior to completion of the elective.

MED643 Clinical Endocrinology - Metabolism

Course Information

Contact Person Alycia Frank 275-5448 alycia_frank@urmc.rochester.edu Class Year Name Clinical Endocrinology - Metabolism

Clinical Endocrinology - Metabolism **Class Code** MED643 **Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care **Block Length** 2wks or 4wks Students 1 Prereauisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Contact the Endocrine Fellow On-Service for reporting instructions. What time should students report? 9:00 A.M. Who should they report to? "endocrine fellow on-service" and/or Alycia Frank

Goal

To become more knowledgeable regarding the diagnosis and treatment of endocrine diseases. This courses offers exposure to a large variety of endocrinologic issues as they are managed primarily in the outpatient setting. The rotating student will also be able to take advantage of inpatient consult service, and will participate actively in the academic conferences offered by the division.

Learning Objectives

By the end of the rotation the student should be able to:

·Perform appropriate endocrine exams.

Discuss the purposes of endocrinological tests and when to appropriately order them.

·demonstrate the ability to integrate the history, physical exam, and lab results in order to reach a practical diagnostic conclusion in patients with endocrinologic conditions.

List the available treatment options for the management of diabetes, thyroid and pituitary disease as well as the other endocrinologic disorders encountered and how to apply them.

Schedule of Activities

Student will spend 5 days/week either in the Endocrine Clinic, rotate in the Neuroendocrine Multidisciplinary Clinic, participate to the Endocrine Consult Service, or at Endocrine Unit Conferences. 4th year URSMD students may be scheduled with patient(s) (NPV only) during the Thurs (Diabetes) and Friday (General Endo) PM clinics. Electronic clinic notes will be done using eRecord and "routed" to be signed by the endocrine supervising MD. It is important that

all notes are "routed" and "reassigned" to the supervising Attending. 3rd year URSMD or foreign students may be reassigned patients from the fellows/resident schedule at the discretion of the supervising attending. In both the clinic and on the consult service he/she will work closely with an assigned faculty preceptor and the fellows and housestaff assigned to the endocrine service. There are 2-3 teaching conferences each week.

Didactic Activities

Daily teaching rounds Journal club (twice monthly) Thyroid Multidisciplinary Conference (once monthly) Citywide clinical case discussion (once weekly) Core curriculum conference series (once weekly) Scientific Research Conference (once monthly)

Required Reading

The endocrine section of one of the standard textbooks of medicine.

Student Evaluations

To receive a grade of Pass the student must successfully demonstrate proficiency of the learning objectives, attend all sessions, maintain a logbook of patients seen, and receive a passing evaluation from the preceptor.

MED645 Clinical Gastroenterology

Course Information

Course Director Brandon S. Sprung M.D. Contact Person Anne Groth anne groth@URMC.rochester.edu **Class Year Name Clinical Gastroenterology** Class Code MED645 **Elective Tags** Consultation Service, Inpatient Service Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? ACF-4, Silver Elevators 4th Floor, front desk GI Division. Ask for GI consult fellow or page the GI-consult fellow oncall after 8am on Monday. What time should students report? 8AM Who should they report to? GI consult fellow

Goal

Broad exposure to common GI and Liver diseases with focus on diagnostic evaluation and management, GI symptom evaluation, and GI emergency management, in both the outpatient and inpatient settings.

Learning Objectives

By the end of the rotation the student should be able to:

-Learn to identify those patients for whom gastroenterology or liver disease consultation may be beneficial both for acute care consultation and long term management.

- Learn how to provide optimal information in obtaining gastroenterology and liver disease consultation; learn how to facilitate a more successful consultation.

-Understand the pathophysiology of peptic ulcer disease in settings of H. pylori infection, acid hypersecretion, and use of injurious drugs (i.e. NSAIDs). Also learn the current approaches to diagnosis and treatment of these disorders. - Learn the pathophysiology, clinical presentation, diagnosis, and inpatient treatment of major inflammatory bowel disorders.

- Understand the clinical presentation, risk factors, triage process, medical and endoscopic management of acute upper and lower gastrointestinal bleeding.

- Understand the pathophysiology, diagnosis, and treatment of common liver diseases including viral hepatitis, fatty liver disease, autoimmune liver disease, sclerosing cholangitis, and PBC.

- Review the clinical presentation, etiology, differential diagnosis, and inpatient management of acute on chronic abdominal pain.

- Review the clinical presentation, etiology, differential diagnosis, and inpatient management of acute diarrhea.

-Learn the indications for proper use of endoscopic procedures including EGD, colonoscopy, flexible sigmoidoscopy, ERCP, and endoscopic ultrasound in gastrointestinal practice.

-Review and strengthen those areas of physical diagnosis pertaining to gastroenterology. -Learn diagnosis and management of acute and chronic pancreatitis and their complications

Schedule of Activities

Students will be assigned predominantly to the inpatient GI/Hepatology consultation service at Strong Memorial Hospital. Any student who is interested in having exposure to outpatient GI/Hepatology clinics can contact the course directors to arrange for this in advance. Activities are generally from 8 a.m. to 5 p.m., Monday thru Friday. There are no on-call responsibilities and no weekend rounds.

Students should page the on-call GI fellow at 8am on the first morning of their rotation or arrive on AC4 in the GI fellow's room. Students will be assigned to evaluate new inpatient consultations, formulate a differential diagnosis and initial management plan, and follow patients through the course of hospitalization as needed. Patients should be reviewed with the GI fellows on consult service and then should be presented on daily rounds with the GI attending. The volume on the consult service is highly variable. Third-year students can expect 1-2 new consult patient assignments per day, while fourth-year students should expect 2-3 new consult patients per day. Students should also follow through on patients they previously saw in consultation and update the consult team with any clinical developments.

Students should also spend time observing endoscopic procedures on a variety of patients, particularly patients in whom they are actively involved in their medical care. Procedures occur on AC4 and some inpatient wards as needed. Discuss with the consult fellows and the charge nurse on AC4 about which procedures you plan to observe, unless otherwise assigned.

If there is downtime during the workday, students are encouraged to observe procedures. Discuss with the consult fellows and attending which procedures would be educational to observe. An alternative option is to seek time at the outpatient clinics at Sawgrass, which can be arranged either in advance if the student has a specific interest, or by discussing with the consult attending.

Didactic Activities

<u>Note: for the duration of the COVID-19 pandemic, many conferences are via Zoom. Please discuss with the fellows on consult service about participating via Zoom link as appropriate.</u>

Students will attend the formal didactic lectures of the Strong Memorial Hospital Gastroenterology division. The following are the weekly GI/Hepatology conferences which the students are highly encouraged to attend alongside the GI fellows and faculty (this schedule is subject to change):

Monday @ noon: Clinical Conference (AC4 conference room or Zoom) or Pathology conference (Zoom) or

Research Conference or Hepatology Conference (AC4 conference room or Zoom)

- Wednesday @ 7am: GI Clinical Conference (Zoom)
- Wednesday @ noon: Board Review (AC4 conference room or Zoom) or GI Clinical Case Conference or IBD/ Colorectal Case Conference or IBD Roundtable (AC4 Conference Room or Zoom) or Motility Conference (AC4 conference room or Zoom) or Radiology Conference (AC4 conference room or Zoom) or Guidelines Review (AC4 Conference Room or Zoom)
- Thursday @ 7am every other month: Physician Morbidity & Mortality Conference (Zoom)
- Last Thursday of every month at 7am: IBD LIVE- teleconference with other IBD centers throughout the
- country (Sawgrass Conference Room or Webcast)
- Thursday @ noon: Liver Pathology (1st Thursday of the month; WCC 2-0727) or Journal Club (AC4 conference room) or Board Review (AC4 conference room or Zoom) or Pancreaticobiliary Conference (AC4 conference room or Zoom)

Students will also participate in once weekly 30-minute interactive teaching sessions led by an upper level (off-service 2nd year) fellow, usually done on Friday. These sessions will be dedicated to working through a case, which will

expand on a high-yield inpatient GI topic. The details of the case will be provided to the fellow leading the session. The goal of this case-based session is to create an interactive dedicated teaching experience that serves as a learning opportunity for the medical students, residents and fellows.

*Students are asked to touch base with the second year GI fellows via email at the beginning of their rotation to discuss timing and location of these sessions, which will generally be on Tuesday and Friday afternoon, as there are no other conferences scheduled on these days. The fellows on consult service can provide you with the names of the second year fellows to email.

Files are located on the GI network I drive, to be accessed during the session, not beforehand: I:/Gastroenterology/ General/MED645

A case of abnormal LFTs

A case of diarrhea

Students may also be asked to make brief didactic presentations on clinical rounds pertinent to patients they are following. These will be assigned by the on-service GI attending or fellows.

Required Reading

Suggested Reading

The GI and Liver section of Cecil's Essentials of Internal Medicine is an excellent foundation for a broad overview of the field. Students may utilize more specific in-depth resources when reading more focused and selected topics pertaining to their patient encounters, such as Harrison's Principles of Internal Medicine, or Sleisenger and Fordtran's Gastrointestinal and Liver Disease.

Additional Resources

GI/Hepatology societal practice guidelines provide a comprehensive reference for diagnosis and management of a variety of conditions which will be encountered throughout the rotation. Students may wish to review recommendations pertinent to cases they encounter on the rotation. It is important to note that these guidelines are written for the level of understanding of a practicing gastroenterologist and that students of this course are not expected to fully master these guidelines.

ACG Guidelines: http://gi.org/clinical-guidelines/clinical-guidelines-sortable-list/

AGA Guidelines: http://www.gastro.org/guidelines

ASGE Guidelines: http://www.asge.org/publications/publications.aspx?id=352

AASLD Guidelines (Hepatology): http://www.aasld.org/publications/practice-guidelines-0

An excellent on-the-go resource of high-yield topics is Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine (Pocket Notebook) by Marc S. Sabatine MD MPH

Students may also look at Blackboard for additional resources which will be added over time.

Student Evaluations

Students are favorably evaluated for their enthusiasm, interest, sense of responsibility, preparedness, and demonstrated capacity to present an organized history, exam, and assessment of clinical consultations. The GI fellows are integral to formulating student evaluations.

Course Information

Contact Person

** Schedule with RGH at graduatemedical.education@rochesterregional.org. Once approved, add the rotation in MedSIS as a special elective under this name ** Stephanie Green, 922-5133, stephanie.green@rochesterregional.org **Class Year Name** Clinical Gastroenterology Class Code MED649 **Elective Tags** Patient Care Block Length Contact for Approval Students 0 Prerequisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Room B5010 - Rochester General Hospital What time should students report? 8:30 to 8:40 a.m. Who should they report to? Bernie Porter, NP/Marcy Soprano, NP

Goal

** Schedule with RGH at graduatemedical.education@rochesterregional.org. Once approved, add the rotation in MedSIS as a special elective under this name **

To increase the student?s familiarity with gastrointestinal, hepatic, and nutritional diseases.

Learning Objectives

By the end of the rotation the student should be able to: GENERAL:

Be able to evaluate patients with common gastrointestinal symptoms.

Develop a familiarity with the common drugs used in gastrointestinal disease, both prescription and over-the-counter, understand their action, the situations for which they are used, their potential side effects, and their cost to the patient. Become aware of the spectrum of procedures performed by a gastroenterologist, and understand the indications, alternatives and potential complications of each.

Identify patients/clinical situations for whom/which consultation with a gastroenterologist is indicated. SPECIFIC:

Develop a reasonable diagnostic approach to both the acute and chronic gastrointestinal bleeder. Become familiar with the treatment of gastroesophageal reflux disease and peptic ulcer disease.

Be aware of the populations at risk for colon cancer, and the manner in which they are screened.

Discuss the clinical and serologic features of viral hepatitis.

Learn the differential diagnosis of chronic liver disease, and develop a methodical approach to the evaluation of abnormal liver function tests.

Develop an approach to the patient with acute or chronic abdominal pain.

Understand the mechanisms of diarrhea, and how to evaluate patients with this symptom.

Become familiar with the clinical features of inflammatory bowel disease, the methods of evaluation, and the available therapy.

Understand the objectives of nutrition support, including nutrition assessment and development of both enteral and parental nutrition prescriptions.

Schedule of Activities

Students are assigned to the Gastroenterology Unit at Rochester General Hospital from 8:30 am to 5:30 pm on weekdays. They work with three attending gastroenterologists and participate in the out- and in-patient consultative service. Students observe gastrointestinal procedures including diagnostic and therapeutic upper and lower endoscopy, ERCP and liver biopsy. They have the opportunity to attend the daily noon conferences in the Department of Medicine for the residents, as well as Medical Grand Rounds on Thursday at 8:30.

Didactic Activities

Each patient seen is discussed with an attending, and independent reading about these patients is expected. Selected pathology slides will be reviewed with the pathology department. The student will be expected to give a weekly, 20-minute presentation on a topic pertaining to a patient seen that week. They are encouraged to attend the monthly Gastroenterology clinical conference when it is given during the time they spend on this elective.

Required Reading

Sleisenger, M. Gastrointestinal Disease 5th edition: Chapters 10,19,30,49, 63,64,80. Chopra, S. Disorders of the Liver, 1st edition: Chapters 1,2, 6,16,17 or Sherlock, S. Diseases of the Liver and Biliary System, 7th edition: Chapters2,4,7-21,29. Rombeau, J. Clinical Nutrition. 2nd Edition: Chapters 12,15,18. Cope?s Early Diagnosis of the Acute Abdomen.

Selected review articles will be provided to the student. All the texts listed are available in the Gastroenterology Unit and in the medical library.

Student Evaluations

To receive a passing evaluation, the student must present a weekly conference. In addition, through patient assessments, case presentations and write-ups, they will demonstrate to their preceptors that they have gained the knowledge stated in the objectives.

MED653 Hematology

Course Information

Course Director Frank C. Passero M.D. Contact Person Dina Henchen 275-4797 Dina Henchen@urmc.rochester.edu **Class Year Name** Hematology Class Code MED653 **Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care Block Length 2 or 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Student Fellow, Visiting Where should students report? Variable. This information will be provided to the students upon registration. What time should students report? 8 a.m. Who should they report to? Frank Passero, MD

Goal

Students will become familiar with both malignant and benign diseases of the blood. Students will be encouraged to consider a career in hematology and to develop an interest in cancer research.

Learning Objectives

At the end of the elective the student will be able to:

- 1. Interpret peripheral blood smears and bone marrow morphology.
- 2. Describe the significance of disturbances in blood counts
- 3. Describe the rationale for ordering tests for bleeding and thrombotic disorders
- 4. Interpret tests for bleeding and thrombotic disorders
- 5. Explain the management of bleeding and thrombotic disorders
- Demonstrate history and physical taking skills in the evaluation of patients with bleeding disorders and thrombotic conditions
- 7. Demonstrate history and physical taking skills in the evaluation of patients with lymphadenopathy or paraproteinemia

- 8. Discuss a rational approach to the diagnosis and treatment of cytopenias, such as anemia, thrombocytopenia, pancytopenia.
- **9.** Discuss appropriate use of hematopoietic growth factors such as erythropoietin, granulocyte colony stimulating factor, etc.
- 10. Explain the appropriate use of blood products and the work up of various transfusion reactions.

Schedule of Activities

This elective is two to four weeks in length. The student will begin work at 8 a.m. daily under the supervision of the attending on the inpatient hematology service. The student will participate in daily rounds, didactic sessions as assigned and will attend two outpatient hematology clinics per week. Students may also be assigned to see hematology consults.

Didactic Activities

The student will attend the lymphoma pathology conference on Tuesdays at 12:30 p.m. in 2.0727, the leukemia and myeloma conference on Wednesdays at noon in 2.3601. The student will also attend the Fellowship Teaching Conference held on select Thursdays at 7:30 a.m. in 2.0727 and the Fellows Core Competency Conference on Fridays at 8 a.m. in 3.0809.

Required Reading

Selected articles as assigned by Dr. Huston at the outset of the elective rotation.

Student Evaluations

To receive a passing grade, students must attend all clinical and didactic activities. They will also make a short presentation to the hematology attending and team. Students must also receive a satisfactory evaluation from the course director and return their course evaluations prior to grades being posted.

MED655 Medical Oncology

Course Information

Course Director Frank C. Passero M.D. Contact Person Dina Henchen 275-4797 dina henchen@urmc.rochester.edu **Class Year Name** Medical Oncology Class Code MED655 **Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care Block Lenath 2 or 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Variable. This information will be provided to the students upon registration. What time should students report? 8 a.m. Who should they report to? Frank Passero, MD

Goal

Students will become familiar with common cancers. Students will be encouraged to consider a career in medical oncology and to develop an interest in cancer research.

Learning Objectives

At the end of the elective the student will be able to:

- 1. List the signs and symptoms of common cancers and describe their diagnostic evaluation and natural history.
- 2. Discuss the principles of cancer therapy including chemo-, hormonal-, and biologic-therapy.
- **3.** Explain the management of common complications of therapy including myelosuppression, infection, hemorrhage, nausea, vomiting, and renal and cardiac failure.
- 4. Explain the treatment of oncologic emergencies; such as febrile neutropenia, spinal cord compression, and metabolic abnormalities such as hypercalcemia.
- 5. Discuss the management of cancer-related pain and the use of narcotic analgesics and adjunctive medications.
- **6.** Discuss the long term complications of cancer and its therapy.
- 7. Discuss the role of clinical trials in a clinical cancer setting.
- $\mathbf{8.}$ Demonstrate history and physical taking skills in the evaluation of patients with cancer

Schedule of Activities

This elective is two to four weeks in length. The student will begin work at 8 a.m. and will attend a variety of outpatient medical oncology clinics. Students may also spend time seeing select inpatient consults with the inpatient attending physician.

Didactic Activities

Students will attend the breast oncology pathology conference at 7:30 a.m. on Mondays in 2.0727, the breast oncology didactic conference at noon on Wednesdays in 2.0727 or the genitourinary oncology conference on the first and third weeks each month at noon in G.5307, the fellowship teaching conference on some Thursdays at 7:30 a.m. on 2.0727, the thoracic oncology conference at 4 p.m. Thursdays in 2.0727, the gastrointestinal oncology conference at 7:30 a.m. on Fridays in 2.0727 or the fellowship core competency conference at 8 a.m. Fridays in 3.0809.

Required Reading

Selected articles as assigned by Dr. Huston at the outset of the elective rotation.

Student Evaluations

To receive a passing grade, students must attend all clinical and didactic activities. They will also make a short presentation to the oncology attending physician and team. Students must also receive a satisfactory evaluation from the course director and return their course evaluations prior to grades being posted.

MED656 Individualized Hematology/Medical Oncology

Course Information

Course Director Frank C. Passero M.D. Contact Person Dina Henchen 275-4797 dina henchen@urmc.rochester.edu **Class Year Name** Individualized Hematology/Medical Oncology Class Code MED656 **Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care Block Length 2 or 4 weeks Students 1 Prerequisites (ANY) MED653 Hematology, MED655 Medical Oncology An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Variable. This information will be provided to the students upon registration. What time should students report? 8 a.m. Who should they report to? Frank Passero, MD

Goal

The pre-requisite for this course is either MED 653 or MED 655.

This elective is intended for fourth year medical students who have already taken MED 653 or MED 655.

It offers the chance to develop an in-depth learning experience for students who wish to focus their learning on a particular hematologic or oncologic disease family.

Prior to registering for the elective medical students must contact the course director to confirm their eligibility and discuss plans to develop the schedule and faculty they will work with during the rotation.

Learning Objectives

To be discussed with the course director upon registration.

Schedule of Activities

To be discussed with the course director upon registration.

Didactic Activities

To be discussed with the course director upon registration.

Required Reading

To be discussed with the course director upon registration.

Student Evaluations

To be discussed with the course director upon registration.

MED658 Clinical Immunology

Course Information

Contact Person Olivia Wallace 585-269-8017 olivia wallace@urmc.rochester.edu **Class Year Name** Clinical Immunology Class Code **MED658 Elective Tags** Inpatient Service, Outpatient Service, Patient Care **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? SMH RM 5-6220N for orientation. Must be in contact with Olivia Wallace before reporting. What time should students report? 10:30am on morning of elective start Who should they report to? Dr. Ummara Shah for orientation followed by Olivia Wallace for further instructions

Goal

To provide a solid foundation in Allergy/Immunology and Rheumatology which will allow the student to approach the patient with allergic or musculoskeletal complaints in an organized and efficient manner.

Learning Objectives

By the end of the rotation the student should will:

-Develop an understanding of the diagnostic criteria for rheumatoid arthritis, osteoarthritis, crystal induced arthritis, systemic lupus erythematosus, seronegative spondyloarthropathies, fibromyalgia, septic arthritis, allergic rhinitis and asthma.

-Develop an understanding of synovial fluid analysis and its use in diagnosis and management of acute and chronic arthritis.

-Develop skills in interpreting bone radiographs and understand the radiographic features of rheumatoid arthritis, osteoarthritis, gout, psuedogout, and seronegative spondyloarthropathies.

-Develop an understanding of the use of immunologic laboratory studies in the diagnosis and management of patients with autoimmune diseases.

-Develop an understanding of the indications for and potential side effects of commonly used medications such as NSAIDs, hydroxycholoroquine, sulfasalazine, methotretexate, azathioprine, cyclophosphamide, etanercept, infliximab, leflunomide, corticosteroids, colchicine, probenecid, and allopurinol.

-Develop an understanding of the role of physical and occupational therapy in the treatment of musculoskeletal problems.

-Develop an understanding of the indications, contra-indications, and techniques of arthrocentesis.

-Develop an understanding of allergic diseases, asthma and the differential diagnosis of wheezing, nasal congestion and rhinorrhea.

-Develop experience in taking a complete environmental history and in advising patients regarding techniques to reduce exposure to house dust mite, mold, and animal antigens.

Schedule of Activities

Students will be assigned to an ambulatory office practice for up to 4 half days per week. Students will also be encouraged to evaluate selected inpatients who are being followed by the inpatient service. Students will attend the Division conferences.

Didactic Activities

Students are required to attend all AIR conferences which include Thursday morning Clinical Conferences, Case Conundrum, Radiology Conference & Journal Club.

Required Reading

Students are required to complete a Blackboard self-study course, AIR.MS .2011-2012.

Student Evaluations

The standard Medical School Evaluation will be used

MED665 Infectious Diseases

Course Information

Course Director David M. Dobrzynski M.D. **Contact Person** Wendy Lepsch 275-5873, Wendy Lepsch@URMC.Rochester.edu AnnMarie Crist 275-6558 AnnMarie_Crist@URMC.Rochester.edu **Class Year Name** Infectious Diseases Class Code **MED665 Elective Tags** Consultation Service, Inpatient Service, Patient Care Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Please email Wendy or AnnMarie for reporting instructions. What time should students report? Whatever time the ID Fellow tells them to. Who should they report to? The ID Fellow On-Call

Goal

To understand the principles of diagnosis and treatment of infectious diseases, including familiarity with culture and susceptibility tests, and use of antimicrobial agents.

Learning Objectives

By the end of the rotation the student should be able to:

Discuss pathogenesis of common infections, including cellulitis, pneumonia, bacteremia, UTI, and tuberculosis.

Distinguish between infection, colonization, and contamination.

Interpret results of cultures and gram stains from various sites, including sputum, urine, blood, CSF, and wounds.

Interpret results of antibiotic susceptibility testing, and apply these results in the selection of appropriate antibiotic therapy. Define minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC).

Discuss pharmacology, toxicity and spectrum of commonly used antibiotics.

Evaluate a patient with fever of uncertain etiology.

Schedule of Activities

Students work closely with Fellows, Medical Residents, and Attendings on the Infectious Disease in-patient service at SMH. Students will be assigned new patient consultations for work-up in conjunction with a Fellow or Resident; students will write up, present and discuss these cases on ID Attending Rounds.

Didactic Activities

- Students are expected to read about and discuss patient cases with their preceptors.
- Students should attend ID Clinical Conference (Thursdays 11:30-1:00) and ID City-Wide Conference (last Thursday of month 8:00-9:30).
- Students are welcome to attend other conferences including HIV Conference (Mondays 12:00-1:00),
- ID Journal Club (2nd and 4th Wednesdays 12:00-1:00), and ID Seminar Series (Fridays 8:00-9:00).
- Students may be assigned to present one of their patient cases at ID Clinical Conference.

Required Reading

Principles and Practice of Infectious Diseases, Bennett, Dolin and Blaser. 8th ed., 2015 (selected chapters).

Student Evaluations

In order to receive a grade of Pass, students must: 1) demonstrate an appropriate knowledge of the learning objectives, 2) actively participate in rounds, patient care, and conferences, and 3) complete patient work-ups at a level commensurate with their experience.

MED667 HIV Outpatient Care and Infectious Diseases

Course Information

Course Director Peter R. Mariuz M.D. **Contact Person** Aaron Brown 275-7644 aaron brown@urmc.rochester.edu **Class Year Name** HIV Outpatient Care and Infectious Diseases **Class Code MED667 Elective Tags Outpatient Service** Block Length 2 Weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Infectious Diseases Clinic AC-3; silver elevator to 3rd floor. ID is the last Clinic. What time should students report? 8:30 Who should they report to? Dr. Mariuz. If not available, then Dr. Louie

Goal

This elective will offer a combined experience of HIV and general outpatient care. The student will become familiar with the ambulatory care of HIV patients, and infections seen in general ID clinic.

Learning Objectives

1) To become familiar with the outpatient care of HIV patients, including the appropriate use of vaccines, antivirals, and monitoring.

2) To understand social determinants of health that affect HIV patients.

3) To understand the multidisciplinary approach to providing optimal care for HIV patients.

4) To become acquainted with common problems encountered in infectious disease clinic.

5) To become more proficient in the appropriate use of antibiotics.

Schedule of Activities

Clinic Monday through Friday.

As schedule allows, review of antibiotics.

Required Reading

Dr. Mariuz will supply a packet of material on HIV.

MED670 Clinical Nephrology

Course Information

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Course Director
Erika R. Drury M.D.
Contact Person
Erica Couch 585-275-4518 erica couch@urmc.rochester.edu
Class Year Name
Clinical Nephrology
Class Code
MED670
Elective Tags
Inpatient Service, Outpatient Service, Patient Care
Block Lenath
2-4
Students
2
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
4th Year, Visiting
Where should students report?
On the first day, page or chat message in eRecord the nephrology fellow on Acute service. Alternatively, go to the
inpatient dialysis unit 4-1400 and have the unit secretary help you contact the Acute fellow.
What time should students report?
8:00 am .
Who should they report to?
Nephrology fellow on Acute service
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Goal

An elective experience designed for 4th year medical students to gain experience in clinical nephrology. The student is expected to achieve competence in the diagnosis and management of common problems in nephrology including acute and chronic kidney disease, acid base disturbances, and disorders of electrolyte balance.

Learning Objectives

- 1. Evaluate a new nephrology consult and present relevant data to the team including a nephrology-focused HPI, physical examination, laboratory parameters, and imaging findings, with an appropriate problem list and initial management plan.
- 2. Provide excellent daily follow-up on several patients on the Acute nephrology consult service including daily assessments, progress notes, and discussion of recommendations to the primary teams.
- Generate an appropriate differential diagnosis for patients with acute kidney injury.
- 4. Identify clinical findings and laboratory parameters that suggest glomerulonephritis.
- 5. Perform a urinalysis and urine microscopy and interpret common findings.
- Interpret arterial blood gases, plasma anion gap, and evaluate and formulate a specific treatment plan for simple and mixed acid base disorders.
- 7. Describe basic principles of dialysis including diffusion, convection, and ultrafiltration, and identify urgent

indications for dialysis.

- 8. Interpret blood and urine chemistries to determine the cause of hyponatremia and apply an appropriate treatment plan.
- **9.** Apply clinical and laboratory parameters to identify an appropriate differential diagnosis for hyperkalemia and discuss acute and chronic management.

Schedule of Activities

Students will primarily work on the Acute nephrology consult service at SMH with fellows, APPs, faculty, and rotating residents. In the case of multiple students/fellows, or if the student specifically expresses interest, they may be assigned for subsequent weeks to work on the ICU or Transplant consult services. Students will also be invited to attend clinic with faculty on service depending on the schedule for the week.

In addition to direct patient care and learning through rounds, there is a checklist designed to guide students through activities that will help them meet the course learning objectives. The completion of these items is not required but suggested to make the most of this elective! For items on the checklist that require direct patient care or observation, please discuss with the fellow and/or faculty on service to help you find appropriate patients.

Didactic Activities

Students are invited to attend nephrology division didactic sessions which occur generally on Mondays, Wednesdays, and some Thursdays from 12:00-12:50pm. Students should attend sign out rounds 12:30-2 PM on Fridays. An updated weekly schedule including specific didactics is posted in the main nephrology office weekly.

Required Reading

Suggested reading and references:

Clinical Physiology of Acid-Based and Electrolyte Disorders, 5th Edition B.D. Rose.

Renal Pathophysiology: The Essentials. H.G. Rennke and B.M. Denker.

Student Evaluations

To receive a grade of pass, the student must participate in daily rounds taking an active role in patient evaluation and care and receive satisfactory evaluations from attending nephrologists with whom they worked. A narrative evaluation is completed with comments regarding the student's knowledge, clinical skills, problem-solving and clinical reasoning abilities, communication skills and personal and professional qualities during the rotation.

MED673 Elective in Nephrology

Course Information

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Course Director
Erika R. Drury M.D.
Contact Person
Erica Couch 585-275-4518 erica couch@urmc.rochester.edu
Class Year Name
Elective in Nephrology
Class Code
MED673
Elective Tags
Consultation Service
Block Lenath
1-2 weeks. Must contact department for approval.
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year. 4th Year
Where should students report?
On the first day please page or chat message in eRecord the nephrology attending at Highland on service.
Alternatively, students may present to the inpatient dialysis unit (4th floor East wing) for assistance (ph 585-341-6502)
What time should students report?
8:30 am
Who should they report to?
HH Nephrology Attending on service. The HD unit secretary or the nephology NP may assist (x16502).
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Goal

An elective experience designed for 4th year medical students to gain experience in clinical nephrology. The student is expected to achieve competence in the diagnosis and management of common problems in nephrology including acute and chronic kidney disease, acid base disturbances, and disorders of electrolyte balance.

Learning Objectives

- 1. Evaluate a new nephrology consult and present relevant data to the team including a nephrology-focused HPI, physical examination, laboratory parameters, and imaging findings, with an appropriate problem list and initial management plan.
- 2. Provide excellent daily follow-up on several patients on the Acute nephrology consult service including daily assessments, progress notes, and discussion of recommendations to the primary teams.
- 3. Generate an appropriate differential diagnosis for patients with acute kidney injury.
- 4. Identify clinical findings and laboratory parameters that suggest glomerulonephritis.
- 5. Perform a urinalysis and urine microscopy and interpret common findings.
- Interpret arterial blood gases, plasma anion gap, and evaluate and formulate a specific treatment plan for simple and mixed acid base disorders.
- 7. Describe basic principles of dialysis including diffusion, convection, and ultrafiltration, and identify urgent

indications for dialysis.

- 8. Interpret blood and urine chemistries to determine the cause of hyponatremia and apply an appropriate treatment plan.
- **9.** Apply clinical and laboratory parameters to identify an appropriate differential diagnosis for hyperkalemia and discuss acute and chronic management.

Schedule of Activities

Students will work under the guidance and supervision of the inpatient nephrology consult attending, along with the nephrology APP and any rotating residents. Students will participate in inpatient hospital rounds evaluating new consults and providing follow-up care. Students will also evaluate chronic dialysis patients admitted to the hospital and have the opportunity to see patients in outpatient nephrology clinic when available.

In addition to direct patient care and learning through rounds, there is a checklist designed to guide students through activities that will help them meet the course learning objectives. The completion of these items is not required but suggested to make the most of this elective! For items on the checklist that require direct patient care or observation, please discuss with the faculty on service to help you find appropriate patients.

Didactic Activities

There are no nephrology didactics at Highland. Students are invited to the internal medicine resident didactics. Students will work directly with the nephrology attending and have ample time for bedside and informal teaching guided by the students' needs, interests, and current cases on the service.

Required Reading

Suggested reading and references:

Clinical Physiology of Acid-Based and Electrolyte Disorders, 5th Edition B.D. Rose.

Renal Pathophysiology: The Essentials. H.G. Rennke and B.M. Denker.

Student Evaluations

To receive a grade of pass, the student must participate in daily rounds taking an active role in patient evaluation and care and receive satisfactory evaluations from attending nephrologists with whom they worked. A narrative evaluation is completed with comments regarding the student's knowledge, clinical skills, problem-solving and clinical reasoning abilities, communication skills and personal and professional qualities during the rotation.

MED686 Multidisciplinary Oncology in Radiation Oncology

Course Information

Course Director Kenneth Y. Usuki M.D. Contact Person Michelle Crary / 3-1984 / michelle crary@urmc.rochester.edu **Class Year Name** Multidisciplinary Oncology in Radiation Oncology Class Code **MED686 Elective Tags** Multidisciplinary, Outpatient Service Block Length 2 - 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Department of Radiation Oncology waiting Room G-0850A, ask receptionist to call Michelle at 3-1984 What time should students report? 7:45 a.m. Who should they report to? Michelle Crary

Goal

To provide students with an understanding of cancer management in a multidisciplinary setting with an emphasis on clinical radiation oncology.

Learning Objectives

By the end of the rotation the student should be able to:

- * Discuss the natural history of malignant disease
- * Describe standard work-up and diagnostic tests used in the evaluation of new patients and in follow-up clinic.
- * Discuss staging of the disease and its relationship to development of a treatment plan.
- * Explain indications for delivering radiation therapy.
- * Discuss the process leading up to and including formulation of a treatment plan.
- * Describe integration of other standard therapeutic modalities (surgery and chemotherapy) in cancer management.
- * Identify various side effects associated with radiation therapy treatments and explain management techniques.

Schedule of Activities

Students are assigned to a radiation oncologist on a rotating basis at SMH from 8:00am - 5:00pm. Students will follow patients from consult through treatment with emphasis on all aspects of patient care, particularly on diagnostic evaluation of new patients leading to accurate staging of disease and formulation of a treatment plan, often multidisciplinary in character.

Didactic Activities

- New Patient Conference - 1 hour per week

- Treatment Planning Rounds - 1 hour per week

-Rad Bio course - 1 hour per week

-Physics course - 1 hour per week

-Other educational opportunities dependant on the month/week

Required Reading

Clinical Oncology, 8 ed. By Philip Rubin, M.D. - major reference text.

Student Evaluations

To receive a grade of Pass, students must turn in all assigned case studies, attend new patient conferences and treatment planning rounds and receive a satisfactory clinical evaluation from their preceptors.

MED689 Lifestyle Medicine

Course Information

Course Director Susan M. Friedman M.D., M.P.H. Contact Person Course Coordinator, Nancy Ortiz 341-6264 **Class Year Name** Lifestyle Medicine Class Code **MED689 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care Block Lenath 2 Weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? : Dr. Susan Friedman, Highland Hospital, S516 What time should students report? REPORT THE SATURDAY or SUNDAY BEFORE THE BLOCK START DATE Who should they report to? Dr. Susan Friedman

Goal

GOAL: To understand the principles of Lifestyle Medicine with which all physicians should be familiar because they are part of general medical practice.

This course starts on the Saturday or Sunday BEFORE the block date with the Jumpstart Program

for the block starting 8/5/2024, report on SATURDAY 8/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 9/9/2024, report on SATURDAY 9/7/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 10/7/2024, report on SUNDAY 10/6/2024 for the JUMPSTART PROGRAM1-3pm On Line for the block starting 11/4/2024, report on SATURDAY 11/2/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 12/9/2024, report on SATURDAY 12/7/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 12/9/2024, report on SATURDAY 12/7/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 1/6/2024, report on SUNDAY 1/7/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 2/1/2024, report on SUNDAY 1/7/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line for the block starting 3/2/2024, report on SATURDAY 2/3/2024 for the JUMPSTART PROGRAM 1-3pm On Line

Please note that the Jumpstart, which is a key part of this elective experience, starts the weekend BEFORE the start of the elective.

Learning Objectives

Learning objectives: By the end of the elective the students should be able to

Identify the "pillars" of lifestyle medicine.

Identify the 15 core competencies of Lifestyle Medicine

Perform a lifestyle medicine assessment of a hospitalized patient

Perform a lifestyle medicine assessment of an outpatient

Understand strategies for management of the key lifestyle contributors to chronic disease, namely, nutrition, physical activity, tobacco, alcohol, stress, sleep, and emotional well-being

Understand how to assess patient readiness to change

Understand components of motivational interviewing

Design treatment plan based on patient goals, priorities and learning style

Understand how to develop SMART goals

Use teaching tools based on patient learning style and goals

Schedule of Activities

Schedule of Activities: This elective will start the Saturday or Sunday prior to the session block with the Jumpstart Program 1-3 pm online.

This elective will include a combination of experiential, clinical and didactic components. Students will participate Monday – Friday, 8 am – 5 pm, as well as the times for the Jumpstart program, which occurs on the 3 Saturdays or Sundays (depending on the month) of the rotation, and 2 Wednesday or Thursday evenings (depending on the month) for an hour. Experiential and clinical activities include:

- **1.** Participation in a 15-day whole-food, plant-based Jumpstart program
- 2. Development of personal SMART goals
- **3.** Mindfulness practice
- 4. Shadow clinician(s) at Geriatrics and Medicine Associates (GAMA) outpatient consults
- 5. Shadow clinician(s) at Highland hospital inpatient consults
- 6. Shadow clinician(s) at Rochester Regional outpatient consults and LM as part of family medicine primary care

Didactic Activities

Didactic Activities:

- 1. Complete a LM literature review on a LM pillar and target condition of choice
- 2. Other guided reading

Required Reading

Required Reading:

Lianov L, Johnson M. Physician competencies for prescribing Lifestyle Medicine. JAMA 2010; 304 (2): 202-203.

Morton D, Rankin P, Kent L, and Dysinger W. The Complete Health Improvement Program (CHIP): history, evaluation, and outcomes. Am J Lifestyle Med 2014; 10(1): 64-73.

Ornish D et al. Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial. Lancet 1990; 336 (8708): 129-133.

Ornish D et al. Intensive lifestyle changes may affect progression of prostate cancer. J Urology 2005; 174 (3): 1065 – 1069.

Rankin P et al. Effectiveness of a volunteer-delivered Lifestyle Medicine program for reducing cardiovascular disease risk factors. Am J Cardiol 2012; 109: 82-86.

Barnard ND et al. A low-fat vegan diet and a conventional diabetes diet in the treatment of type 2 diabetes: a randomized, controlled, 74-wk clinical trial. Am J Clin Nutr 2009; 89(5): 1588S-1596S.

Esselstyn CB et al. A strategy to arrest and reverse coronary artery disease: a 5-year longitudinal study of a single physician's practice. J Fam Pract 1995; 41(6): 560-568.

Jenkins DJ et al. Direct comparison of a dietary portfolio of cholesterol-lowering foods with a statin in hypercholesterolemic participants. Am J Clin Nutr 2005; 81(2): 380-387.

Orlich MJ et al. Vegetarian dietary patterns and mortality in Adventist Health Study 2. JAMA Intern Med 2013; 173(13): 1230-1238.

Orlich MJ and Fraser GE. Vegetarian diets in the Adventist Health Study 2: a review of initial published findings. Am J Clin Nutr 2014; 100 Suppl 1: 353S-358S.

Lifestyle Medicine Handbook: An Introduction to the Power of Healthy Habits - Beth Frates, MD et al.

Recommended reading: How Not to Die - Michael Greger, MD

Optional: ACLM Lifestyle Medicine curriculum

Student Evaluations

Student Evaluations:

To receive a grade of Pass, students must turn in a log sheet documenting that the learning objectives have been covered, participate in the 15-day Jumpstart program, complete a literature review on a LM pillar and target condition of their choice, and receive a passing clinical evaluation from their preceptor(s) during the elective.

Course Information

Contact Person

Nicole Cruz 585-275-4861 Nicole Cruz@urmc.rochester.edu Class Year Name Inpatient Pulmonary Medicine Class Code **MED692 Elective Tags** Inpatient Service **Block Length** 2 or 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year. 4th Year Where should students report? Please call or e-mail Nicole Cruz a few days prior to the start of the rotation. What time should students report? TBD Who should they report to? TBD

Goal

At the end of this rotation, the student should be able to articulate the initial diagnostic approach to and management of patients with common respiratory problems such as asthma, COPD, interstitial lung disease and lung cancer. Other conditions likely to be encountered include obstructive sleep apnea, pulmonary hypertension, and unexplained dyspnea or hypoxemia. The student should also be familiar with basic pathophysiologic mechanisms of hypoxemia including the causes of a widened A-a gradient, and also principles of alveolar ventilation. Basic interpretation of the normal and abnormal chest X-ray will also be expected.

Learning Objectives

The student will accompany the inpatient Pulmonary Consult Team at Strong Memorial Hospital. The Consult Team consists of an Attending and Fellow that see 3-5 new consults per day with a variety of pulmonary diagnoses. An Internal Medicine Resident is also usually a part of the team during elective time. Consults vary in their acuity from acute respiratory failure to lung cancer, and more chronic problems including cough and unexplained dyspnea. The student will initially accompany the team on rounds and observe the process of consultation from initial evaluation to write-up of recommendations. By the end of the rotation the student will be expected to see new consults independently and initiate his/her own diagnostic plan. The student will be expected to provide a 5-10 minute overiew of evidenced based management of one of his or her cases twice per week on rounds (total of four presentations). The student will be expected to attend regularly scheduled conferences (e.g. City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference on Fridays at Noon), and will also have the opportunity to present an interesting case at these conferences. The student will also have the chance to observe fiberoptic bronchoscopies (e.g. bronchoalveolar lavage or transbronchial biopsies) since the Pulmonary Team also performs this procedure on a regular basis. There may be limited possibilities to participate in outpatient Pulmonary clinic as well.

Schedule of Activities

Daily rounds five days per week on the pulmonary inpatient consults service. Bronchoscopies scheduled throughout the day beginning at 8 a.m. Depending on volume of service, rounds can conclude after 6 p.m.

Didactic Activities

Formal didactic sessions include City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference Fridays at noon. Informal teaching sessions as part of rounds.

Student Evaluations

Student's performance will be graded by: (i) their participation in rounds and ability to complete a coherent consult write-up on a timely basis; (ii) direct observation of their clinical skills including history taking and physical exam; and (iii) their presentations on rounds or at conferences.

MED694 Med-Peds Allergy and Immunology

Course Information

Course Director Jessica L. Stern M.D. **Contact Person** Jessica Stern, MD MS Class Year Name Med-Peds Allergy and Immunology Class Code MED694 **Elective Tags** Patient Care **Block Length** 2 Weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Will be assigned when we know who has been added What time should students report? Either 8:00 AM or 1:00 pm depending on who and where they are rotating Who should they report to? Precepting Allergy Attending

Goal

This subspecialty elective emphasizes experience in the evaluation and management of common clinical problems in allergy and immunology. The learner will assist in the diagnosis and management of anaphylaxis, asthma, dermatology, drug allergy, food allergy, immune deficiency, and rhinitis/conjunctivitis/rhinosinusitis.

The learner will be exposed to a variety of allergic and immunologic disorders including: asthma, rhinitis, conjunctivitis, rhinosinusitis, nasal polyposis, urticaria, angioedema, atopic dermatitis, contact dermatitis, anaphylaxis, drug allergy/adverse drug reactions, stinging insect hypersensitivity and food allergy. Selected opportunities for learning about immune deficiencies, auto- inflammatory disorders, autoimmune diseases, allergic bronchopulmonary aspergillosis, mast cell disorders and eosinophilic disorders may also be available.

Learning Objectives

Patient Care.

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

- 1. Conduct a comprehensive Allergy/Immunology medical interview and physical examination at a level appropriate for the learner.
- 2. Interpret selected allergy tests and spirometry.
- 3. Interpret specific tests related to adverse reactions to foods, medications and/or stinging insects. Additional opportunities may be available to develop an understanding of the basic principles on how to safely conduct a supervised challenge to a food or drug.

4. - Additional experiences may be provided to enable the learner to interpret diagnostic immunology tests

(primarily tests for humoral immunity, as well as cellular immunity, neutrophil function, and complement)

5. – Develop a differential diagnosis for patients presenting with problems such as rhinitis, conjunctivitis, rhinosinusitis, asthma, cough or other respiratory symptoms, urticaria, angioedema, atopic dermatitis/contact dermatitis, adverse reactions to foods, medications, stinging insects and anaphylaxis. Additional experiences may be provided to enable the learner to develop a differential diagnosis for patients presenting with recurrent

infections and suspected immune deficiency.

6. – Develop a guideline based approach for the treatment and monitoring of response to therapy of various allergic and immunologic conditions including rhinitis, conjunctivitis, rhinosinusitis, asthma, atopic dermatitis, contact dermatitis, urticaria, food allergy, drug allergy, stinging insect allergy, anaphylaxis and mast cell disorders. Additional experiences may be provided to enable the learner to develop a guideline-based

approach to the treatment of patients with immune deficiencies.

7. – Provide patient education related to a specific diagnosis, testing modalities, risks & benefits of treatment approaches (including cost), and prognosis.

Medical Knowledge:

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

1 – **Anaphylaxis:** Define anaphylaxis and biphasic reactions, and describe symptoms typical of IgE-mediated anaphylaxis. Describe various causes of IgE- mediated anaphylaxis and how anaphylaxis is diagnosed. Describe first line and the various secondary therapies for anaphylaxis including dose, route, onset of

action, and indication

- 2. Asthma: Describe asthma pathogenesis, main asthma endotypes treated by allergists, the fundamentals of asthma management and the fundamentals of diagnostic testing for asthma.
- 3. Dermatology: Develop a differential diagnosis for patients presenting with allergic/ immunologic skin disorders, such as atopic dermatitis, contact dermatitis, and urticaria and angioedema, and pruritus. Describe approach for evaluation of these skin disorders including appropriate testing to make the diagnosis and

identify possible triggers. Describe avoidance and treatment protocols for immunologic skin disorders.

4. – Drug allergy: Describe the immunopathology of adverse drug reactions including the Gell & Coombs classification system, pseudoallergic reactions, and the hapten hypothesis. Define contraindications to re-exposure to medications implicated in drug allergy including serious cutaneous adverse reactions (SCARs) and end-organ dysfunction (hemolytic anemia, drug induced lupus, etc). Describe the role of skin testing, graded dose challenge and desensitization in the evaluation and treatment of patients with drug allergy 5 – Food allergy: List the most common food allergens in children and adults. Describe the natural history of food

allergy, the current evaluation, and the management of food allergy.

6. - Immune Deficiency: Recognize clinical signs and symptoms that would warrant a work-up for a primary immunodeficiency disorder. Select the laboratory work-up required to diagnose the more common immunodeficiency disorders. Describe the treatment options for patients with primary immunodeficiency

disorders including immunoglobulin replacement.

7. – Rhinitis, rhinosinusitis and/or conjunctivitis: Define a differential diagnosis for patients presenting with rhinitis, rhinosinusitis and/or conjunctivitis. Describe the natural history and common triggers of rhinitis, rhinosinusitis and/or conjunctivitis. Identify a guideline-based approach for the treatment of rhinitis,

rhinosinusitis and/or conjunctivitis.

Schedule of Activities

The learner will see patients in different age groups (adult & pediatric) with different cultural and socioeconomic backgrounds, and with diseases of varying severity.

Required Reading

Principal Ancillary Educational Materials

Anaphylaxis Learning objectives:

-Define anaphylaxis and biphasic reactions, and describe symptoms typical of - IgE-mediated anaphylaxis

-Describe various causes of IgE-mediated anaphylaxis and how anaphylaxis is diagnosed

-Describe first line and the various secondary therapies for anaphylaxis including dose, route, onset of action, and indication

Anaphylaxis resources:

- 1. Canadian Primer: Chapter 6, Anaphylaxis
- 2. Video: Anaphylaxis
- 3. Increasing Emergency Department Visits for Anaphylaxis
- 4. Prospective Validation of the NIAID FAAN Criteria for Emergency Department Diagnosis of Anaphylaxis
- 5. Time of Onset and Predictors of Biphasic Anaphylactic Reactions A Systematic Review and Meta-analysis
- 6. Predictors of Repeat Epinephrine Administration for ED Patients with Anaphylaxis

Additional Resources

- 7. Idiopathic Anaphylaxis.pdf
- 8. 2020 AAAAI anaphylaxis practice parameter
- 9. Anaphylaxis Conundrum A Trojan Horse Phenomenon.pdf
- 10. Epinephrine in Anaphylaxis.pdf
- 11. Current Knowledge and Management of Hypersensitivity to Perioperative Drugs and Radiocontrast Media

12. AAAAI Mast Cell Disorders Committee Work Group Report: Mast cell activation syndrome (MCAS) diagnosis and management

13. ADVENT Educational Resources

<u>Asthma</u>

Learning objectives:

-Describe asthma pathogenesis

-Describe main asthma endotypes treated by allergists

-Describe fundamentals of asthma management

-Describe fundamentals of diagnostic testing for asthma

Asthma resources:

- 1. Canadian Primer (PDF): Chapter 2, Asthma
- 2. Video: Pulmonary Function Tests
- 3. Video: Chronic Cough
- 4. Video: 2020 NHLBI Asthma Guidelines
- **5.** Video: Biologics in Asthma and Allergic Disease
- 6. Review of ABPA (Allergic Bronchopulmonary Aspergillosis) Diagnosis and Management
- 7. Case-based review of AERD (aspirin-exacerbated respiratory disease)
- 8. Indoor Environmental Control Practices and Asthma Management

Additional Resources:

- **1.** 2020 Focused Updates to the Asthma Management Guidelines
- 2. Exercise-Induced Bronchoconstriction Practice Parameter
- 3. Airway Smooth Muscle Pathophysiology in Asthma
- 4. GINA Guidelines
- 5. 2020 NAEPP Guidelines Update and GINA 2021—Asthma Care Differences, Overlap, and Challenges
- 6. ADVENT Educational Resources

Dermatology Learning objectives:

-Develop a differential diagnosis for patients presenting with allergic/ immunologic skin disorders, such as atopic dermatitis, contact dermatitis, and urticaria and angioedema, and pruritus.

-Describe approach for evaluation of these skin disorders including appropriate testing to make the diagnosis and identify possible triggers

-Describe avoidance and treatment protocols for immunologic skin disorders

Derm resources:

- 1. Allergic Skin Diseases
- 2. Video: Atopic Dermatitis: Improving Outcomes in Adult and Pediatric Patients
- 3. Video: Contact Dermatitis

- 4. Canadian Primer Chapter 11, Urticaria and Angioedema
- 5. Video: Update of Classification, Diagnosis and Treatment of Hereditary Angioedema (HAE)
- 6. What's New in the Treatment of Urticaria and Angioedema
- 7. Personalized Management Strategies in Mast Cell Disorders: ECNM-

AIM User's Guide for Daily Clinical Practice

8. Proposed Diagnostic Algorithm for Patients with Suspected Mast Cell Activation Syndrome

Additional Resources:

- **1.** ADVENT Educational Resources
- 2. Atopic Dermatitis and Food Allergy: Best Practices and Knowledge Gaps—A Work Group Report from the AAAAI Allergic Skin Diseases Committee and Leadership Institute Project
- **3.** Elevated Tryptase: Conditions and Pitfalls
- 4. Global Classification of Mast Cell Activation Disorders: An ICD-10- CMeAdjusted Proposal of the ECNM-AIM Consortium
- 5. Scratching the Itch: Managing Recurrent Pruritic Skin Conditions
- 6. Video: Urticaria and Angioedema

Drug Allergy Learning objectives:

-Describe the immunopathology of adverse drug reactions including the Gell & Coombs classification system, pseudoallergic reactions, and the hapten hypothesis

-Define contraindications to re-exposure to medications implicated in drug allergy including serious cutaneous adverse reactions (SCARs) and end- organ dysfunction (hemolytic anemia, drug induced lupus, etc).

-Describe the role of skin testing, graded dose challenge and desensitization in the evaluation and treatment of patients with drug allergy

Drug allergy resources:

- 1. Video: Drug Allergy: Essentials for the ABAI Exam
- 2. Canadian Primer: Chapter 12, Drug Allergy
- **3.** Video: Drug Allergy
- 4. Drug allergy: A 2022 Practice Parameter Update
- 5. Practical Guidance for the Evaluation and Management of Drug Hypersensitivity: General Concepts
- 6. Controversies in Drug Allergy: Drug Allergy Pathways

- 1. Practical Guidance for the Evaluation and Management of Drug Hypersensitivity: Specific Drugs
- 2. The role of aspirin desensitization followed by oral aspirin therapy in managing patients with aspirinexacerbated respiratory disease: A Work Group Report from the Rhinitis, Rhinosinusitis and Ocular Allergy Committee of the American Academy of Allergy, Asthma & Immunology
- **3.** Drug Allergy Phenotypes, Endotypes, and Biomarkers
- 4. Use of a Penicillin Allergy Screening Algorithm and Penicillin Skin Testing for Transitioning Hospitalized Patients to First-Line Antibiotic Therapy
- **5.** ADVENT Educational Resources

Food Allergy Learning objectives:

-List the most common food allergens in children and adults

-Describe the natural history of food allergy

-Describe the current evaluation and the management of food allergy

Food allergy resources:

- 1. Canadian Primer Chapter 7, IgE-mediated Food Allergy
- 2. Canadian Primer Chapter 8, Non-IgE-mediated food hypersensitivity
- 3. Canadian Primer Chapter 9, Early Introduction of foods to prevent food allergy
- 4. Video: Principles of Food Allergy
- 5. Video: Eosinophilic Esophagitis
- 6. Non–IgE-mediated gastrointestinal food allergy

Additional Resources

- 1. The Challenges of Managing Multiple Food Allergies and Consequent Food Aversions
- 2. Prospects for Prevention of Food Allergy
- **3.** The Food Allergy From Infancy Through Adulthood
- 4. Food Allergy and Anaphylaxis Emergency Care Plan
- **5.** A Slice of Food Protein Induced Enterocolitis Syndrome (FPIES): Insights from 441 Children with FPIES as Provided by Caregivers in the International FPIES Association
- **6.** Canadian Primer Chapter 10, Eosinophilic esophagitis
- 7. Clinical Management of Food Allergy
- $\mathbf{8.}$ Relationship between red meat allergy and sensitization to gelatin and galactose

9. ADVENT Educational Resources

Immune Deficiency Learning objectives:

-Recognize clinical signs and symptoms that would warrant a work-up for a primary immunodeficiency disorder

-Select the laboratory work-up required to diagnose the more common immunodeficiency disorders

-Describe the treatment options for patients with primary immunodeficiency disorders including immunoglobulin replacement

Immune Deficiency resources:

- **1.** Canadian Primer: Chapter 1, An introduction to immunology and immunopathology
- 2. Canadian Primer: Chapter 13, Primary immunodeficiency
- **3.** Video: Primary Immunodeficiency Disorders
- 4. Video: Dysregulation of the Immune System
- 5. Video: Evaluation of Patient with Recurrent Infections
- 6. Video: Lab Eval of Primary Immunodeficiency
- 7. Video: Abbas Basic Immunology Overview Additional Resources
- **1.** Overview of Primary Immunodeficiencies
- 2. Practice parameter for the diagnosis and management of primary immunodeficiency
- 3. Update on the use of Immunoglobulin in human disease a review of evidence
- 4. ADVENT Educational Resources

Rhinitis, rhinosinusitis, and conjunctivitis Learning objectives:

-Define a differential diagnosis for patients presenting with rhinitis, rhinosinusitis and/or conjunctivitis -Describe the natural history and common triggers of rhinitis, rhinosinusitis and/or conjunctivitis -Identify a guideline-based approach for the treatment of rhinitis, rhinosinusitis and/or conjunctivitis

Rhinitis resources:

- 1. Canadian Primer: Chapter 3, Allergic rhinitis
- 2. Canadian Primer: Chapter 5, Allergen-specific immunotherapy
- **3.** Video: Allergic Rhinitis
- **4.** Chronic rhinosinusitis pathogenesis

Additional Resources:

- $1. \ {\sf Rhinitis} \ {\sf and} \ {\sf Sinusitis}$
- 2. Video: SCIT vs. SLIT: Efficacy in Clinical Trials
- 3. Video: SLIT-SCIT Safety and Adherence: Do They Matter?
- 4. Optional Video: Chronic Rhinosinusitis in Children
- 5. ADVENT Educational Resources

Course Information

Course Director

Michael E. Yurcheshen M.D. **Contact Person** Michael Yurcheshen, M.D.; 341-7575 Michael Yurcheshen@urmc.rochester.edu **Must get course director`s approval prior to scheduling** **Class Year Name** Sleep Medicine Elective **Class Code MED695 Elective Tags** Multidisciplinary, Outpatient Service, Patient Care **Block Length** 1 - 2 weeks Must get approval. Students Prerequisites (ALL) MED300 Medicine Clerkship, PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Strong Sleep Disorders Center 2337 S. Clinton Ave What time should students report? 8:30 Who should they report to? Rhonda Westmiller, receptionist. Must Contact Dr. Yurcheshen before scheduling

Goal

To develop an understanding of the various sleep disorders and their treatment.

Must get course director`s approval prior to scheduling

Learning Objectives

By the end of the rotation, the student should be able to:

·Take a comprehensive sleep history.

·Identify patients who likely suffer from a sleep disorder.

Become cognizant of both the medical and societal cost of various sleep disorders.

Be able to manage and counsel a patient suffering from obstructive sleep apnea.

Be familiar with behavioral therapy in treating patients suffering from insomnia.

Be able to describe the normal stages of sleep as well as the physiologic changes that occur during sleep.

Describe the underlying physiology of obstructive sleep apnea.

Schedule of Activities

Students will rotate at the Strong Sleep Disorders Center of Rochester during their one or two-week elective. During this time, they will perform the initial evaluation on patients referred to the center. Many of these patients will suffer from obstructive sleep apnea, however, there is also exposure to patients with other sleep abnormalities such as narcolepsy, restless legs syndrome/periodic limb movements during sleep, and REM behavior disorder. Medical students will also rotate in the insomnia clinic, where they will be exposed to behavioral therapy in the treatment of

chronic insomnia.

Didactic Activities

Students are expected to read about and discuss the learning objectives with their preceptor during the clinical day. The consults that the medical students are involved in will be discussed on a one-to-one basis and teaching points will be made about each case.

Required Reading

·Current Concepts in Sleep Medicine by Peter Huari

- ·Principles and practices of Medicine by Kryger, Roth and Dement(selected chapters)
- ·Various articles from recent literature about sleep disorders
- These booklets will be provided to you at the beginning of your rotation.

Student Evaluations

To receive a grade of pass, students need to actively participate in the assessment and care of patients at the Sleep Disorders Center. They must also demonstrate an understanding of the learning objectives.

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Benita Shelley benita shelley@urmc.rochester.edu **Class Year Name** Medicine Acting Internship @ SMH Class Code MEDEX1 **Block Length** 4 weeks Students 6 **Prereauisites** MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? SMH - further information 1 week before AI What time should students report? 8:30 am Who should they report to? Jennifer Readlynn, MD

Goal

Course Description: The Medicine Acting Internship is an opportunity for students to expand their internal medicine knowledge and refine the clinical skills established in the Medicine Clerkship while assuming greater responsibilities for their patients. Each acting intern should act as the primary caregiver for their patients, documenting the history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team, including the patient's family. This rotation is also intended to prepare students for intern year outside of their caregiver role as well.

Goals

- Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.
- Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.
- Improve communication skills in documentation, requesting consultation, working within an interdisciplinary team, and with patients and their families.
- Demonstrate the IICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.
- Expand internal medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.
- Develop skills in caring for patients from various experiences and practice reflecting on our patients' experiences.

Learning Objectives

By the end of the acting internship, students should be able to:

- Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient.
- Identify indications for diagnostic testing within this specialty and write initial orders for co-sign.
- Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications with supporting rationale.
- Write accurate and well-organized specialty-specific admit, progress, and operative notes where applicable; update progress notes daily.
- Recognize when a patient is sick vs. not sick, perform the initial evaluation, and develop an initial management plan while asking for help.
- Begin to recognize the appropriate disposition for a patient (when ready for discharge, needs ICU, suitable for the floor, prepared for a procedure, etc.).
- Prioritize tasks in the care of multiple patients in order to provide efficient, safe, and equitable care.
- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team.
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e.uses interpreter services appropriately, avoids jargon).
- Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance.
- Understand team dynamics, limitations of the team, resources available, and where to go for help when needed.
- Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care.
- Demonstrate insight into one's own strengths and weaknesses, asking for help when needed and responding to feedback in a professional manner.
- Acknowledge ambiguity and be open to questions and challenges from the patient and team.
- Utilize evidence-based resources to answer clinical questions.
- Apply knowledge of the anatomy, physiology, indications, contraindications, risks, and benefits relevant to common procedures in your specialty in discussions with patients and the student's team.
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes IICARE)
- Demonstrate how to obtain informed consent (basic surgical procedures, bedside procedures, blood transfusion, treatment plan, etc).

Schedule of Activities

First Monday:

- Orientation at 8:30am
- Meet and Round with Your Team at 9am
- Clinical Decision-Making Exam at 1:15pm
- Academic Half Day through 4pm

Second Friday: Mid-Rotation Check-In with Dr. Readlynn

Last Friday: Podcast Discussion with Dr. Readlynn and other students on the rotation

Please note that students may be asked to rotate on additional services including the Wilmot Cancer Center, Heart Center, or SMH HMD Hospitalist APP service for 2 of their 4 weeks or even all 4 weeks. Students will receive site preference surveys prior to their rotations.

Didactic Activities

Please see the Blackboard course for didactic activities.

Student Evaluations

Grades are determined by anonymous review of de-identified evaluations from residents and attendings the students worked with during their rotation. This review is done by a grading committee utilizing the grading rubric posted on Blackboard and final grades with comments are determined by Dr. Readlynn.

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Martha Stock 341-0341 martha stock@urmc.rochester.edu **Class Year Name** Medicine Acting Internship @ HH Class Code MEDEX3 **Block Length** 4 Students 2 Prereauisites MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Highland Hospital - more information to come 1 week prior to rotation What time should students report? 8:00 am Who should they report to? Dr. Saadia Sherazi or Dr. Aameera Khan

Goal

Course Description: The Medicine Acting Internship is an opportunity for students to expand their internal medicine knowledge and refine the clinical skills established in the Medicine Clerkship while assuming greater responsibilities for their patients. Each acting intern should act as the primary caregiver for their patients, documenting the history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team, including the patient's family. This rotation is also intended to prepare students for intern year outside of their caregiver role as well.

Goals

- Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.
- Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.
- Improve communication skills in documentation, requesting consultation, working within an interdisciplinary team, and with patients and their families.
- Demonstrate the IICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.
- Expand internal medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.
- Develop skills in caring for patients from various experiences and practice reflecting on our patients' experiences.

Learning Objectives

By the end of the acting internship, students should be able to:

- Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient.
- Identify indications for diagnostic testing within this specialty and write initial orders for co-sign.
- Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications with supporting rationale.
- Write accurate and well-organized specialty-specific admit, progress, and operative notes where applicable; update progress notes daily.
- Recognize when a patient is sick vs. not sick, perform the initial evaluation, and develop an initial management plan while asking for help.
- Recognize appropriate disposition for a patient (when ready for discharge, needs ICU, suitable for the floor, prepared for a procedure, etc.).
- Prioritize tasks in the care of multiple patients in order to provide efficient, safe, and equitable care.
- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team.
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter services appropriately, avoids jargon).
- Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance.
- Understand team dynamics, limitations of the team, resources available, and where to go for help when needed.
- Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care.
- Demonstrate insight into one's own strengths and weaknesses, asking for help when needed and responding to feedback in a professional manner.
- Acknowledge ambiguity and be open to questions and challenges from the patient and team.
- Utilize evidence-based resources to answer clinical questions.
- Apply knowledge of anatomy, physiology, indications, contraindications, risks, and benefits relevant to common procedures in your specialty in discussions with patients and the student's team.
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes IICARE)
- Demonstrate how to obtain informed consent (basic surgical procedures, bedside procedures, blood transfusion, treatment plan etc.)

Schedule of Activities

First Monday:

Orientation at 8am

- Meet and Round with Your Team at 9am
- Clinical Decision-Making Exam at 1:15pm at SMH
- Academic Half Day through 4pm at SMH

Second Friday: Mid-Rotation Check-In with Dr. Khan or Dr. Sherazi

Last Friday: Podcast with Dr. Readlynn and other students on the rotation

Didactic Activities

Please review the information on Blackboard for further information on didactic activities.

Student Evaluations

Grades are determined by anonymous review of evaluations from residents and attendings the students worked with during their rotation. This review is done by a grading committee utilizing the grading rubric posted on Blackboard and final grades with comments are determined by Dr. Readlynn.

MEDEX5 Medicine Honors Acting Internship

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Benita Shelley benita shelley@urmc.rochester.edu **Class Year Name** Medicine Honors Acting Internship Class Code MEDEX5 **Block Length** 4 weeks Students 2 **Prereauisites** MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Strong Memorial Hospital - more information to come 1 week prior to rotation What time should students report? 8:30am Who should they report to? Jennifer K. Readlynn, MD

Goal

ENROLLMENT CRITERIA: Students need to have received High Pass or Honors on medicine clerkship. Students who have not yet received a grade for their medicine clerkship can reach out to Dr. Readlynn to discuss their potential placement.

Course Description: The Medicine Acting Internship is an opportunity for students to expand their internal medicine knowledge and refine the clinical skills established in the Medicine Clerkship while assuming greater responsibilities for their patients. Each acting intern should act as the primary caregiver for their patients, documenting the history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team, including the patient's family. This rotation is also intended to prepare students for intern year outside of their caregiver role as well.

Goals

- Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.
- Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.
- Improve communication skills in documentation, requesting consultation, working within an interdisciplinary team, and with patients and their families.
- Demonstrate the IICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.
- Expand internal medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.

 Develop skills in caring for patients from various experiences and practice reflecting on our patients' experiences.

Learning Objectives

By the end of the acting internship, students should be able to:

- Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient.
- Identify indications for diagnostic testing within this specialty and write initial orders for co-sign.
- Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications with supporting rationale.
- Write accurate and well-organized specialty-specific admit, progress, and operative notes where applicable; update progress notes daily.
- Recognize when a patient is sick vs. not sick, perform the initial evaluation, and develop an initial management plan while asking for help.
- Recognize appropriate disposition for a patient (when ready for discharge, needs ICU, suitable for the floor, prepared for a procedure, etc.).
- Prioritize tasks in the care of multiple patients in order to provide efficient, safe, and equitable care.
- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team.
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter services appropriately, avoids jargon).
- Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance.
- Understand team dynamics, limitations of the team, resources available, and where to go for help when needed.
- Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care.
- Demonstrate insight into one's own strengths and weaknesses, asking for help when needed and responding to feedback in a professional manner.
- Acknowledge ambiguity and be open to questions and challenges from the patient and team.
- Utilize evidence-based resources to answer clinical questions.
- Apply knowledge of anatomy, physiology, indications, contraindications, risks, and benefits relevant to common procedures in your specialty in discussions with patients and the student's team.
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes IICARE)
- Demonstrate how to obtain informed consent (basic surgical procedures, bedside procedures, blood transfusion, treatment plan etc.)

Schedule of Activities

First Monday:

- Orientation at 8:30am
- Meet and Round with Your Team at 9am
- Clinical Decision-Making Exam at 1:15pm at SMH
- Academic Half Day through 4pm at SMH

Second Friday: Mid-Rotation Check-In with Dr. Readlynn

Last Friday: Podcast with Dr. Readlynn and other students on the rotation

2 weeks of days + 2 weeks of nights

- 1 student starts nights on the first Tuesday
- 1 student starts nights on the second Sunday

Didactic Activities

Please review the information on Blackboard for a complete overview of didactic activities.

Student Evaluations

Grades are determined by anonymous review of evaluations from residents and attendings the students worked with during their rotation. This review is done by a grading committee utilizing the grading rubric posted on Blackboard and final grades with comments are determined by Dr. Readlynn.

MEDEX6 Medicine Honors Acting Internship - FF Thompson

Course Information

Course Director Jennifer K. Readlynn M.D. Contact Person Benita Shelley benita shelley@urmc.rochester.edu Jennifer Readlynn jennifer readlynn@urmc.rochester.edu **Class Year Name** Medicine Honors Acting Internship - FF Thompson **Class Code** MEDEX6 **Block Length** 4 weeks Students 1 **Prereauisites** MED300 Medicine Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? FF Thompson - more info to come 1 week prior to rotation What time should students report? 8am Who should they report to? Alexi Bulloch, MD

Goal

ENROLLMENT CRITERIA: Students need to have received High Pass or Honors on medicine clerkship. Students who have not yet received a grade for their medicine clerkship can reach out to Dr. Readlynn to discuss their potential placement.

Course Description: The Medicine Acting Internship is an opportunity for students to expand their internal medicine knowledge and refine the clinical skills established in the Medicine Clerkship while assuming greater responsibilities for their patients. Each acting intern should act as the primary caregiver for their patients, documenting the history and physical findings, formulating differential diagnoses, developing initial management plans, writing orders, and communicating with the interdisciplinary team, including the patient's family. This rotation is also intended to prepare students for intern year outside of their caregiver role as well.

Goals

- Increase independence in providing care for hospitalized patients with complex medical and social issues, including recognizing the sick patient and when to ask for help.
- Develop skills in organization, efficiency, and prioritization to care for an increasing number of patients balanced with personal wellness.
- Improve communication skills in documentation, requesting consultation, working within an interdisciplinary team, and with patients and their families.
- Demonstrate the IICARE values of inclusion, integrity, compassion, accountability, respect, and excellence.
- Expand internal medicine knowledge, enhance skills in self-directed learning, and apply evidence-based medicine to individual patient situations.

 Develop skills in caring for patients from various experiences and practice reflecting on our patients' experiences.

Learning Objectives

By the end of the acting internship, students should be able to:

- Independently evaluate patients and synthesize information from an organized history, physical, and diagnostic tests into a problem representation and prioritized differential diagnosis specific to the patient.
- Identify indications for diagnostic testing within this specialty and write initial orders for co-sign.
- Deliver an accurate, concise, well-organized presentation with an initial management plan for common diagnoses and/or complications with supporting rationale.
- Write accurate and well-organized specialty-specific admit, progress, and operative notes where applicable; update progress notes daily.
- Recognize when a patient is sick vs. not sick, perform the initial evaluation, and develop an initial management plan while asking for help.
- Recognize appropriate disposition for a patient (when ready for discharge, needs ICU, suitable for the floor, prepared for a procedure, etc.).
- Prioritize tasks in the care of multiple patients in order to provide efficient, safe, and equitable care.
- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team.
- Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter services appropriately, avoids jargon).
- Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance.
- Understand team dynamics, limitations of the team, resources available, and where to go for help when needed.
- Recognize the social context in which a patient's presentation exists and utilize appropriate resources to provide comprehensive care.
- Demonstrate insight into one's own strengths and weaknesses, asking for help when needed and responding to feedback in a professional manner.
- Acknowledge ambiguity and be open to questions and challenges from the patient and team.
- Utilize evidence-based resources to answer clinical questions.
- Apply knowledge of anatomy, physiology, indications, contraindications, risks, and benefits relevant to common procedures in your specialty in discussions with patients and the student's team.
- Demonstrate the exemplary attitudes and humanistic behaviors expected of physicians, including integrity, reliability, compassion, accountability, ethical conduct, respect, anti-racism, cultural humility, selfless advocacy for patient and population health and appropriate management of potential conflicts of interest. (includes IICARE)
- Demonstrate how to obtain informed consent (basic surgical procedures, bedside procedures, blood transfusion, treatment plan etc.)

Schedule of Activities

- Orientation at 8:30am
- Clinical Decision-Making Exam at 1:15pm
- Academic Half Day through 4pm

First Day at FF Thompson is on the first Tuesday.

Second Friday: Mid-Rotation Check-In with Dr. Readlynn

Last Friday: Podcast with Dr. Readlynn and other students on the rotation

Due to travel associated with FF Thompson, there are no weekend responsibilities aside from makeup dates.

Didactic Activities

Please see information on Blackboard regarding didactics and assignments.

Student Evaluations

Grades are determined by anonymous review of de-identified evaluations from residents and attendings the students worked with during their rotation. This review is done by a grading committee utilizing the grading rubric posted on Blackboard and final grades with comments are determined by Dr. Readlynn.

MHU602 Clinical Ethics

Course Information

Course Director Marjorie Hodges Shaw J.D., Ph.D. Contact Person Chris Donnelly, 585-275-5800 christine donnelly@urmc.rochester.edu **Class Year Name** Clinical Ethics Class Code MHU602 **Elective Tags** Medical Humanities **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Department of Health Humanities and Bioethics, G-8011 What time should students report? By arrangement with Chris Donnelly Who should they report to? Nick Mercado

Goal

To learn the aspects of clinical ethics that are essential to good medical and surgical practice. This elective provides students the opportunity to participate in the clinical ethics consultation service, practice the skills necessary for discussing ethical dilemmas, reflect upon the evolution of clinical ethics, and consider how personal and professional values influence the practice.

Learning Objectives

Capabilities the student is expected to acquire in this elective:

- 1. Identify situations/cases in which ethics consultation is appropriate; identify the procedure for requesting an ethics consultation; describe who can request an ethics consultation
- 2. Demonstrate the process of reviewing the medical record in an ethics consultation; identify the relevant components of the medical record for an ethics consultation
- 3. Identify the relevant parties to be interviewed for the ethics consultation
- 4. Demonstrate the process of the ethics interview with patient, family, members of the care team, and others
- **5.** Identify ethical issues presented in clinical cases
- 6. Recognize the major methodologies for analysis of ethical problems in clinical practice
- 7. Utilize the major methodologies to analyze clinical cases
- 8. Distinguish ethical, legal, and clinical issues
- 9. Analyze the special problems that exist in cases involving difficult and/or non-compliant patients or families

- 10. Demonstrate familiarity with the relevant bioethics literature, including major journals and books applying ethics to the field of interest of the student
- 11. Prepare written summaries of ethical issues in clinical cases, including analyses, recommendations, and references to the literature
- 12. Identify and demonstrate the appropriate mechanisms for follow up in ethics consultation

Schedule of Activities

The schedule of teaching and clinical activities for the Ethics Consultation Service varies. Chris Donnelly, Secretary for the Department of Health Humanities & Bioethics will send each student on elective a welcome email message and a schedule for the rotation

Didactic Activities

The student is expected to be familiar with the learning objectives and requirements before beginning this elective experience. The student will attend all classes and teaching rounds conducted by the ethics faculty. The student will participate in all ethics consultations during the elective experience, including follow up. The student will research the issues around a clinical ethics case and present the case to the ethics team for discussion

Required Reading

Students enrolling in this elective should have access to a copy of Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine (8th Edition) by Jonsen, Siegler and Winslade and Resolving Ethical Dilemmas: A Guide for Clinicians (5th Edition) by Lo, available online through the Miner Library or in the Health Humanities & Bioethics office. Other bioethics literature, will be selected according to the current cases and student interest.

Student Evaluations

To receive a passing grade for this elective, the student will actively participate in the full activities of the ethics team. The student will contribute to discussions about cases and issues, and will participate in the preparation of written case summaries. Students will identify an issue in clinical ethics, research the literature, and deliver a presentation to the clinical consult team for discussion.

Course Information

Contact Person

Chris Donnelly, 585-275-5800 christine donnelly@urmc.rochester.edu **Class Year Name Clinical Ethics Research** Class Code MHU603 **Elective Tags** Medical Humanities **Block Length** 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

This elective includes two options for students interested in pursuing independent research in ethics. The goal of both options is to allow the third- or fourth-year student to identify an ethics topic of interest and conduct substantive independent research of that topic under the guidance of the ethics faculty.

If the student chooses option one, the student will produce a manuscript quality paper with input from faculty. (Example of a previous project: "End of Life Conflicts") This option gives the student the opportunity to identify an ethics topic of interest, critically survey the relevant ethics literature, develop an argument, hypothesis, or position, and develop this into a manuscript quality paper.

If the student chooses option two, the student will produce an annotated bibliography of at least **20** articles on a selected topic and a 2-page reflection on what the student learned and how the research will influence future practice. This option gives the student the opportunity to identify an ethics topic of interest, critically survey the relevant ethics literature, and summarize the literature in a useful form to facilitate additional learning.

For guidance on how to create an annotated bibliography, see http://guides.library.cornell.edu/annotatedbibliography.

Learning Objectives

The learning objectives include:

- **1.** Acquisition of knowledge about literature in bioethics and the skills to conduct research on ethical issues.
- 2. Acquisition of knowledge, including self-knowledge, about an ethical issue that affects the practice of medicine

and the medical profession.

- 3. Critical appraisal of literature pertaining to complex bioethical issues in healthcare domestically and/or abroad.
- 4. The ability to provide a framework to the structure the issues in such a way to facilitate ethical decision-making.

Schedule of Activities

ONE WEEK before beginning the elective the student must get approval of a topic and decide whether to complete option one or option two from the Department of Health Humanities & Bioethics (christine_donnelly@urmc.rochester.edu).

Didactic Activities

The student will conduct library research and either write a manuscript or create an annotated bibliography, as described.

Required Reading

To be determined in the course of the research.

Student Evaluations

To receive a Pass grade, the student must attend all scheduled meetings and meet all deadlines.

MHU604 Palliative Care

Course Information

Contact Person Gina Zinn 585-505-2282 Gina Zinn@urmc.rochester.edu **Class Year Name** Palliative Care Class Code MHU604 **Elective Tags** Inpatient Service Block Length 2 weeks (No exceptions) Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Prior to elective start date, student will receive an e-mail with their schedule, reporting location, syllabus, etc. What time should students report? see above Who should they report to? see above

Goal

***This is an advanced clinical elective available to 4th year students only. 3rd year students in the second half of the academic year (January forward) and who have completed all mandatory clerkships may request this elective by emailing Gina_Zinn@urmc.rochester.edu. ***

Learning Objectives

- Understand and explain the rationales for, value of and process of obtaining a Palliative Care consultation.
- Demonstrate the process of a palliative care consultation, including review of relevant medical situation, exploration of patient-family values, assessment of symptoms and relevant social, emotional, and spiritual issues.
- Describe several common symptoms among patients with serious illness, and approaches to their evaluation and management.
- Experience and reflect on the challenges and pleasures of attending compassionately to dying patients and their families.

Schedule of Activities

Scheduled Activities (these apply to non-holiday weekdays only):

Consultation on assigned new patients and daily follow-up on your patients, to include:

- patient-family evaluation (solo or with attending, per discussion)
- oral presentation to attending
- discussion and re-visit with attending
- documentation in eRecord with Palliative Care note templates

Daily team rounding (details vary, according to your attending/team practice)

Daily 4-1200/Palliative Care Unit "Huddle" at 9am (9:15am Wednesdays)

Wednesday morning Interdisciplinary Team Mtg 8am-9am (location to be determined; and/or Zoom)

Didactic Activities

- 2 one-hour Primer Review sessions (scheduled prior to start date)
- Participation in scheduled Wednesday conferences (none July-August)
- Schwartz Center Rounds 3rd Wednesday of the month
- Palliative Care Grand Rounds 4th Wednesday of the month

Required Reading

Students will receive a copy of the Palliative Care Primer early in the rotation, which they are expected to read, and to complete the associated workbook. There will be session(s) with a senior palliative care consultant to review the material in the workbook, and to discuss difficult palliative care challenges encountered. Students are expected to read about the palliative care issues encountered by their patients, and to prepare a brief report about a topic of interest by the end of the rotation.

Student Evaluations

Students will be evaluated by the palliative care attendings and nurse practitioners with whom they work with.

MHU615 Ind Creative/Research Projects in Medical Humanities and Bioethics

Course Information

Contact Person Chris Donnelly, 585-275-5800 christine donnelly@urmc.rochester.edu **Class Year Name** Ind Creative/Research Projects in Medical Humanities and Bioethics Class Code MHU615 **Elective Tags** Medical Humanities **Block Length** Students must contact Medical Humanities to identify project and required criteria and then submit as a Special Elective for advisory dean review and approval. Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

<u>GOAL</u>

This elective is designed to provide the individual student an opportunity to undertake research or creative work on a topic in Health Humanities and/or Bioethics under the supervision of a University of Rochester faculty member who has expertise in the student 's topic of interest. The elective may be 2-4 weeks in duration. No pre-requisites are needed. For example, students may develop a research paper on a medical topic informed by philosophy, sociology, anthropology, cultural studies, ethics, literature, etc., or develop a health humanities seminar or elective, or complete their project for the Pathway in Health Humanities/Clinical Ethics.

LEARNING ACTIVITIES

This is an independent research project for self-directed learners. Students will identify their topic of interest, identify a faculty mentor, ascertain their learning needs and then address them with appropriate resources under the guidance of their mentor.

Learning Objectives

- 1. Research and develop a project in the health humanities and/or bioethics (paper, anthology, film, performance, curricular piece) on a topic of particular interest to the individual medical student.
- 2. Create a "product" that will have been useful and important to the student -- i.e., a paper, a short film, an electronic module, elective or seminar (including, learning objectives, speakers, field trips and syllabus etc.)

Schedule of Activities

IMPORTANT NOTICE

Student proposal must be received by the Department of Health Humanities & Bioethics (<u>christine_donnelly@urmc.rochester.edu</u>) no later than 2 weeks prior to the start date of the elective for review and approval. Students will be notified as soon as the elective is approved. **Proposals submitted after that time will not be accepted unless there is a compelling reason to do so**. This decision is up to the course faculty.

Checklist to help the student stay on time:

Two months in advance of the course start date:

1. Determine the project topic and format.

2. Develop the proposal.

The proposal must include:

- **a.** Personal Education Goals what is the value of the project to you personally and/or as a physician-in-training?
- **b.** State 2 3 Learning Objectives
- C. Description of Project including:

-Title of project

-Dates for elective

-If you are a Pathways Student, please state this in your proposal.

-Focus of inquiry/work: (examples: of past student work: create a group of 5-10 artworks or poems, write a personal essay about a difficult ethical conversation between nurse and attending from two perspectives, write a paper on the history of healthcare reform in the US and the role of the AMA)

-Consideration of resources - do you need access to films, books, articles on this topic? Are

there organizations or individuals that will be involved? Do you need help to connect

with them?

-Plan of work - how will you use your time?

-Presentation of final Product (deliverable) - will you create a paper, an exhibit of images, a poster, a PowerPoint presentation, video, a collection of stories or reflections, an abstract, or something else?

<u>**4** weeks prior to the start date</u>, seek a faculty mentor/advisor of your choosing to provide knowledge, advice and support.

If you need help identifying a mentor, please contact the course director, Dr. Nick Mercado (<u>nicholas_mercado@urmc.rochester.edu</u>) as soon as possible.

____Share the Mentor guidelines with your mentor. This document is in the Course

Resources in Blackboard.

NO later than 2 weeks before the start of the elective:

1. If the mentor agrees to act in that capacity, the student must ask the mentor to provide a one-sentence email indicating they approve the proposal and agree to be the mentor. Direct the email to

Christine Donnelly@urmc.rochester.edu and Nicholas Mercado@urmc.rochester.edu.

 Concurrently, the student must send an email that includes the proposal, objectives and goals and mentor name directly to <u>Christine_donnelly@urmc.rochester.edu</u> who will share this information with Department faculty for approval of the project.

Didactic Activities

This is an independent research project for self-directed learners. Students will identify their topic of interest, identify a faculty mentor, ascertain their learning needs and then address them with appropriate resources under the guidance of their mentor.

Required Reading

As appropriate to the individual project of the student.

Student Evaluations

Final grading/evaluation

Students must submit their final product to their faculty mentor and to Chris Donnelly on the last day of the elective for grading. Faculty mentors may choose to meet with the student in person or may make other arrangements as needed.

The mentor gives a pass/fail grade that is sent via email to Christine Donnelly.

Student must also submit their final product to Christine_donnelly@urmc.rochester.edu on the last day of the elective, who will send it to the Department course faculty coordinator for final review.

MHU620 Virtual: History of Psychiatry

Course Information

Course Director Laurence B. Guttmacher M.D. Contact Person Dr. Laurence Guttmacher, Emeritus **Class Year Name** Virtual: History of Psychiatry **Class Code** MHU620 **Elective Tags** Medical Humanities Block Length Need Course Director's Approval Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report? Dr. Laurence Guttmacher, Emeritus What time should students report? Dr. Laurence Guttmacher, Emeritus Who should they report to? Dr. Laurence Guttmacher, Emeritus

Goal

The history of medicine, is filled with revealed truths that ultimately proved to be invalid. Students will better understand the social context of our current beliefs and practices, through reviewing historical approaches. This may be either through guided reading or working with primary source material. A written product will emerge at elective end.

Students are to contact Dr. Guttmacher at least two weeks prior to the course.

Content of the elective is subject to negotiation.

Course will be virtual and at the availability of Dr. Guttmacher.

Learning Objectives

To consider critically a number of key accepted theories and treatments offered in psychiatry, and understand them in their historical context.

To reflect on the ways in which an accepted theory and/or practice may become ultimately discredited as new technology, new scientific or empirical knowledge emerges.

To understand the ways in which diagnosis, treatment, and theories as to underlying causation are often socially and culturally dependent.

To recognize the cyclic features of certain approaches within the field of psychiatry: from categorical to individual diagnosis; from institutionalization to deinstitutionalization of the mad; from mindlessness to brainlessness; from theological to secular understanding of patients.

To learn about the key figures in the history of psychiatry.

To learn about the history of psychiatry in Rochester.

Schedule of Activities

This can take two forms, both of which would be subject to negotiation between Dr. Guttmacher and the student:

A. A project with primary research using the rich historical records of the Rochester Psychiatric Center. Since RPC's history closely parallels that of American institutional psychiatry, exploration of commitment papers, data on admissions and discharges, etc can further our understanding of the history of American psychiatry.

B. A reading elective exploring in depth some aspect of the history of psychiatry.

Dr. Guttmacher will meet at least twice a week with the student engaged in this elective.

In either case, the rotation should lead to a presentation of the work, either to the Corner Society or to RPC and/or a paper.

Didactic Activities

See above

Required Reading

See above. Dependent on the project.

Student Evaluations

Dr. Guttmacher will offer feedback on the final product which emerges from the rotation.

MHU621 Indelible Impressions-African American Experiences and Resilience

Course Information

Contact Person

Class Year Name Indelible Impressions-African American Experiences and Resilience Class Code MHU621 **Elective Tags** Medical Humanities **Block Length** 4 Sessions (Fridays) Feb 7,14,21 and 28 Must attend all 4 sessions Students 40 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year Where should students report? Adolph Aud. or Case Method Room What time should students report? 12:15 pm and sign the attendance roster Who should they report to? Adrienne Morgan, PhD

Goal

Training to prepare students, faculty and staff to have respectful and effective interaction with diverse patients and peers, often focuses on the worldview of others, bias and reaction to difference. While training can enhance the awareness, competence and cultural humility of participants, there is seldom a focus related to preparing and empowering participants to respond when observing, hearing or being on the receiving end of bias. The 2016 Indelible Impressions Elective will focus on skills to respond when observing or being on the receiving end of bias. In particular, the participants will explore when and how to respond to protect vulnerable individuals, to redress biased and/or misleading comments and situations especially when there is a power differential.

To have a common frame of reference, cases and trigger scenarios from experiences of members of the African Diaspora will be presented and discussed. Elective participants will have the opportunity to present personal scenarios for the discussion.

After participating in the elective students will have a broader appreciation for the unique challenges select members of the African Diaspora in America have experienced and how these challenges may influence health and care delivery.

Learning Objectives

• Recognize how bias has an influence on health and wellness.

• Awareness of personal biases, what underlies personal reactions and how both may influence your care delivery.

· Gain insight regarding the worldview of alleged offenders.

• Increase skills and confidence regarding when and how to respond to protect vulnerable individuals, to redress biased and/or misleading comments and situations especially when there is a power differential.

Schedule of Activities

Elective Requirements

Attend all four sessions – Fridays, February 5, 12, 19 and 26

Participate in the discussion

• Submit a one page reflection for each session describing insight gained and impact on approach to patients, care delivery and comfort with responding to bias.

Deadlines for submitting the reflection assignments

Week I Monday, February 8, 2016 Week II Monday, February 15, 2016 Week III Monday, February 22, 2016 Week IV Monday, February 29, 2016

E-mail reflection assignments to: brenda_lee@urmc.rochester.edu

Didactic Activities

Update Pending

Required Reading

No supplementary reading will be assigned

Student Evaluations

• Years III and IV students – will receive one week of elective credit for completing the seminar.

MHU627 Medicine and Literature: Posthuman Life in the Age of Applied Science

Course Information

Course Director Marjorie Hodges Shaw J.D., Ph.D. Contact Person Chris Donnelly (275-5800) christine donnelly@urmc.rochester.edu **Class Year Name** Medicine and Literature: Posthuman Life in the Age of Applied Science Class Code MHU627 **Elective Tags** Medical Humanities **Block Length** 2 Weeks Students 16 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report?

What time should students report?

Who should they report to? Margie Shaw or Erik Larsen

Goal

Basic Course Information: The Reading Elective will be held entirely online, through Zoom meetings (students are not required to be in Rochester for the course, but must attend Zoom meetings). MHU 627 is held over two consecutive weeks in the Spring Semester. There will be no class meetings during the first week of the course, in order to allow students to complete reading assignments. During the second week, the course will meet three times for 90 minutes / session (Group 1 - Monday 4/17 10:00-11:30; Wednesday 4/19 10:00-11:30; Friday 4/21 10:00-12:00 Group 2 - Monday 4/17 2:00-3:30; Wednesday 4/19 1:00-2:30; Friday 4/21 1:00-3:00). In addition to completing reading assignments for each session, students will submit short papers to the instructors. One of the following grades will be assigned for the course: Pass, Pass Marginal, Fail, Incomplete. Only third and fourth year medical students may enroll in reading electives.

Course Description:

For the last two centuries, the applied sciences have transformed our sense of humanity's limitations and possibilities. Modern medicine made this revolution palpable and immediately personal. By intervening directly in our biological processes and bodily structures, physicians and biomedical researchers began to change human bodies, and mostly for the better. And yet, these medical miracles, such as organ transplants, vaccines, and pacemakers, raised questions about the new human self emerging from scientific experimentation: Are bodies transformed by and integrated with machines still fully human bodies? Are the selves we identify with these hybrid bodies human selves? In the future, will the bodies we currently recognize as human be replaced with something superior and new—a "posthuman" self?

MHU 627 will explore social and artistic responses to these questions by studying 3 major works of science fiction. The concerns these novels explore are more relevant today than they were in 1818, the year Mary Shelley published *Frankenstein*.

Learning Objectives

Learning Objectives:

-Recognize ethical, personal, and social concerns surrounding the application of medical science in major works of modern speculative fiction.

-Reflect on connections between these concerns and contemporary fears about new technologies, such as CRISPR.

-Appreciate literature as a distinctive mode of reflection by recognizing how formal properties explore and express themes.

-Conduct close readings of assigned texts, demonstrating careful attention to detail through class discussion and written assignments.

-Reflect on how current innovations in biomedicine may affect the personal, ethical, and social situations in which students will practice medicine.

-Develop convincing and well-supported interpretations of the books under study in clearly written assignments.

Schedule of Activities

-Students should complete all course readings prior to the first class meeting of the Reading Elective (4/17).

-Prior to each class meeting, students will submit a brief analysis paper (2 pages) about a major theme or formal element of the text under study. In total, students will produce 6 pages (2 pages/book) of written work for the Elective (posted to Blackboard).

Required Reading

Books for spring 2023:

Margaret Atwood Oryx and Crake

Jeanette Winterson Frankissstein: A Love Story

Stanislaw Lem The Truth and Other Stories

Student Evaluations

To receive a pass grade, the student must attend all scheduled meetings and must meet all deadlines

MHU650 Ethics in a Clash of cultures: A Pediatric focus

Course Information

Contact Person Chris Donnelly 275-5800 christine donnelly@urmc.rochester.edu **Class Year Name** Ethics in a Clash of cultures: A Pediatric focus Class Code MHU650 **Elective Tags** Medical Humanities **Block Length** 2 Students 12 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Further the development of HCP's who can bring cultural sensitivity and ethical practices in their work with children and families from other cultures and backgrounds.

Learning Objectives

- 1. Reflect on the role of parental authority in pediatric decision-making: are there boundaries?
- 2. Discuss and analyze the concept of "best interest of the child ".
- 3. Discuss the impact of culture on parental decision-making and compliance with medical treatment.
- 4. Consider what constitutes child abuse in light of differing cultural norms.

Schedule of Activities

Each day students will be assigned book chapters and discussion questions. On the days we don't meet in class there is a discussion board to discuss the day's questions with classmates.

3 live zoom class session-

Monday, January 3, 2022 - 3 - 5 pm

Thursday, January 6, 2022 - 3 - 5 pm

Friday, January 14, 2022 - 12 - 2 pm

Didactic Activities

Overview of Hmong culture from an anthropologist

Short videos describing key concepts of pediatric ethics.

This elective is open to Nurse Practitioner students in the Pediatric and Family Nurse Practitioner Tracks at the UR SON.

Required Reading

Fadman, Ann. The Spirit Catches you and you fall down: A Hmong child, her American doctors, and the collision of two cultures.

Student Evaluations

1. Active and meaningful participation in class discussions that contributes to the learning of all.

2. A final short (10 minute) presenation to classmates on a pediatric topic of personal interest.

MSK600 Orthopaedic/Musculoskeletal Outpatient Elective

Course Information

Course Director Benedict F. DiGiovanni M.D. Contact Person Jennifer Worden@urmc.rochester.edu **Class Year Name** Orthopaedic/Musculoskeletal Outpatient Elective Class Code **MSK600 Elective Tags** Patient Care **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

To provide an overview of musculoskeltal medicine in an outpatient setting and to become familiar with diagnosis and treatment of common Orthopaedic problems.

Learning Objectives

By the end of the rotation the student should be able to:

-Become familiar with the fundamentals of taking an accurate history from patients with musculoskeletal problems. -Learn basic physical examination of the musculoskeletal system.

-Become familiar with the vocabulary of fractures and to be able to describe clinical and x-ray findings.

-Apply splinting and casting techniques.

-Learn situations where an Orthopaedics consultation is necessary.

-Understand when surgical intervention is in the patient?s best interest and when it is not and that different treatment methods can be appropriate for the same conditions in different patients.

-Become aware and evaluate the functional outcomes possible with modern techniques in trauma and reconstructive surgery.

-Assess the functional demands of the amateur and higher level athlete including their rehabilitation.

Schedule of Activities

Students are assigned to one on one preceptors in the Westfall Building D Musculoskeletal unit with a balanced exposure to subspecialty service from 8:00 AM to 5:00 PM on weekdays. Students will be assigned to the Emergency Room one evening/week as part of their regular schedule to work with the Orthopaedic Resident in active care and procedural skills.

Didactic Activities

-Daily morning conference schedules are posted outside the Plato Schwartz Library.

-Grand Rounds held every first Thursday at 7:00 a.m.and is required.

-Daily fracture rounds, presentations of the previous day?s Emergency Room fractures, at 7:15 AM (except Thursdays) is also required.

-<u>Attendance at resident conferences at 6:30 AM is required.</u> Attendance at Monday Trauma conference at 6:30 AM is required. Other attendance depends on topics. This will be discussed at the start of the rotation. -Three Core textbooks are loaned to students, serve as reading reference for various musculoskeletal disorders

encountered during elective.

-The musculoskeletal pathophysiology of patients in the out patient Musculoskeletal Building will be used to its fullest emphasizing positive physical findings in the musculoskeletal system.

-Students will have the opportunity to independently obtain histories, examine and present patients for review to their preceptor.

-Injecting and aspirating of joints will be demonstrated including best techniques and approaches. Individual discussion with the preceptor will focus on differential diagnosis, assessment and evaluation, cost effective workup and treatment options, and coordination of the patient's overall care with primary care physician.

Required Reading

Students are strongly encouraged to read and refer to the 3 Core Textbooks loaned to them:

-Hoppenfeld's text titled Physical Examination of the Spine and Extremities

-Bernstein's textbook titled Musculoskeletal Medicine

-American Academy of Orthopaedic Surgeons textbook titled Essentials of Musculoskeletal Care

Students are welcome to browse amongst the collection of the Plato Schwartz Library as well.

Student Evaluations

Evaluations of students will be based on their performance with emphasis upon interests, conscientiousness, interpersonal skills with patients and mentors, and presentation of patients.

MSK601 Orthopaedic Surgery Externship

Course Information

Course Director Benedict F. DiGiovanni M.D. Contact Person Bonnie Schuster bonnie schuster@urmc.rochester.edu **Class Year Name** Orthopaedic Surgery Externship Class Code **MSK601 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care, Teaching Block Lenath 4 weeks Students 6 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report?

What time should students report?

Who should they report to? Assigned Resident Team

Goal

To provide an overview of Orthopaedic surgery on an active inpatient services including pre and postoperative evaluation and exposure to outpatient care of the musculoskeletal system.

Learning Objectives

By the end of the rotation the student should be able to:

-Provide an overview in the field of Orthopaedic surgery and its division, i.e. Adult Reconstructive, Hand, Spine, Sports Medicine, Pediatrics, Tumor, Trauma, and Foot and Ankle.

-Learn to reduce common fractures and principals of casting and fracture care.

-Become familiar with the fundamentals of taking an accurate history from patients with musculoskeletal problems. -Become familiar with the vocabulary of fractures and to be able to describe clinical and x-ray findings.

-Learn basic physical examination of the musculoskeletal system.

-Assist in the Operating Room and become familiar with the objectives of modern techniques in trauma and reconstructive surgery.

-Assist in the care of athletes and assist in interventions that restore their functional return to activity. This includes their rehabilitation.

Schedule of Activities

Students are assigned to be part of the team of an inpatient service in Orthopaedics. Rotations are usually 4 weeks long and the student is part of the team. Students are expected to be present for all morning conferences, grand rounds and labs. Students will be expected to participate in all aspects of Orthopaedic care of patients on their service. This will include preoperative, intraoperative and postoperative care. They are encouraged to also participate in the orthopaedic care of ambulatory patients by their presence with residents and preceptors in the Musculoskeletal Unit. Assignments to specific subspecialty teams is done by the course director, Dr DiGiovanni. Preferences noted in

advance will be given consideration but not guaranteed. There will be emergency orthopeadics care with night coverage assigned, about once/week. Please note that the hospital, clinic and surgery center are in differnt areas of the city and transportation will be required.

Didactic Activities

-Daily morning conference schedules are posted outside the Plato Schwartz Library. Attendance is required. -Grand rounds are held the first Thursday of each month at 7:00 AM.

-Daily fracture rounds or presentation of the previous day's Emergency Room cases take place at 7:15 AM Monday thru Friday, except Thursday as posted.

-Students will be expected to read and present information on the basic pathophysiology of orthopaedic illnesses that they encounter in the Operating Room and on their inpatients. Physical exams and physical findings of orthopaedic conditions will be emphasized.

-Three Core textbooks are available to students, serve as reading reference for various musculoskeletal disorders encountered during elective.

Required Reading

Students are welcome to browse amongst the collection of the Plato Schwartz Library.

Student Evaluations

Evaluations of students will be based on their performance with emphasis upon interests, conscientiousness, interpersonal skills with patients and mentors, and presentation of patients.

MSK602 Inpatient Orthopaedic Surgery Elective

Course Information

Course Director Benedict F. DiGiovanni M.D. **Contact Person** Jennifer Worden@urmc.rochester.edu **Class Year Name** Inpatient Orthopaedic Surgery Elective **Class Code MSK602 Elective Tags** Inpatient Service **Block Length** 2 weeks Students 2 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Course Description

2 week experience in the Department of Orthopaedics

Location

Strong hospital or Highland hospital

Orthopaedic trauma call experience: Strong Hospital

Focus on acute treatment, operative and nonoperative, of orthopaedic disorders and injuries

2 weeks on one orthopaedic surgical subspecialty service

2 trauma calls at Strong hospital - Level one trauma center

Learning Objectives

Objective

To better understand principles and treatment methods of the surgical subspecialty of orthopaedic surgery

To learn the principles of treatment of orthopaedic emergencies

To better understand the operative treatment of orthopaedic disorders and injuries

To better understand the nonoperative treatment of orthopaedic injuries

Schedule of Activities

One weekday evening, work the following day (6pm to 11pm), and one weekend overnight (Friday night or Saturday day)

Weekday morning educational conferences with residents (typically M thru F 6:30am to 7:30am)

Morning inpatient rounds with orthopaedic surgery residents on the subspecialty service

MSK604 Orthopaedic Surgery Research and Independent Study Elective

Course Information

Course Director Benedict F. DiGiovanni M.D. Contact Person

Class Year Name Orthopaedic Surgery Research and Independent Study Elective Class Code **MSK604 Elective Tags** Patient Care **Block Length** 4 weeks Students 0 Prerequisites MSK601 Orthopaedic Surgery Externship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report?

What time should students report?

Who should they report to?

Goal

Goals of this elective is to work on UR orthopaedic research (new or current project), while attending and participating in orthopaedic learning opportunities including conferences departmental and resident specific conferences. Daily research activity is expected, along with active participation in Department of Orthopaedic grand rounds and Quality Assurance conferences, and daily weekend resident morning conferences. *Must have directors pre-approval to sign up for this course.

Learning Objectives

Learning opportunities and required conferences: Orthopaedic Grand Rounds and Quality Assurance conference once per month, daily weekday morning conferences with the orthopaedic surgery residents.

Schedule of Activities

Two week blocks from Sept-March

Required Reading

-Hoppenfeld. Surgical Exposures in Orthopaedics - The Anatomic Approach

-Hoppenfeld Physical Examination of the Spine and Extremities.

-Skeletal Trauma. Browner and Jupiter

-OrthoBullets

-ACGME orthopaedic surgery milestones

Course Information

Course Director Martha Johnson Gdowski Ph.D. Contact Person Martha Gdowski, x5-6592 Martha Gdowski@urmc.rochester.edu OR Brittney Link, x3-1884 Brittney Link@urmc.rochester.edu **Class Year Name** Teaching Tutorial and Review in Human Structure **Class Code** NAN601 **Elective Tags** Teaching **Block Length** 2 weeks Students 10 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year Where should students report? 1-9576 at 8 AM on the morning of the first day of the elective or as indicated on the HSF schedule. What time should students report? 8:00 a.m. Who should they report to? Martha Gdowski or Brittney Link

Goal

Provide lab instruction, participate in small-group teaching, attend lectures, and assist in preparing students to be successful on examinations in our Phase 1 Human Structure and Function course. This elective is designed for students who wish to review their anatomy, histology and physiology, or for students who wish to gain teaching experience in anticipation of an academic career.

Learning Objectives

By the end of the rotation the student should be able to:

- · Assist students in identifying key anatomical structures as pointed out in the anatomy dissector.
- Assist students in identifying histologic structures as pointed out in the histology lab manual.

Help students with dissection in the anatomy lab and assist students as they review material as necessary during designated self-study periods.

- · Assist students in identifying key histologic features on digitized images.
- Share with students the clinical relevance and applied importance of key histological, anatomical, and physiological concepts.
- Tutor students outside of formal class periods who need additional help learning human structure and function.
- · Serve as an effective tutor in small group activities (PBL, problem sets, physiology lab exercises).

- · Foster teamwork, emphasizing the importance of this skill within a health care delivery environment.
- Convey the clinical context for content that is being studied in anatomy, histology, and physiology strands of HSF.

Schedule of Activities

Attend all class sessions according to the following class schedule: Monday - Friday, 8-12; Mondays 1-5 (as scheduled); and Fridays 1-5 (as scheduled). Outside tutoring of students may be required. Additional afternoon sessions for reviews may be required.

Course Dates:

Block 1: August 19 - September 13; Material Covered: Cell/Tissue Sturcture and Function; Transport Processes; Nerve and Muscle Physiology; Musculoskeletal Anatomy

Block 2: September 16 - October 4; Material Covered: Cardiovascular and Endocrine Systems; Thoracic Anatomy; Immune Organs

Block 3: October 7 - October 25; Material Covered: Respiratory System; Brain and Cranial Nerves; Special Senses

Block 4: October 28 - November 8; Material Covered: Gastrointestinal and Reproductive Systems

Block 5: November 11 - November 26; Material Covered: Renal and Reproductive Systems

*Students often inquire about the potential to tutor a PBL. We are happy to accommodate this request, providing that the student is available to tutor all sessions of the case. The schedule of PBL cases for Fall 2024 follows:

PBL 1: 9/3, 9/6, 9/11

PBL 2: 9/19, 9/23, 9/24

PBL 3: 9/26, 9/30, 10/1

PBL 4: 10/14, 10/16, 10/22

PBL 5: 11/1, 11/6

PBL 6: 11/14, 11/18, 11/20

No more than 2 days absence are permitted during a 2 week elective. If you need to miss additional days, you must either arrange to make that time up during different weeks or reschedule your NAN elective time for an interval that works with your schedule.

Note that the two week elective may be split into two non-consecutive weeks. You must contact the registrar to arrange a two-week elective that differs from the available options.

Didactic Activities

Students are expected to read the Anatomy Dissector (copy provided), review in an Anatomy Atlas the material to be covered prior to each day's dissection, review Histology exercises related to lab, and review Physiology material relevant to physiology exercises. Students also attend all Human and Structure Function lectures. During examination periods, the students will help organize review sessions outside of the scheduled course review periods and help to proctor the examinations.

Required Reading

Relevant dissection instructions in the Dissector (provided), appropriate lab exercises in the histology manual (provided) and appropriate chapters in an Anatomy, Histology and Physiology textbook (texts you use in the course or one on open reserve in the Miner Library).

New as of NAN601 2017, there are NAN601 Histology Tutor Guides that has been prepared for each histology laboratory. This allow NAN601 students to review histology material prior to the histology laboratories. This has been designed to assist you in teaching this material effectively in laboratory and student review sessions. Since the active process of searching for and finding structures that are required to be located in the histology laboratory is an integral part of student acquisition and retention of this information, the NAN601 Histology Tutor Guides are NOT to be shared with students in HSF under any circumstances.

Student Evaluations

To receive a grade of Pass, students must attend all required lectures and lab sessions, and come prepared to assist students with their laboratories and their learning of human structure and function. When appropriate, tutor students outside of scheduled class periods, prepare prosection material, and assist the faculty in setting up lab practical exams.

No more than 2 days absence are permitted during a 2 week elective. If you need to miss additional days, you must either arrange to make that time up during different weeks or reschedule your NAN elective time for an interval that works with your schedule.

Note that the two week elective may be split into two non-consecutive weeks. You must contact the registrar to arrange a two-week elective that differs from the available options.

Student evaluations in NAN601 may not be available until the end of HSF.

Course Information

Course Director Joel S. Pasternack M.D., Ph.D. **Contact Person** Joel Pasternack, M.D., Ph.D. (joel pasternack@urmc.rochester.edu) Julie Pasternack, M.D. (julie_pasternack@urmc.rochester.edu) **Class Year Name** Medical Procedures in Anatomy Lab **Class Code** NAN604 **Elective Tags** Research-Basic science **Block Length** 1 week Students 12 Prerequisites (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship , SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Fifth floor Anatomy Lab What time should students report? Monday at 9:00 a.m. Who should they report to? Dr. Pasternack

Goal

Revisit human anatomy as it relates to successfully and safely performing medical procedures. Practice a variety of procedures on lightly embalmed cadavers in anatomy lab.

Learning Objectives

The student should be able to perform a variety of medical procedures on the lightly embalmed cadaver model. The student should learn to use the equipment necessary to safely and effectively perform the procedure.

Specifically the student should learn to do:

- 1. Endotracheal intubation
- 2. Cricothyroidotomy
- 3. Tracheostomy
- 4. Chest tube placement
- 5. Central Venous line placement internal jugular, subclavian, femoral
- 6. Joint aspirations: hip, knee, ankle, shoulder, elbow, wrist, great toe mtp
- 7. Anesthetic nerve block placement- face, wrist, fingers, ankle, toes, femoral
- 8. Lumbar puncture
- 9. Assessment of traumatic laceration using topographical anatomic anticipation
- 10. Exploration of extremity lacerations, identification and repair of injured structures

In addition, students who are planning a residency in a surgical specialty will have an opportunity to do procedures related to their area of interest. Prior discussion with Course Director advised to optimize experience.

Schedule of Activities

This is a week long cadaver laboratory elective.

Course begins Monday morning at 9 am and will start with Central Lines and Joint aspirations as these procedures use the ultrasound which is best done prior to any incisions. By the end of the second day we will have addressed procedures 1-8 above. The rest of the week will be devoted to specific procedures determined by student interest.

Note: in this elective the students will suture closed the wounds created for procedures or dissections.

Didactic Activities

At the end of the week, each student will give brief presentation (15 minutes) on a specific procedure describing the indications, the relevant anatomy, and the technique.

Required Reading

Recommended textbooks: Roberts and Hedges' Clinical Procedures in Emergency Medicine Essential Anatomy Dissector (by J.T. Hansen) Clinically Oriented Anatomy (by K.L. Moore & A.F. Dalley) Atlas of Human Anatomy (by F.H. Netter) Surgical Exposures in Orthopedics –the anatomic approach (by S. Hoppenfeld, & P. deBoer)

Student Evaluations

Students will be evaluated based on their demonstrated ability to do the procedure and explain the relevant anatomy.

NEU610 Ambulatory Neurology

Course Information

Course Director Melanie K. Braun M.D. Contact Person Megan Derry, 275-0408 megan derry@urmc.rochester.edu **Class Year Name** Ambulatory Neurology **Class Code NEU610 Elective Tags Outpatient Service, Patient Care** Block Length 2 weeks - Must get prior approval, please contact Megan Derry Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Students will receive schedule detailing where and when to report on the first day. What time should students report? Per schedule. Who should they report to? Per schedule

Goal

To learn how to evaluate and treat neurological disorders seen in an outpatient neurology practice.

This elective is offered on a limited basis and is reserved for students seriously considering a career in adult neurology. Prior approval from the course director is required before scheduling this elective.

Learning Objectives

- 1. To learn how to evaluate and treat common neurological outpatient problems, including headache, dizziness, back and neck pain, and peripheral nerve disorders.
- 2. To learn how to evaluate and treat disorders seen in a subspecialty neurology outpatient clinic, including epilepsy, multiple sclerosis, neuromuscular disorders, movement disorders, and cognitive neurology.

Schedule of Activities

The student will spend approximately 7-8 half-days each week in one of the subspecialty or general neurology outpatient clinics.

Required Reading

- 1. Daroff R, Jankovic J, Mazzotta J, Pomeroy S. Bradley's Neurology in Clinical Practice.
- 2. Brazis P, Masdeu J, and Biller J: Localization in Clinical Neurology.

Student Evaluations

The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade.

Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

NEU612 General Neurology Consultation Service

Course Information

Course Director Melanie K. Braun M.D. Contact Person Megan Derry, 275-0408 megan derry@urmc.rochester.edu **Class Year Name** General Neurology Consultation Service **Class Code NEU612 Elective Tags** Consultation Service, Teaching Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Student will attend Morning Report in Room 5-5220 (Garvey Room) on the first day. What time should students report? 7:30 am Who should they report to? Resident they are assigned to

Goal

To learn the principles and skills underlying the recognition and management of neurologic diseases a general medical practitioner is most likely to encounter in the inpatient setting.

Learning Objectives

- 1. To develop skills in obtaining complete neurological histories, in performing accurate neurological examinations, and in selecting appropriate therapies on a general neurology consultation service in a tertiary referral center.
- 2. To gain in-depth knowledge of major categories of neurological disease, with special emphasis on stroke, epilepsy, coma and mental status changes, movement disorders, neuromuscular disorders, demyelinating disorders, infections of the nervous system, tumors of the nervous system, head trauma and dementia.
- **3.** To gain experience in the appropriate ordering and interpretation of neurodiagnostic tests, including head and spine CT and MR scans, EEG, lumbar puncture, and EMG and nerve conduction studies.
- 4. To develop and improve written and oral communication skills.

Schedule of Activities

The General Neurology Consultation Service provides neurology consultations to the medical and surgical services, emergency room and intensive care units. The service consists of a neurology Attending, a neurology PGY-3,

sometimes an intern, and a medical student.

Each student will evaluate, present and write-up approximately 1-2 new patients per day and will be responsible for following their patients during hospitalization. The student on the neurology consultation service will be responsible for obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to them. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated.

Didactic Activities

- Morning report
- Neurology Grand Rounds

Required Reading

- 1. Daroff R, Jankovic J, Mazzotta J, Pomeroy S. Bradley's Neurology in Clinical Practice.
- 2. Brazis P, Masdeu J, and Biller J: Localization in Clinical Neurology.

Student Evaluations

The final grade in the General Neurology Consultation Service is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

NEU615 Child Neurology

Course Information

Course Director Robert I. Thompson-Stone M.D. Contact Person Megan Derry 275-0408 megan derry@urmc.rochester.edu **Class Year Name** Child Neurology **Class Code NEU615 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Teaching Block Lenath 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Student will receive schedule detailing where and when to report at least one week prior to starting. What time should students report? see above Who should they report to? see above

Goal

To become familiar with the important characteristics of the neurological history and examination in children of various ages, and learn how to evaluate and treat neurological disorders seen in the inpatient and/or outpatient setting.

Learning Objectives

PATIENT CARE

- 1. Demonstrate the ability to gather a detailed, complete, and accurate neurological history in children. (PE-1)
- 2. Learn how to complete a neurological examination in neonates, infants, toddlers, and children. (PE-1)
- 3. Verbally present a complete or focused history and examination in an appropriately succinct manner, and write

notes in the medical record. (C-2) MEDICAL KNOWLEDGE

- Learn to localize common pediatric neurologic symptoms to specific areas of the nervous system. (NSS-1, D-1)
- 2. Learn to appropriately order and interpret the results of neurologic tests including neuroimaging (MRI and CT scan of the brain and spinal cord), EEG, and lumbar puncture. (PE-2)
- Demonstrate understanding of the clinical presentation, work-up, and management for common inpatient and/ or outpatient pediatric neurological conditions, most notably seizures/epilepsy, migraine/headache, developmental delay/disability. (D-1, T-2, CRM-1)

1. Utilize evidence-based medicine in the care of individual patients by exhibiting intellectual curiosity, defining learning needs, and reviewing the medical literature to help inform assessment and management plans.

(SC-2, TSM-1, CRM-1, IS-1) PROFESSIONALISM

1. Demonstrate honesty, compassion, empathy, reliability, and respect for all patients, families, and members of the health care team. (C-1, C-2, PH-1)

Schedule of Activities

Depending on the timing of the elective and resultant outpatient availability, the students will be assigned outpatient child neurology clinics, or to the inpatient child neurology service (or a combination). If the student has a strong preference for a primarily inpatient or outpatient rotation, they should contact the course director at the time of registering for the elective.

<u>Outpatient experience</u>: The student will be assigned approximately 5-7 half-days per week in general child neurology and subspecialty clinics. On the first day of the rotation, the student will report to 200 East River Road clinic and will usually meet briefly with Dr. Thompson Stone in the morning or around Noon. The student will attend all of the outpatient child neurology clinics assigned to them. The clinics meet Monday - Friday from 8:00 or 8:30 am to 12:00 noon and from 1:00 - 5:00 pm. The student will obtain the history and examine at least one new patient each clinic session. In addition, they will see a number of patients for follow-up visits. All patients will be reviewed with an attending child neurologist. The student may be asked to write a note for each patient seen.

Inpatient experience: The student will be assigned to the inpatient child neurology service, which typically consists of a child neurology attending, child neurology resident, and neurology resident. The student should contact their senior child neurology resident on the first day at 8 AM to meet up with the team. The student will evaluate, present and write-up approximately 1 new patient per day and will be responsible for following their patients during hospitalization. The student will be responsible for obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to them. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated.

Didactic Activities

Child Neurology Division conference on Tuesdays from 8 – 9 AM

Patient of the Week conference on Thursdays from 8:30 - 9 AM

Neurology Grand Rounds on Wednesday from Noon – 1 PM (K307)

Required Reading

Pina-Garza J, James K. Fenichel's Clinical Pediatric Neurology: A Signs and Symptoms Approach.

Student Evaluations

<u>The elective is graded Pass/Fail.</u> The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

NEU617 Neuro-Oncology Elective

Course Information

Course Director Lauryn E. Hemminger M.D. Contact Person Megan Derry 5-0408 megan derry@urmc.rochester.edu **Class Year Name** Neuro-Oncology Elective Class Code **NEU617 Elective Tags** Consultation Service, Outpatient Service, Patient Care Block Lenath 2 weeks - Must get prior approval before scheduling Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Wilmot Cancer Ctr, Room 2-0767 What time should students report? 8:30 AM Who should they report to? Lauryn Hemminger MD.

Goal

To learn the principles and skills underlying the recognition and multi-disciplinary management of adult brain tumors, central nervous system metastases and neurologic complications of cancer.

Learning Objectives

- 1. To gain in-depth knowledge about the etiology, pathogenesis, and management of primary and secondary adult brain tumors.
- To gain exposure to the multidisciplinary tools used in the assessment and treatment of brain tumors including neurosurgical procedures, radiation treatment techniques, pharmacologic management, and neuropathologic evaluation of surgical specimens.
- 3. To gain experience in recognizing, evaluating and treating neurologic complications of cancer.
- 4. To develop communication skills with a focus on discussing prognosis, treatment options and experimental therapies with cancer patients.

Schedule of Activities

Outpatient Activities

Each student is assigned to ~5 half-days of outpatient clinic where they will see new patients as well as selected follow-up patients. They will be responsible for evaluating, presenting and writing notes for the patients they see in the clinic. While in the clinic, the student will have an opportunity to interact with providers from neuro-oncology including

nursing and advanced practice providers, as well as providers from neurosurgery, radiation oncology, and neuropalliative care.

Inpatient Activities

The student will have the opportunity to see inpatient consultations on patients with newly diagnosed brain tumors or other neurologic complications of cancer requiring hospitalization. They will continue to the follow the patient during their elective as indicated.

Didactic Activities

Students will participate in two brain tumor specific conferences each week to gain exposure to the multi-disciplinary management of primary and secondary brain tumors. Additionally, the student will be provided with additional primary literature and didactic material by Dr. Hemminger prior to the first week of their rotation.

Required Reading

- Buckner, Jan C., et al. "Radiation plus procarbazine, CCNU, and vincristine in low-grade glioma." *New England Journal of Medicine* 374.14 (2016): 1344-1355.
- Grommes, Christian, et al. "Comprehensive approach to diagnosis and treatment of newly diagnosed primary CNS lymphoma." *Neuro-oncology* 21.3 (2019): 296-305.
- Hegi, Monika E., et al. "MGMT gene silencing and benefit from temozolomide in glioblastoma." New England Journal of Medicine 352.10 (2005): 997-1003.
- Mellinghoff, Ingo K., et al. "Vorasidenib in IDH1-or IDH2-Mutant Low-Grade Glioma." New England Journal of Medicine (2023).
- Miller, Julie J., et al. "Isocitrate dehydrogenase (IDH) mutant gliomas: A Society for Neuro-Oncology (SNO) consensus review on diagnosis, management, and future directions." *Neuro-oncology* (2022).
- Mohile, Nimish A., et al. "Therapy for diffuse astrocytic and oligodendroglial tumors in adults: ASCO-SNO guideline." (2022): 358-383.
- Stupp, Roger, et al. "Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma." *New England journal of medicine* 352.10 (2005): 987-996.
- Stupp, Roger, et al. "Effect of tumor-treating fields plus maintenance temozolomide vs maintenance temozolomide alone on survival in patients with glioblastoma: a randomized clinical trial." *Jama* 318.23 (2017): 2306-2316.
- van den Bent, Martin J., et al. "Adjuvant and concurrent temozolomide for 1p/19q non-co-deleted anaplastic glioma (CATNON; EORTC study 26053-22054): second interim analysis of a randomised, open-label, phase 3 study." *The Lancet Oncology* 22.6 (2021): 813-823.
- Vogelbaum, Michael A., et al. "Treatment for brain metastases: ASCO-SNO-ASTRO guideline." (2022): 331-357.

Student Evaluations

The final grade is based on the narrative evaluations of clinical performance by neuro-oncology faculty. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

NEU618 Stroke Consultation Service Elective

Course Information

Course Director Melanie K. Braun M.D. Contact Person Megan Derry 275-0408 megan derry@urmc.rochester.edu **Class Year Name** Stroke Consultation Service Elective Class Code **NEU618 Elective Tags Consultation Service Block Lenath** 2 weeks Students 2 Prerequisites NEU300 Neurology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting Where should students report? Students will receive schedule detailing where and when to report on the first day. What time should students report? Per schedule. Who should they report to? Per schedule.

Goal

To learn the principles and skills underlying the recognition and multi-disciplinary management of cerebrovascular disease.

Learning Objectives

- 1. To recognize the signs and symptoms of acute ischemic stroke.
- 2. To utilize current treatment guidelines for ischemic stroke, especially concerning blood pressure management, anticoagulation, and use of thrombolytic therapy.
- **3.** To identify common risk factors for stroke.
- 4. To utilize current recommendations for the use of anti-platelet agents and oral anti-coagulants in stroke prevention.
- **5.** To utilize strategies for preventing and treating increased intracranial pressure.
- 6. To perform and record the National Institutes of Health Stroke Scale.

Schedule of Activities

The acute stroke service provides consultations for patients suspected of having an acute stroke, TIA, intracerebral hemorrhage or subarachnoid hemorrhage. The service consists of a neurology attending, a neurology PGY-3, sometimes an intern, sometimes an APP, and a medical student. Each medical student will evaluate, present and write-up approximately 1-2 new patients per day and will be responsible for following their patients during hospitalization. The student will be responsible for obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to them. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated.

Didactic Activities

- Morning report
- Neurology Grand Rounds

Required Reading

Daroff R, Jankovic J, Mazzotta J, Pomeroy S. Bradley's Neurology in Clinical Practice.

Brazis P, Masdeu J, and Biller J: Localization in Clinical Neurology.

Student Evaluations

The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

NEU619 Neurology Inpatient Service

Course Information

Course Director Melanie K. Braun M.D. Contact Person Megan Derry, 585-275-0408, megan derry@urmc.rochester.edu **Class Year Name Neurology Inpatient Service** Class Code **NEU619 Elective Tags** Consultation Service, Teaching Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Students will receive schedule detailing where and when to report on the first day. What time should students report? As per schedule Who should they report to? As per schedule

Goal

To learn how to evaluate and treat neurological disorders seen in the inpatient setting.

Learning Objectives

- **1.** To learn how to obtain an accurate neurological history, and to perform and interpret a neurological examination.
- 2. To learn the appropriate indications for ordering laboratory studies in neurology: EEG, EMG, nerve conduction studies, evoked potentials, lumbar puncture, CT and MR imaging of the brain and spinal cord.
- **3.** To learn how to evaluate common inpatient neurological conditions (coma and mental status changes, stroke, seizures, multiple sclerosis, neuromuscular disorders).

Schedule of Activities

The Neurology Inpatient Service consists of a 24-bed unit located on 5-1600. The neurology inpatient service is responsible for the care of patients with neurologic disorders, and the service is divided into two teams, each consisting of a neurology attending, a neurology PGY-2, sometimes an APP, a neurology, psychiatry or anesthesiology PGY-1 and medical students. The RED team takes care of patients with vascular neurologic problems (stroke), and the BLUE team takes care of patients with general neurologic problems. Students may request one of the teams in particular at the time of signing up for the elective, and efforts will be made to honor that request if possible. If no specific request is made, students will be randomly assigned one team.

Each student will evaluate, present and write-up approximately 1-2 new patients daily and will be responsible for following their patients during hospitalization. Students will participate in the various teaching conferences of the Department of Neurology at Strong Memorial Hospital, including daily attending rounds and daily work rounds with the residents.

Didactic Activities

- Morning report
- Neurology Grand Rounds

Required Reading

- 1. Daroff R, Jankovic J, Mazzotta J, Pomeroy S. Bradley's Neurology in Clinical Practice.
- 2. Brazis P, Masdeu J, and Biller J: Localization in Clinical Neurology.

Student Evaluations

The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

Course Information

Course Director Debra E. Roberts M.D., Ph.D. Contact Person Pamela Marks pamela marks@urmc.rochester.edu **Class Year Name** NeuroMedicine ICU Class Code NEU621 **Elective Tags** Inpatient Service **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Please report directly to unit 8-1200 and ask for the APP on service. What time should students report? 6am Who should they report to? APP

Goal

• To learn how to manage the post-operative care of neurosurgery patients, such as ICP management, SAH/ICH management, and tumor removal.

• To be exposed to neurological diseases that requires intensive care treatment such as acute neuromuscular diseases and seizure disorders.

- To learn to care for patients with other organ support devices such as ventilator management and CRRT.
- To learn how to identify and treat infections in neurologically ill patients.

• To learn how to manage common critical care problems such as, but is not limited to, acute coronary syndrome, shock, sepsis, arrhythmias, ARDS, and AKI.

• To learn how to work in a unit with a multidisciplinary provider model including critical care Nurse Practitioners (NP), Physician Assistants (PA), residents from neurology, neurosurgery, and ENT, and critical care fellow's from Anesthesiology, Neurology, Emergency Medicine and Internal Medicine.

Learning Objectives

The Medical student on the NeuroMedicine ICU service will be assigned patients to admit, evaluate, and present at morning rounds. All evaluation and procedures on patients may be done by the student under appropriate supervision by the resident and/or Fellow.

Schedule of Activities

Daily rounds will begin on the Neuro ICU beginning at 8:00am and will end around 12:30pm. Evening work rounds begin at about 5pm.

Didactic Activities

Informal teaching sessions are part of rounds by attending/fellow or selected personnel.

Required Reading

None required prior to the rotation.

Student Evaluations

Students performance will be graded by: (I) their participation in rounds and ability to complete a coherent admission notes and daily progress notes in a timely basis; (ii) direct observation of their clinical sills including history taking and physical exam; and (iii) effectiveness as a team player

NEU623 Advanced Child Neurology

Course Information

Course Director Robert I. Thompson-Stone M.D. **Contact Person** Megan Derry 275-0408 megan derry@urmc.rochester.edu **Class Year Name** Advanced Child Neurology Class Code **NEU623 Elective Tags** Consultation Service, Inpatient Service, Patient Care, Teaching Block Length 2 Weeks Students 2 Prerequisites (ALL) NEU300 Neurology Clerkship, NEU615 Child Neurology An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? Students will receive schedule detailing where and when to report at least one week prior to starting. What time should students report? See above. Who should they report to? See above.

Goal

To gain more advanced knowledge and skill in the care of hospitalized children with neurological conditions in preparation for residency in child neurology.

Learning Objectives

PATIENT CARE and MEDICAL KNOWLEDGE

1. Independently evaluate patients, and synthesize information from an organized history and physical including detailed neurologic exam, and diagnostic tests into localization within the nervous system as well as a

prioritized differential diagnosis specific to the patient (PE-1)

- 2. Strength skill completing a neurological examination in neonates, infants, toddlers, and children. (PE-1)
- 3. Demonstrate more advanced understanding of the clinical presentation, work-up, and management for common inpatient pediatric neurological conditions, most notably seizures/epilepsy, and encephalopathy. (D-1, T-2, CRM-1)
- 4. Identify indications for diagnostic testing including neuroimaging (MRI, CT, DSA), routine and continuous EEG, and lumbar puncture for inpatient pediatric neurologic problems and write initial orders for co-sign. Learn to

appropriately interpret the neurologic test results in the context of the patient. (PE-2)

5. Deliver an accurate, concise, well-organized presentation with an initial management plan for common neurologic diagnoses and/or complications with supporting rationale. (CRM-1)

- 6. Write accurate and well-organized H&P and progress notes; update progress notes daily ensuring they reflect the student's understanding of the patient's condition and plan. (CRM-1)
- 7. Recognize when a patient is sick vs not sick, perform the initial evaluation, and develop an initial management plan. (PE-1, PE-2, CRM-1, T-1, SC-2)

COMMUNICATION

- Share information clearly and respectfully to patients, their family, consultants, and the interdisciplinary team including social work, nursing, and therapists across a broad range of socioeconomic and cultural backgrounds. (C-1, C-2, C-3)
- 2. Adapt communication skills to the individual needs and characteristics of patients and their family (i.e. uses interpreter appropriately, avoids jargon). (C-1, C-2, C-3)
- **3.** Provide a verbal and written handoff that highlights sick patients, items to follow-up, and appropriate anticipatory guidance. (C-1, C-2, C-3)

PRACTICE BASED LEARNING

 Utilize evidence-based medicine in the care of individual patients by exhibiting intellectual curiosity, defining learning needs, and reviewing the medical literature to help inform assessment and management plans. (SC-2, TSM-1, CRM-1, IS-1)

PROFESSIONALISM

1. Demonstrate honesty, compassion, empathy, reliability, and respect for all patients, families, and members of the health care team. (C-1, C-2, PH-1)

Schedule of Activities

Students will join the inpatient Child Neurology team, and function at the level of an intern. The Child Neurology inpatient team covers Golisano Children's Hospital inpatient floors, PICU, PCICU, NICU, ED, and the adolescent psychiatry unit in Strong Memorial Hospital. The service is a mix of patients admitted under Child Neurology and patients being seen in consultation. The team structure is typically an attending child neurologist, 1 child neurology senior residents (team leader), and a second resident that is either a child or adult neurologist. The team for patients admitted under Child Neurology will also include pediatric residents on the floor the patient is assigned who help with day-to-day management of the patient.

The student should contact their senior child neurology resident on the first day at 7 AM to meet up with the team. The goal if for students to evaluate, present and write-up approximately 1-2 new patients per day and will be responsible for following 3-5 patients at a time. The student will be responsible for independently obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to them. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated. They will be listed as first call for any patients admitted to Child Neurology and will work with pediatric and neurology residents to care for those patients, including writing orders, discharge summaries, and handoffs.

Didactic Activities

Child Neurology Division conference on Tuesdays from 8 – 9 AM

Patient of the Week conference on Thursdays from 8:30 - 9 AM

Neurology Grand Rounds

Required Reading

Pina-Garza J, James K. Fenichel's Clinical Pediatric Neurology: A Signs and Symptoms Approach.

Student Evaluations

<u>The elective is graded Pass/Fail.</u> The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing their narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the elective.

Course Information

Course Director Lauryn E. Hemminger M.D. **Contact Person** Megan Derry, 275-0408, megan derry@urmc.rochester.edu **Class Year Name** Neurology Acting Internship **Class Code** NEUEXT **Block Length** 4 weeks Students 2 **Prereauisites** NEU300 Neurology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Student will attend morning report in room 5-5220 (Garvey Room) on the first day What time should students report? 7:30 Who should they report to? Resident they are assigned to

Goal

To learn the principles and skills for managing a cohort of inpatients on a general neurology service in preparation for internship training.

Due to limited space, we cannot offer this to visiting students without approval from the course director.

Learning Objectives

- 1. To learn how to independently obtain and synthesize an accurate neurological history, and to perform and interpret a neurological examination on neurology inpatients.
- 2. To learn the appropriate indications for ordering diagnostic testing in neurology: routine and continuous EEG, EMG and nerve conduction studies, evoked potentials, lumbar puncture, and neuroimaging including CT and MR imaging of the brain and spinal cord, as well as diagnostic angiography (DSA).
- **3.** To learn how to evaluate and manage common neurological inpatient problems, including stroke, seizures, multiple sclerosis, dementia, CNS tumors, and neuromuscular disorders including myasthenia gravis and Guillain-Barré syndrome.
- **4.** To develop the many personal attributes necessary for becoming an effective physician, including honesty, compassion, reliability, and effective communication.

Schedule of Activities

The Adult Neurology Inpatient Unit consists of twenty-four beds, which are divided among three teams: the Red Team (Stroke Neurology Inpatient Service), Blue Team (General Neurology Inpatient Service), and the Epilepsy Service. The Red and Blue Teams follow all patients admitted to the neurology inpatient service, with the exception of those admitted to the Epilepsy Service for long-term video EEG monitoring. Each team consists of an attending neurologist, a chief neurology resident (adult neurology PGY-4), senior neurology resident (adult neurology PGY-2 or child neurology PGY-3), a neurology, psychiatry PGY-1 or anesthesiology PGY-2, two 3rd year medical students (during many, but not all months) and, on occasion, a 4th year neurology acting intern. Each acting intern will spend two weeks on the Blue Team and two weeks on the Red Team in order to maximize the exposure to the breadth of common inpatient neurologic conditions.

Rotation hours

- 6 days per week (one weekend day) with 2 evening call shifts over the course of the month
- Monday-Friday, approximately 6 AM 5 PM (arrive no earlier than 7 AM the day after an evening call shift)
- Saturday or Sunday, approximately 6 AM 2 PM

Didactic Activities

Acting interns will attend morning report, work rounds, attending rounds, grand rounds, and neuroradiology/ neurosurgery joint conferences. If given the opportunity (typically coordinated by the chief resident), acting interns may present a patient they are following at professor rounds or neuroradiology/neurosurgery joint conference.

Required Reading

- 1. Daroff R, Jankovic J, Mazzotta J, Pomeroy S. Bradley's Neurology in Clinical Practice.
- 2. Brazis P, Masdeu J, and Biller J: Localization in Clinical Neurology.

Student Evaluations

The final grade for the Neurology Acting Internship is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of their narrative evaluations and the final grade for the neurology Acting Internship approximately six weeks following completion of the rotation.

OBG605 Ambulatory Ob-Gyn

Course Information

Contact Person Donna Darby donna darby@urmc.rochester.edu **Class Year Name** Ambulatory Ob-Gyn Class Code **OBG605 Elective Tags Outpatient Service, Patient Care** Block Length 4 weeks Students 1 **Prereauisites** (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, International Visiting, Visiting Where should students report? 2-4474 What time should students report? 8:00am Who should they report to? Stacy Sun, MD

Goal

The goal is to provide students with a variety of experiences in outpatient obstetrics and gynecology.

Learning Objectives

- 1. Gain experience in performing pelvic examinations
- 2. Develop proficiency assessing pregnant women (high and low risk prenatal care)
- 3. Improve skill in triage and management of abnormal pap smears in Colposcopy Clinic

4. Participate in the evaluation and management of women with undergoing genetic counseling in the antenatal period.

- 5. Interpret basic obstetrical and gynecologic ultrasounds
- 6. Develop diagnostic and management skills for common gynecologic problems.
- 7. Learn to evaluate and care for women with family planning needs.
- 8. Learn to evaluate and care for women with complex pelvic pain syndromes.

Schedule of Activities

Students on this rotation work with General OB-GYN, Family Planning, Genetics, and MFM faculty as well as OB-GYN Generalist Faculty and residents in the ambulatory setting. The clinical experience is divided between outpatient gynecology, family planning, high-risk obstetrics, genetics, and OB-GYN ultrasound, usually encompassing the hours of 8:00 AM to 5:00 PM. Outpatient sites and are the Lattimore Building and at the Red Creek offices.

Didactic Activities

There are various educational conferences on Thursday mornings (grand rounds, OB/GYN morbidity and mortality, resident lectures, etc.) that the student attends. Dr. Nicandri will meet with students weekly to discuss a variety of topics relevant to OB/GYN.

Required Reading

There is no required reading per se, but familiarity with either Williams or Gabbe's Obstetrics, and Droegemueller's Gynecology is expected.

Student Evaluations

Evaluations are based on assessments from the faculty and residents. Important elements are enthusiasm & interest, willingness & availability to actively participate in patient care, and evidence of active learning through reading and discussion with faculty.

Course Information

Course Director Ashlee L. Smith D.O. Contact Person Donna Darby donna darby@urmc.rochester.edu **Class Year Name** Gynecologic Oncology **Class Code OBG608 Elective Tags** Inpatient Service, Patient Care Block Length 4 weeks Students 1 Prerequisites (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Highland Hospital What time should students report? TBA; Please call pager # (585) 220-0948 to arrange start time. Who should they report to? Chief Resident on Gynecologic Oncology.

Goal

The gynecologic oncology elective provides experience in inpatient and operative management of women with gynecologic cancers. Students will be active participants in the evaluation and treatment of women admitted for management. In addition, the student will be exposed to the radical surgery used in treating gynecologic cancer. In the outpatient setting, students will learn the appropriate evaluations and testing necessary for women with suspected or known gynecologic cancers.

Students will prepare and present cases on daily rounds as well as at a weekly Tumor Board.

Schedule of Activities

Daily Rounds

Surgery (by assignment)

Clinic (by assignment)

Required Reading

Posted on Blackboard - students doing an elective will be given access to articles

Student Evaluations

Students are evaluated by the resident and attending staff.

OBG620 Reproductive Endocrinology and Infertility

Course Information

Course Director John T. Queenan M.D. Contact Person You must contact Dr. Wendy Vitek and cc: Anne Tedrow for permission to register for this course **Class Year Name** Reproductive Endocrinology and Infertility Class Code OBG620 **Elective Tags** Consultation Service, Outpatient Service, Patient Care Block Length 1 week Must Contact Dept. for Approval Students 1 Prerequisites (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Our clinical setting is located at 500 Red Creek Drive Suite #220 in Rochester, NY Phone: (585) 487-3378. Email me before the start of your rotation: john_queenan@urmc.rochester.edu What time should students report? 8:00 am on the first day of the rotation Suite #220 Strong Fertility Center 500 Red Creek Drive Rochester, NY 14623 Who should they report to? Appointment secretary@Front desk

Goal

** You must contact Dr. Wendy Vitek and cc: Anne Tedrow for permission to register for this course **

You will have the opportunity to learn the following objectives:

Describe the physiology of the normal menstrual cycle including the following:

- 1. Changes at puberty
- 2. Changes during perimenopause
- 3. Awareness of timing of fertlity

Describe the embryology of the pelvis and pelvic organs

- 1. Describe normal development
- 2. Describe abnormal development
 - a. ambiguous genitalia

- b. mullerian ageneis
- c. vaginal/uterine septum

Describe gametogenesis

Describe normal steroid hormone biosynthesis and clinical applications.

For the following medical conditions, describe the appropriate screening,

diagnosis, pertinent history, focused physical examination, diagnostic testing, and

treatment, including indications for referral:

- 1. Recurrent pregnancy loss
- 2. Galactorrhea/hyperprolactinemia
- 3. Androgen excess
- 4. Polycystic ovary syndrome
- 5. Infertility
- 6. Premenstrual syndrome/premenstrual dysphoric disorder
- 7. Amenorrhea
- 8. Müllerian anomalies

Given the short duration of your rotation, please select 2-3 objectives that would like to focus and let the faculty that you are working with know your learning goals so that we can guide your learning.

You will have the opportunity to participate in patient visits using zoom There may be opportunities to observe ultrasound and procedures when physical distancing can be safely observed. We can supply you with a mask, but please bring a shield if you have one. If you do not have a shield, please let me know before your rotation starts.

Please do not present to clinic if you have a fever, cough, sore throat, loss of smell or other symptoms concerning for infection. You should contact Dr. Vitek by email if you are unable to attend clinic due to illness. Please avoid using perfume/aftershave/heavy scents to avoid exposing the embryos to volatile organic compounds?. You must wear scrubs in the procedure rooms. Scrubs are available on site or you can launder scrubs with unscented detergent and change into the scrubs in the office.

You are welcome to schedule a time to meet with Dr. Vitek at the end of your rotation so that she can assess your progress towards meeting the learning objectives you selected and give you feedback.

Learning Objectives

By the end of the elective the student should be able to: Perform a comprehensive reproductive history in the couple with infertility or the woman with a reproductive endocrinopathy. Describe the basic work up for infertility. Identify the indications for assisted reproductive technologies. Understand the role of surgery in the treatment of infertility. Explain the appropriate work up for anovulation.

Schedule of Activities

Students will be expected to see patients with one of the attending physicians from 8:00am to 5:00pm, weekdays. On some days there will be surgery, ultrasound exams or hysterosalpingograms.

Didactic Activities

Resident lecture series: Thursdays: 9:00-11:00. These lectures are aimed at the residents, but students should be able to take advantage, as well.

OB/GYN grand rounds: Thursdays, 7:30-8:30 a.m.

IVF conference: Mondays 3:15-4:30 pm: review of patients in treatment, new patients and follow up.

Division research seminars: (optional) Thursday mornings following Grand rounds

Joint conferences with medical endocrinology: Third Friday each month, 7:45 a.m.

OB/GYN Journal Club: is part of Grand Rounds Schedule and also meets at night on a quarterly basis.

Required Reading

Speroff L, Glass RH, and Kase N. Clinical Gynecologic Endocrinology and Infertility, seventh edition: chapters 3,6, 11,12, 21,30,31, and 32. This book is available at Miner Library.

* Other materials may be recommended to supplement the conferences.

Student Evaluations

Students should keep a log recording numbers and types of procedure to help document that learning objectives have been achieved. They will be expected to participate in conferences. They must receive a satisfactory evaluation from the attending physicians with whom they have worked.

Course Information

Contact Person Dr. Stefanie Hollenbach stefanie hollenbach@urmc.rochester.edu **Class Year Name** Maternal-Fetal Medicine **Class Code OBG621 Elective Tags** Inpatient Service, Outpatient Service, Patient Care **Block Length** 4 weeks Students 1 Prereauisites (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? 2-3237 What time should students report? 8:00 am Who should they report to? Stefanie Hollenbach, MD

Goal

The goal is to provide students with in-depth exposure to various aspects of Maternal-Fetal Medicine (MFM).

Learning Objectives

- 1. Manage normal and complicated labor and delivery
- 2. Understand concepts of antepartum and intrapartum management of selected high-risk pregnancies (e.g.
- preeclampsia, diabetes, preterm labor, premature rupture of membranes, placental abruption, etc.)
- 3. Perform and interpret a basic obstetrical sonogram
- 4. Interpret antepartum and intrapartum fetal heart rate tracings
- 5. Understand the role of the Maternal-Fetal Medicine subspecialist

Schedule of Activities

Students on this rotation are overseen by the MFM faculty and OB Chief Resident at Strong Memorial Hospital. The clinical experience is divided between inpatient and outpatient management of high-risk (and some low-risk) pregnancies, and the student will have the opportunity to follow antepartum and intrapartum patients. The course entails rotations through the resident high-risk obstetrical clinics, Ob/Gyn ultrasound, Labor and Delivery, and the antepartum inpatient obstetrical service. Generally two weeks are spent on outpatient and two weeks on inpatient, although time allocations can be flexible.

Didactic Activities

There are several meetings each week to discuss high-risk patient management, as well as a research meeting, Ob/

Gyn grand rounds, and combined Ob/Peds case presentations. There are also optional resident conferences that the student may attend, as desired. I meet with the students weekly on an informal basis to discuss topics of MFM interest.

Required Reading

There is no required reading per se, but familiarity with either Williams Obstetrics or Gabbe's Obstetrics is expected.

Student Evaluations

Evaluations are based on assessments from the MFM faculty and residents. Important elements are enthusiasm & interest, willingness to actively participate in patient care, availability in Labor and Delivery and outpatient clinics, and evidence of active learning through reading and discussion with faculty.

OBG622 Family Planning

Course Information

Course Director Sarah J. Betstadt M.D., M.P.H. **Contact Person** Donna Darby, 585-275-7149, donna darby@urmc.rochester.edu **Class Year Name** Family Planning Class Code OBG622 **Elective Tags** Inpatient Service, Outpatient Service, Patient Care Block Length 2 wks Students 1 Prerequisites OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year. 4th Year Where should students report? URMC Gender Wellness OB/GYN (GOG) 125 Lattimore Road. WEST ENTRANCE Rochester, NY 14642 What time should students report? 8:15am Who should they report to? Dr. Sarah Betstadt, Dr. Amy Harrington or Alison Carletta, NP, Dr. Natalie Whaley, Dr. Stacy Sun

Goal

To become familiar with the epidemiological, psychosocial, medical and surgical aspect of abortion and contraceptive care.

Learning Objectives

In this Reproductive Health 2-week elective, we aim to teach you:

- 1. The epidemiology of unintended pregnancy and abortion care in the U.S
- 2. The medical evidence foundations of safe abortion care in the first and second trimesters
- 3. The psychosocial aspects of counseling and caring for pregnant people who are having abortions
- 4. The surgical process of first and second trimesters abortions, with hands on experience
- 5. Patient educational approaches to contraceptive counseling and care
- 6. The surgical process of contraceptive procedures (arm and uterine implant insertion), with hands on experience

Schedule of Activities

Week One

1. Monday AM: 1st trimester surgical procedures (2nd floor OR @SMH) PM: 1st trimester pre-operative appointments

2. Tuesday 2nd trimester surgical abortion pre-operative appointments

3. Wednesday Operating Room 2nd trimester surgical abortion procedures **OR** Complex Contraception Clinic (select wednesdays)

4. Thursday Office preoperative patient visits **OR** Planned Parenthood session

5. Friday OR 2nd trimester surgical abortion procedures **OR** General Obgyn office **OR** Ultrasound **OR** Labor and Delivery

Week Two

1. Monday AM: 1st trimester surgical abortion procedures (2nd floor OR @SMH) PM: 1st trimester preoperative appointments

2. Tuesday 2nd trimester surgical abortion pre-operative appointments

3. Wednesday Operating Room 2nd trimester surgical abortion procedures **OR** Complex Contraception Clinic (select wednesdays)

4. Thursday Office preoperative patient visits **OR** Planned Parenthood session, **Elective Presentation** (topic of your choice)

5. Friday OR 2nd trimester surgical abortion procedures **OR** General Obgyn office **OR** Ultrasound **OR** Labor and Delivery

Didactic Activities

Thursday AM: Grand Rounds and Obgyn Resident Lectures pending schedule.

Students will be required to present a topic of interest at the end of the two week elective rotation.

Required Reading

Will be emailed prior to starting the elective.

Please review: www.guttmacher.org

Student Evaluations

Students should log all procedures they attend during the rotation.

The attending(s) with whom the student worked will do an in-person evaluation during last day of rotation.

OBG623 Inpatient Obstetrics and Gynecology

Course Information

Contact Person Donna Darby donna_darby@urmc.rochester.edu 585-275-7149 **Class Year Name** Inpatient Obstetrics and Gynecology **Class Code** OBG623 **Elective Tags** Inpatient Service **Block Length** 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? What time should students report? Who should they report to?

Course Information

Contact Person

Donna Darby, (585) 275-7149, Donna Darby@urmc.rochester.edu Stacy Sun@urmc.rochester.edu **Class Year Name** Obstetrics and Gynecology Acting Internship **Class Code** OBGEXT **Block Length** 4 weeks Students 2 Prerequisites (ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year Where should students report? 2-3257 What time should students report? 7:30AM Who should they report to? Stacy Sun, MD

Goal

The goal is to provide students with in-depth exposure to various aspects of inpatient Obstetrics and Gynecology. It is appropriate for students considering or planning to enter OB-GYN, or for students entering other specialties who want further obstetrics and gynecology experience to improve their primary care skills.

Learning Objectives

By the end of the rotation the student should be able to:

- · Admit patient to labor and delivery, manage normal labor and asisst with vaginal delivery
- · Interpret antepartum and intrapartum fetal heart rate tracings
- · Understand concepts of antepartum (prenatal) management of low risk and selected high-risk pregnancies
- · Refine breast and pelvic exam skills

• Generate differential diagnoses for common gynecological presentations to the emergency department (abnormal uterine bleeding, pelvic pain, ectopic pregnancy, ovarian cysts, ovarian torsion, vaginal discharge, PID, TOA, etc.) and formulate plans for evaluation and management

• Generate differential diagnoses for common obstetric presentations to triage (rupture of membranes, preterm labor, vaginal bleeding, vaginal discharge, decreased fetal movement, pre-eclampsia evaluation, flu, etc) and formulate plans for evaluation and management

· Assist on gynecological surgeries and cesarean deliveries.

Schedule of Activities

OB-GYN residents and faculty oversee students on this rotation. The course is divided into 2 weeks on GYN and 2 weeks on OB, including the inpatient services, emergency room, and operating rooms. One week is typically scheduled as night shifts (usually one of the two OB weeks). The student will follow patients antepartum and

intrapartum. Students are expected to care for patients at the level of an intern.

Didactic Activities

Weekly OB-GYN resident conferences (Thursday AM)

OB-GYN Grand Rounds (Thursday AM)

Combined OB/PEDS case presentations (Wednesday 1PM during OB days week).

Daily inpatient rounds with either the Generalist or MFM attending.

Weekly Skills Sessions with the course director - practicing an assortment of basic obstetric/gynecologic skills through student-selected simulation activities (cervical exams, AROM/FSE/IUPC/Foley bulb application, vaginal deliveries, steps of a c-section, neonatal circumcision, suturing/knot tying, basic laparoscopic skills, IUD/nexplanon insertion)

Required Reading

There is no required reading per se, but familiarity with either Williams' or Gabbe's "Obstetrics" and either Hacker and Moore's "Essentials of Obstetrics and Gynecology" or Te Linde's "Operative Gynecology" is expected. All of these titles are available in full text through Miner Library site.

Student Evaluations

Evaluations are based on assessments from the GYN and OB faculty and residents. Important elements are enthusiasm, motivation & interest, willingness to actively participate in patient care both on Labor and Delivery and in the GYN operating rooms, and evidence of active learning through reading and discussion with faculty.

OME605 Professionalism in Medicine

Course Information

Contact Person Emily Lindquist emily lindquist@urmc.rochester.edu **Class Year Name** Professionalism in Medicine Class Code **OME605 Elective Tags** Teaching **Block Length** 1 week Students 12 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? PBL rooms per published orientation schedule What time should students report? per orientation schedule Who should they report to? Emily Lindquist

Goal

To broaden the student's professional development and understanding of ethical dilemmas in medical education and careers in medicine.

MD/PhD, Third year students and forward are eligible to take the elective.

COURSE DIRECTOR: Flavia Nobay, MD

Learning Objectives

- · Identify and interpret the ethical dilemmas and professionalism concerns in the case scenarios
- · Discuss and explain the subtle nuances in professionalism and ethical cases
- · Develop skills in facilitating an orientation Professional Development Group

Schedule of Activities

Most of the activities will occur during the Year I Orientation Week, August 12-16, 2024

Didactic Activities

- Attend the orientation for the new Professional Development Group facilitators
- · Co facilitate an orientation Professional Development Group for the incoming medical students
- · Attend the White Coat Ceremony

• Prepare a one page summary on the lessons learned from co-facilitating the Professional Development Group and provide an assessment on how the week impacts on the incoming students' professional development

• Research, prepare and submit a professionalism case scenario focused on Phase 1 and Phase 2 to use in future Orientation Professional Development Groups, for the SMD Honor Board Educational sessions and/or in the Advisory Dean Groups.

Required Reading

URSMD Professional Development Facilitator Guide and related documents

Student Evaluations

• To receive a grade of Pass, student must attend all the scheduled sessions and prepare and submit a professionalism case scenario focused on Phase 1 and Phase 2 to use in future Orientation Professional Development Groups, for the SMD Honor Board Educational sessions and/or in the Advisory Dean Groups. The student must provide what topic of professionalism the case addresses - i.e. Issues of power differentials

in the medical profession - and also provide a scholarly reference to support the information.

- A summary of your experience as a PD instructor on the lessons learned from co-facilitating the PD Group and provide an assessment on how the week impacts incoming students' professional development.
- Email above assignments to Emily Lindquist (emily_lindquist@urmc.rochester.edu) at the conclusion of PD Group sessions.

OPH600 Basic Ophthalmology Elective

Course Information

Course Director Matthew Lloyd Haynie M.D. **Contact Person** Kim Catalino 275-8944 kim catalino@urmc.rochester.edu **Class Year Name Basic Ophthalmology Elective** Class Code **OPH600 Elective Tags Outpatient Service Block Lenath** 1 week Students 6 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Ophthalmology Resident Clinic, which is located on the 3rd floor right off the green elevators. What time should students report? 8:00 am Who should they report to? Kim Catalino

Goal

Ophthalmology is an incredibly rewarding and exciting medical-surgical specialty. Using both medical and surgical care combined with cutting edge diagnostic imaging, ophthalmologists have the privilege of working with patients in diverse settings to rehabilitate and restore vision. In addition to Comprehensive Ophthalmology, there are several subspecialties including Cornea and External Disease, Retina, Glaucoma, Pediatrics, Neuro-ophthalmology and Oculoplastics. As such, our physicians take care of patients throughout all stages of life who are confronted with an extremely wide range of conditions. In addition to ophthalmic diseases, given the ability to directly examine the eye, ophthalmologists are often essential in the diagnosis and management of many systemic diseases such as diabetes, hypertension, multiple sclerosis, HIV or sleep apnea.

The overall objectives of the ophthalmology clerkship OPH600 are to provide a core ophthalmic knowledge base and to teach introductory clinical skills. The objectives will be met through a combination of lectures, practical hands-on sessions, and clinical experiences in the outpatient, operating room and in an emergency on-call settings. Additionally, students will be introduced to the important relationship between the referring physician and the ophthalmologist.

OPH600 is a 1-week rotation designed to provide an introduction to Ophthalmology and is appropriate for any student interested in gaining more experience in this field of medicine.

Learning Objectives

The medical student's main task is to gain fundamental knowledge of important ophthalmic disorders, learn core clinical exam techniques and to learn to identify those patients that require referral to an ophthalmologist. The following ophthalmic problems are considered core material to understand:

• The eye as an optical system (refractive error and its correction)

- Orbital and ocular trauma
- Strabismus and amblyopia
- Systemic diseases with ocular manifestations (diabetes, hypertension, HIV)
- Glaucoma
- Cataract
- Age-related macular degeneration
- Ocular infections
- Optic neuropathies
- Pupil abnormalities
- Cranial nerve abnormalties

Sudents will be introduced to the ophthalmic equipment used in the clincial examination including the pen light, slitlamp, direct and indrect ophthalmoscopes and tonometer. In addition the students will be introduced to some of the ancillary testing that is performed for diagnostic purposes including perimetry, OCT, fluorescein angiography, and topography.

A basic skills practicum will be provided to teach the core components of the ophthalmic exam including measuring visual acuity, examination of the pupil and eye movements, assessment of visual fields and examination of the anterior segment using the slit-lamp and ophthalmoscopy.

Schedule of Activities

The clerkship will consist of approximately 50% didactic activities and skill building sessions and 50% clinical/OR time. During this period the student may be assigned to any combination of the following: a SMH full time attending practice, an Ophthalmology Resident- clinic practice, or the operating room. Students will accompany the preceptor through his/her day of practice, surgery, rounds, and conferences. During the week, the student is expected to read independently on specific topics which arise during their work week.

Didactic Activities

Students are requred to participate in all didactic lectures. A schedule will be provided on the first day of the course.

Required Reading

Several texts are available for loan during the rotation. Others are available online, via the Miner Library. Useful references include:

Basic Ophthalmology: Essentials for Medical Students, published by the American Academy of Ophthalmology

Manual for Eye Examination and Diagnosis, by Mark Letiman MD

Wills Eye Manual: Office and Emergency Room Diagnosis and Treatment of Eye Diseases, edtied by Bagheri et al

Ophthalmology, by Yanoff

visit: https://aao.org/medical-students

Student Evaluations

It is expected that the student will pass the final written exam, and complete a course evaluation. The exam will consist of several clinical scenarios, and require the student to develop a differential diagnosis and potential management plan. The exam will be open-book and must be submitted by the end of the rotation. The student will

also be graded on their clinical skills, reasoning, and attendance.

Course Information

Course Director Matthew Lloyd Haynie M.D. **Contact Person** Kim Catalino - 585-275-8944 kim_catalino@urmc.rochester.edu **Class Year Name** Advanced Ophthalmology Elective Class Code **OPH601 Elective Tags Outpatient Service Block Length** 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Ophthalmology Resident Clinic. 3rd floor, right off the green elevators. What time should students report? 8:00 am Who should they report to? Must Contact Kim Catalino Prior to Scheduling

Goal

Ophthalmology is an incredibly rewarding and exciting medical-surgical specialty. Using both medical and surgical care combined with cutting edge diagnostic imaging, ophthalmologists have the privilege of working with patients in diverse settings to rehabilitate and restore vision. In addition to Comprehensive Ophthalmology, there are several subspecialties including Cornea and External Disease, Retina, Glaucoma, Pediatrics, Neuro-ophthalmology and Oculoplastics. As such, our physicians take care of patients throughout all stages of life who are confronted with an extremely wide range of conditions. In addition to ophthalmic diseases, given the ability to directly examine the eye, ophthalmologists are often essential in the diagnosis and management of many systemic diseases such as diabetes, hypertension, multiple sclerosis, HIV or sleep apnea.

The overall objectives of the ophthalmology clerkship OPH601 are to provide a core ophthalmic knowledge base and to teach the clinical skills appropriate for a "non-ophthalmologist" physician as well as those interested in pursuing a career in Ophthalmology. The objectives will be met through a combination of lectures, practical hands-on sessions, and clinical experiences in the outpatient setting, operating room and in an emergency on-call setting. Additionally, students will be introduced to the important relationship between the referring physician and the ophthalmologist.

OPH601 is a 2-week rotation designed to provide an opportunity to develop more advanced skills and knowledge in Ophthalmology. This is provided through increased time in the operating room and clinic settings as well as exposure to one or more of the subspecialties within ophthalmology. This course is appropriate for any student interested in gaining more exposure to this field, both for those interested in pursuing Ophthalmology as well as any other area of medicine/surgery.

Learning Objectives

The medical student's main task is to gain fundamental knowledge of important ophthalmic disorders, learn core

clinical exam techniques and to learn to identify those patients that require referral to an ophthalmologist. The following ophthlamic problems are considered core material to understand:

- The eye as an optical system (refractive error and its correction)
- Orbital and ocular trauma
- Strabismus and amblyopia
- Systemic diseases with ocular manifestations (diabetes, hypertension, HIV)
- Glaucoma
- Cataract
- Age-related macular degeneration
- Ocular infections
- Optic neuropathies
- Pupil abnormalities
- Cranial nerve abnormalties

Sudents will be introduced to the ophthalmic equipment used in the clincial examination including the pen light, slitlamp, direct and indrect ophthalmoscopes and tonometer. In addition the students will be introduced to some of the ancillary testing that is performed for diagnostic purposes including perimetry, OCT, fluorescein angiography, and topography.

A basic skills practicum will be provided to teach the core components of the ophthalmic exam including measuring visual acuity, examination of the pupil and eye movements, assessment of visual fields and examination of the anterior segment using the slit-lamp and ophthalmoscopy.

During the second week of the rotation, OPH601 students will have the opportunity to learn more about a subspecialty of their choosing including Retina, Cornea and External Disease, Glaucoma, Pediatrics, Oculoplastics, Neuro-ophthalmology or ophthalmic imaging.

Schedule of Activities

The clerkship will consist of approximately 50% didactic activities and skill building sessions and 50% clinical/OR time. During this period the student may be assigned to any combination of the following: a SMH full time attending practice, an Ophthalmology Resident- clinic practice, or the operating room. Students will accompany the preceptor through his/her day of practice, surgery, rounds, and conferences. During the 2 weeks, the student is expected to read independently on specific topics which arise during their work week.

Students enrolled in OPH601 will have increased opportunity to work with physicians in the clinic as well as operating room. Tailored experiences based on the students' specific area of interest will be provided.

Didactic Activities

Students will also be asked to attend the a.m. and p.m resident conferences along with specific medical student lectures throughout the rotation.

Required Reading

Several texts are available for loan during the rotation. Others are available online, via the Miner Library. Useful references include:

Basic Ophthalmology: Essentials for Medical Students, published by the American Academy of Ophthalmology

Manual for Eye Examination and Diagnosis, by Mark Letiman MD

Wills Eye Manual: Office and Emergency Room Diagnosis and Treatment of Eye Diseases, edtied by Bagheri et al

Ophthalmology, by Yanoff

visit: https://aao.org/medical-students

Student Evaluations

It is expected that the student will pass the final written exam, and complete a course evaluation. The exam will consist of several clinical scenarios, and require the student to develop a differential diagnosis and potential management plan. The exam will be open-book and must be submitted by the end of the rotation. The student will also be graded on their clinical skills, reasoning, and attendance.

OPH602 Pediatric Ophthalmology and Strabismus Elective

Course Information

Course Director Matthew Lloyd Haynie M.D. Contact Person Matthew Haynie, MD matthew haynie@urmc.rochester.edu **Class Year Name** Pediatric Ophthalmology and Strabismus Elective Class Code **OPH602 Elective Tags** Consultation Service, Multidisciplinary, Outpatient Service, Patient Care Block Lenath 1 week Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Flaum Eye Institute 3rd Floor (unless stated otherwise) What time should students report? 8:00 am Who should they report to? The physician they are scheduled to work with that day.

Goal

To familiarize students with the specialty of pediatric ophthalmology and strabismus highlighting common eye disorders of childhood, examination techniques, as well as the ethical and psychosocial aspects of caring for children. Opportunities may be available for writing/research.

Students will get exposure to basic eye examination skills (e.g. visual acuity, direct ophthalmoscopy, red reflex testing, lid eversion, speculum insertion)

The rotation will fulfill the following Competencies: Professionalism and Altruism, medical knowledge, Patient Care, Interpersonal and Communication Skills, Life-long learning, and Systems Based Practice

Learning Objectives

By the end of the clerkship the students should be able to:

Recognize common eye disorders of childhood and know concepts of basic management and when to refer for pediatric ophthalmology consultation

Perform visual acuity, direct ophthalmoscopy, red reflex testing, lid eversion, speculum insertion and other useful ophthalmic procedures

Didactic Activities

Resident pediatric ophthalmology lectures cover a wide range of ocular genetics and pediatric ophthalmology

Genetics case conference are live multidisciplinary conversations about active challenging cases

Grand Rounds involve a research presentation, followed by resident case presentations, followed by a lecture by the Visiting Professor

The schedule for lectures during your rotation will be provided

Required Reading

Summers GC, Christiansen SP, Kemper AR, Lee KA, Quinn GE, Repka MX, Wallace DK, Rowe SG: Estropia and Exotropia. American Academy of Ophthalmology Preferred Practice Pattern; 2012; 1-49

Summers GC, Christiansen SP, Kemper AR, Lee KA, Quinn GE, Repka MX, Wallace DK, Rowe SG: Amblyopia. American Academy of Ophthalmology: Preferred Practice Pattern; 2012; 1-40

Levin, A.V., Retinal hemorrhage in abusive head trauma. Pediatrics, 2010. 126(5): p. 961-70.

Levin AV: Ophthalmic emergencies. In: Fleisher GR, Ludwig S, Henretig FM, eds. Textbook of Pediatric Emergency Medicine, 6th ed. Lippincott Williams & Wilkins, Philadelphia, 2010, pp. 1595-1602.

Levin AV: Eye trauma. In: Fleisher GR, Ludwig S, Henretig FM, eds. Textbook of Pediatric Emergency Medicine, 6th ed. Lippincott Williams & Wilkins, Philadelphia, 2010, pp. 1448-1458.

Levin AV: Eye-Unequal pupils. In: Fleisher GR, Ludwig S, Henretig FM, eds. Textbook of Pediatric Emergency Medicine, 6th ed. Lippincott Williams & Wilkins, Philadelphia, 2010, pp. 253-258.

Levin AV: Eye-Strabismus. In: Fleisher GR, Ludwig S, Henretig FM, eds. Textbook of Pediatric Emergency Medicine, 6th ed. Lippincott Williams & Wilkins, Philadelphia, 2010, 245-252.

Levin AV: Eye-Red. In: Fleisher GR, Ludwig S, Henretig FM, eds. Textbook of Pediatric Emergency Medicine, 6th ed. Lippincott Williams & Wilkins, Philadelphia, 2010, pp. 240-244.

Karr DJ, Levin AV: Special tests of the eyes. In:. Rudolph CD, ed. Rudolph's Pediatrics. 22nd edition, McGraw-Hill Medical, New York, 2011, pp. 2279-2282.

Edmond JC: Why Can't My Baby See?; American Academy of Ophthalmology Focal Points: Clinical Modules for Ophthalmologists; April 2014; 32(4); 1-15

Kohara EM, Levin AV: Ocular manifestations of child abuse. American Academy of Ophthalmology Focal Points: Clinical Modules for Ophthalmologists 2016;34(1):1-8

Simon JW, Kaw P: Commonly Missed Diagnoses in the Childhood Eye Examination; American Family Physician; 2001; 64(4); 623-628

Gunton, Kammi B: Advances in Amblyopia: What Have We Learned from PEDIG Trials? State of the art review; Pediatrics; 2013; 1-10

Teoh DL, Reynolds S: Diagnosis and management of pediatric conjunctivitis; Pediatric Emergency Care; 2003; 19(1); 49-54

Student Evaluations

Informal feedback by faculty throughout the rotation, as well as faculty feedback transmitted by Course Director to student at end of rotation, as well as the required form.

Course Information

Course Director Alex V. Levin M.D., M.H.Sc. Contact Person Cyndy Dewey 585-276-5036 cynthia dewey@URMC.Rochester.edu **Class Year Name Ocular Genetics Elective** Class Code **OPH603 Elective Tags** Patient Care **Block Length** 1-2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report?

What time should students report?

Who should they report to?

Goal

To familiarize students with the specialty of ocular genetics highlighting examination techniques as well as the ethical and psychosocial aspects of caring for individuals with genetic conditions, including children.

Students will get exposure to basic eye examination skills (e.g. visual acuity, direct ophthalmoscopy, red reflex testing, lid eversion, speculum insertion)

Students will get exposure to genetics evaluation skills (e.g. family history, systemic medical history), genetic test selection and interpretation, and genetic counseling

The rotation will fulfill the following Competencies: Professionalism and Altruism, medical knowledge, Patient Care, Interpersonal and Communication Skills, Life-long learning, and Systems Based Practice

Learning Objectives

By the end of the clerkship the students should be able to:

Recognize ocular genetic conditions and know concepts of basic management and when to refer for ocular genetics evaluation or other clinical genetics evaluation

Perform visual acuity, direct ophthalmoscopy, red reflex testing, lid eversion, speculum insertion and other useful ophthalmic procedures

Identify basic inheritance patterns and recognize the role of ocular geneticist and genetic counselor in diagnosis and management

Didactic Activities

Resident pediatric ophthalmology lectures cover a wide range of ocular genetics and pediatric ophthalmology

Genetics case conference are live multidisciplinary conversations about active challenging cases

Ocular genetics team meetings are live team conversations about genetic test results, clinical trial eligibility, and complex cases

Grand Rounds involve a research presentation, followed by resident case presentations, followed by a lecture by the Visiting Professor

Stone Rounds and Stone Rounds Live are informational website and videoconference educational program hosted by Dr. Edwin Stone, ophthalmologist at University of Iowa and leading ocular geneticist. See https://stonerounds.org/ to create a free account.

Required Reading

Bennett, Robin L., et al. "Standardized human pedigree nomenclature: update and assessment of the recommendations of the National Society of Genetic Counselors." Journal of genetic counseling 17.5 (2008): 424-433.

Bennett, Robin L., et al. "Practice resource-focused revision: Standardized pedigree nomenclature update centered on sex and gender inclusivity: A practice resource of the National Society of Genetic Counselors." Journal of Genetic Counseling (2022).

Biesecker, Leslie G., and Robert C. Green. "Diagnostic clinical genome and exome sequencing." New England Journal of Medicine 370.25 (2014): 2418-2425.

Fahim AT, Daiger SP, Weleber RG. Nonsyndromic Retinitis Pigmentosa Overview. 2000 Aug 4 [Updated 2017 Jan 19]. In: Adam MP, Everman DB, Mirzaa GM, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2022. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1417/

Jackson, Daniel, et al. "Molecular diagnostic challenges for non?retinal developmental eye disorders in the United Kingdom." American Journal of Medical Genetics Part C: Seminars in Medical Genetics. Vol. 184. No. 3. Hoboken, USA: John Wiley & Sons, Inc., 2020.

*Lee KA: Pediatric Diagnoses You Don't Want to Miss. American Academy of Ophthalmology Focal Points: Clinical Modules for Ophthalmologists; September 2012; 1-17

Lohmann DR, Gallie BL. Retinoblastoma. 2000 Jul 18 [Updated 2018 Nov 21]. In: Adam MP, Everman DB, Mirzaa GM, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2022. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1452/

Stone, Edwin M., et al. "Clinically focused molecular investigation of 1000 consecutive families with inherited retinal disease." Ophthalmology 124.9 (2017): 1314-1331.

Stroh, Eliza. "Taking the family history in genetic disease: a guide for ophthalmologists." Current Opinion in Ophthalmology 22.5 (2011): 340-346.

*Wygnanski-Jaffe T, Levin AV: Introductory Genetics for the Ophthalmologist. American Academy of Ophthalmology Focal Points: Clinical Modules for Ophthalmologists; June 2005; 1-17

https://www.fightingblindness.org/ : Specifically sections on "Retinal Education"

Student Evaluations

Informal feedback by faculty transmitted by Course Director to student at midway and end of rotation as well as the required form

Course Information

Contact Person Marybeth Jones, 276- 5168 Marybeth Jones@urmc.rochester.edu **Class Year Name** Pediatric Ambulatory Elective **Class Code PED602 Elective Tags Outpatient Service, Primary Care** Block Length 1 - 2 weeks Students 1 **Prereauisites** PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Monday rotation starts in the Pediatric Practice located on the 6th floor of the ambulatory center (AC6). Take the silver elevators off the main lobby What time should students report? 9:00am Who should they report to? Marybeth Jones or Assigned preceptor

Goal

To develop skills and experience in the diagnosis and management of common pediatric illnesses and congenital disorders in a Patient-Centered Medical Home. Review the Golisano Children's Hospital (GCH) Pediatric Practice website for more information about services provided in our clinic:

https://www.urmc.rochester.edu/childrens-hospital/general-peds.aspx

Students typically participate in resident teaching conferences and spend time working with residents to provide patient care. Review the GCH Pediatric Residency website for more information about our training programs:

https://www.urmc.rochester.edu/pediatrics/pediatrics-residency.aspx

Learning Objectives

Through participation in this elective, students will have opportunity to advance skills according to the following learning objectives:

- Practice and demonstrate increasing confidence in their evaluation of children and adolescents with acute illnesses and injuries.
- Perform the initial assessment of newborn babies and recognize common newborn conditions.
- Practice counseling new parents on the care of their child including the psychosocial adjustment of the family.

- Describe the impact of cultural and environmental factors on children's health and pediatric health care
- delivery, and apply this understanding to the development of individualized care management plans.
- Demonstrate concise and complete oral and written patient evaluations.
- Apply the biopsychosocial model to pediatric practice.
- Practice problem solving strategies and devise treatment plans under guidance of the supervising pediatrician.
- For common outpatient pediatric concerns, discuss appropriate clinical reasoning (i.e., evaluation of the febrile newborn), and patient management plans (i.e., determining antibiotic choices for the management of otitis media, pneumonia, and urinary tract infections).

Schedule of Activities

Students should email the course director at least 2 weeks before their elective to assist in designing their own schedule to meet personal learning objectives. Students will typically spend clinic sessions rotating as a part of the acute illness clinic team or with faculty members providing routine well child care, though upon request, students may have opportunity to rotate with partnering subspecialty clinics. In some cases, community pediatrician office settings can be included if sites are available and advanced arrangements are made.

Student expectations:

Students will receive their final schedule no later than noon on the Friday prior to their elective rotation, and usually approximately one week in advance. Students are expected to attend a minimum of 5 half-day clinic sessions on at least 3 weekdays, and typically will receive a schedule that includes 7-9 half-day clinic sessions (One half-day = 9:00am - 12:00pm, 1:00pm - end of day, or Afterhours clinic: 5:30 - 8:00pm). On Monday and Wednesday evenings, our faculty see patients during an "afterhours" clinic, and elective students are typically scheduled during at least one of these evening session(s). As the only learners rotating during these afterhours sessions, elective students have a unique opportunity to provide routine and illness care to patients, and receive feedback from faculty members. On other days of the week, patients can be registered to be seen in the clinic each day until 4:30PM. Members on our care team will typically finish work by 5:30 PM, though at times, patients may have ongoing care needs or patient documentation may need to be completed later than this time.

Patient schedules and patient volume may change reasonable expectations each day. On average, an elective student will see 2-5 patients per half-day clinic session. Clarify your role on the team and patient care responsibilities with each new faculty preceptor at the beginning of a clinic session. Students are responsible for reviewing individual goals for the rotation and requesting specific feedback from preceptors.

Students are expected to follow pediatric resident teaching schedules, attending 8:00AM morning report and Grand Rounds sessions, and report to the clinic for patient care responsibilities after these conclude (9:00AM). The end of a morning session is often the busiest time of day. You are expected to monitor the time and leave a clinic session on time to attend noon conference activities.

How Illness Clinic Works:

- The illness clinic team will include 2-3 residents, 1-2 attending preceptors (which may include a fellow or a chief resident), and 1-2 students.
- Visits to Illness Clinic are typically scheduled 24-48 hours in advance, and are problem-focused/acute visits.
- Patients are checked in by the nurses, weighed, vitals taken and put in a room. The nurses write the room number, patient name, age and chief complaint on the illness board in the conference room.
- A red folder with patient identification stickers and an encounter form are placed in a rack outside every patient room. You can review information on the encounter form (it will also be entered in E-Record), and give this information to the resident or attending preceptor.
- Students should discuss each patient with an upper level or chief resident, or a fellow or attending who will also see the patient. Each morning, you can discuss the best approach to workflow with the team. Try to see any patient with interesting physical findings.

• When seeing a patient on your own, record the history and physical in a chart note, focusing on the relevant problem(s). Usually you will use a progress note (not a provider student note) that your preceptor will edit/ addend and which will become a part of the permanent medical record for the patient. Clarify these

expectations for written documentation with your preceptor each day.

- Each patient is presented to the preceptor and together you will formulate a working diagnosis and plan of action. Be sure all required paper work is complete the same day as the patient visit.
- Encourage patients/families to receive any overdue immunizations, and to schedule a WCC if they are not up to date with routine care.
- The preceptor will order any needed labs, procedures, immunizations or prescriptions.

Didactic Activities

A typical didactic schedule for the week includes the following activities listed below. Pediatric residents rotating with you can update you about each day's teaching topics and any anticipated adjustments to the schedule. Many teaching activities are hosted in virtual/hybrid format. See Blackboard for teaching schedules and more information during your rotation.

Monday: No Morning Teaching - Report to your first scheduled clinic session on your individual elective schedule.

Tuesday: Kaplan Room (1-1140) 8:00am-8:30am (Morning Report) 8:30am-9:00am (Outpatient Conference)

Wednesday: ZOOM ONLY 8:00am-9:00am (Pediatric Grand Rounds)

Thursday: Kaplan Room (1-1140) 8:00am-8:30am (Intern Report) 8:30am-9:00am (Outpatient Conference)

Friday: Kaplan Room (1-1140) 8:00am-8:30am (Morning Report)

Every day: Kaplan Room (1-1140) 12:00pm-1:00pm (Noon Conference)

Required Reading

None.

Students may review reference materials in the AC-6 Conference Room.

Pediatrics in Review is accessible on Miner Library website, and is a good source for review articles relevant to common pediatric concerns.

Student Evaluations

A summative narrative evaluation will be completed by the elective director based on input from various preceptors, highlighting key strengths and areas for improvement demonstrated during the elective rotation.

To receive a grade of Pass, students must demonstrate professionalism, and actively participate in the conferences and clinical sessions. Students are expected to attend a minimum of 5 half-day clinic sessions on at least 3 different days during each scheduled week. Students are asked to communicate with the elective director in case of illness or

any last minute schedule adjustments. See "Schedule of Activities" for more information regarding daily expectations.

PED604 Practice Based Experience in Med-Peds

Course Information

Contact Person Enrico Caiola, MD, (585) 654-5432, enrico caiola@urmc.rochester.edu; Shandell Moreno Shandell Moreno@urmc.rochester.edu **Class Year Name** Practice Based Experience in Med-Peds **Class Code PED604 Elective Tags Outpatient Service, Primary Care** Block Length 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Culver Medical Group, 913 Culver Road, Rochester, NY 14609 What time should students report? 9 AM Who should they report to? Enrico Caiola, MD

Goal

To expose the learner to the day-to-day life of a Med-Peds practitioner in a primary care setting.

Learning Objectives

To experience the outpatient management of common pediatric & internal medicine problems. The secondary objective is exposure to inpatient medicine and pediatrics.

Schedule of Activities

Daily morning rounds with a Med-Peds attending followed by office hours paired with one of seven Med-Peds attendings seeing a mixture of adult and pediatric patients and problems.

Didactic Activities

Two half-hour teaching sessions per day, following the UR Med-Peds ambulatory curriculum.

Required Reading

None required, but Allen Goroll's Primary Care Medicine and Dershewitz's Pediatric Primary Care are strongly suggested and are available in the office, so no need to purchase them.

Student Evaluations

An evaluation will be discussed half way through the rotation and a final evaluation will be written and submitted after it is discussed with the student. All seven attending physicians have equal input into the students evaluations.

PED610 Pediatric Developmental Disabilities

Course Information

Course Director Abigail L.H. Kroening M.D. Contact Person Carolyn King Carolyn King@urmc.rochester.edu Dennis Kuo Dennis Kuo@urmc.rochester.edu **Class Year Name** Pediatric Developmental Disabilities Class Code **PED610 Elective Tags** Consultation Service, Multidisciplinary, Outpatient Service, Patient Care Block Lenath 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? 200 East River Road Third Floor What time should students report? 8:30 a.m. Who should they report to?

Goal

The goal of this elective in Developmental and Beahvioral Pediatrics is to familiarize students with typical and atypical child development through clinical experiences, small-group and media-based teaching/learning opportunities, and community-based site experiences, when possible. It is our hope that students will appreciate the role of play in developmental diagnostic evaluations, as well as the importance of interdisciplinary collaboration (with health and community professionals) in supporting a child and family affected by a developmental disability. Students will learn more about autism spectrum disorders, intellectual disability, attention deficit hyperactivity disorder, fetal alcohol spectrum disorders, cerebral palsy, and other developmental and behavioral diagnoses. Students will also learn more about basic management strategies for common pediatric behavior concerns, educational advocacy within early intervention and special education systems, and community services and their coordination. All of this will be presented within a person-and-family centered framework, with attention to social determinants of health and recognition of the importance of family partnership.

Learning Objectives

By the end of the rotation the student should be able to:

1. Understand the different domains of development (language, motor, cognitive, social-emotional, adaptive).

2. Have a better understanding of how (through play!) to determine whether a child has typical or atypical development.

3. Perform the medical part of an interdisciplinary diagnostic evaluation for a child with a developmental disability.

4. Describe the roles of other interdisciplinary team professionals (including psychologist, educator, nurse, social worker, speech pathologist, occupational therapist, physical therapist, audiologist, and nutritionist) in the care and

support of a child with a developmental disability.

5. Participate in the process of care coordination for an individual with complex developmental disability.

6. Learn first hand from a Family Experience what life is like for a family when disability is a part of the dynamic.

7. Describe the necessary screening, diagnostic, and therapeutic tasks involved in appropriate primary care for children with spina bifida, cerebral palsy, autism, Down Syndrome, attention deficit disorder, and learning disabilities.

8. List differential diagnoses for language delay, intellectual disability, autism spectrum disorders, attention deficits, and motor disability in children and youth.

9. Understand and discuss appropriate use of pharmacologic agents such as psychostimulants, alpha adgrenergic agents, atypical antipsychotics, and other medications used in the care of children with developmental disabilities.

10. Understand how social determinants of health impact early childhood development and developmental trajectories.

Schedule of Activities

Students will participate in all clinical activities of the Division of Developmental and Behavioral Pediatrics, including our Developmental and Behavioral Pediatrics Clinic (formerly known as Kirch Center), as well as visiting community agencies such as schools and childcare centers for guided observations. Students electing longer rotations will have more opportunities for higher level clinical interaction. Although we have created 2-week blocks for this elective, we are open to students coming for 1, 2, 3, or 4 weeks. Students should contact DBP Elective Coordinator Ms. Carolyn King (carolyn_king@urmc.rochester.edu) if they are interested in taking this elective during dates that are not already established as a 2-week block session, or if they are interested in a 1,3, or 4 week elective. We do our best to accommodate these requests! Key DBP Faculty for this elective: Dr. Abigail LH Kroening (abigail kroening@urmc.rochester.edu) and Dr. Dennis Kuo (dennis kuo@urmc.rochester.edu).

Didactic Activities

Weekly Developmental and Behavioral Pediatrics Core Lecture Series on research and leadership in the care of children with Developmental Disorders; weekly pediatric discipline conference; computer-aided instruction; individualized teaching; and (for students electing experiences longer than 2 weeks) a brief, informal talk based on reading on a related subject of the student's choice.

Required Reading

Handbook of Developmental and Behavioral Pediatrics, 3rd ed, handouts.

Student Evaluations

Students will be evaluated based on their engagement in clincal and learning opportunties, the quality and completeness of their patient workups, their ability to participate as members of interdisciplinary teams, and on their informal talks.

PED615 Adolescent Medicine

Course Information

Contact Person Nadine Manns, 275-0416 nadine_manns@urmc.rochester.edu **Class Year Name** Adolescent Medicine Class Code **PED615 Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care **Block Length** 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? 8 South Unit What time should students report? 9AM Who should they report to? Attending on-call via webpaging or calling 275-2964

Goal

To introduce students to the particular interests and issues surrounding the unique health care needs of adolescent patients, and start to develop the knowledge, skills, and self-efficacy for both primary and specialty care of adolescent patients.

Learning Objectives

Individualized learning objectives will be developed by learners at the outset of their rotation; a comprehensive list of potential learning objectives can be found on the course's Blackboard site.

Schedule of Activities

This elective is structured into inpatient and outpatient experiences. Mornings are generally spent at Golisano Children's Hospital, doing patient rounds and consults. The afternoons are spent at different clinical sites, with within URMC clinical and in the community. The schedule for clinical assignments will be sent to the students via email the week prior to starting the elective.

Didactic Activities

The students are also expected to attend adolescent medicine didactic sessions that take place over the course of the week. Please refer to the schedule.

Required Reading

The course Blackboard site provides access to a set of rotation-specific required and optional online educational experiences, including readings, webinars, and video series.

Student Evaluations

To receive a grade of Pass, students must attend clinical sessions, demonstrate enthusiasm, and be open to feedback and learning. The student should demonstrate increasing communication skills and knowledge of adolescent health. There is also a required student presentation at the end of the rotation. Details regarding the presentation will be sent along with other materials a week in advance.

Course Information

Course Director Jessica A.G. Gangaram M.D. Contact Person Anjali Gangaram@urmc.rochester.edu valerie smith2@urmc.rochester.edu 275-3863 **Class Year Name** Pediatric Gastroenterology/Nutrition Class Code **PED620 Elective Tags** Patient Care **Block Length** 1 -2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? 7 South residents sign out room at Golisano Children's Hospital What time should students report? 10:00AM Who should they report to? Pediatric GI Fellow on service

Goal

To become more familiar with the practice of Pediatric Gastroenterology, Hepatology and Nutrition, an essential pediatric subspecialty

https://www.urmc.rochester.edu/childrens-hospital/gastroenterology.aspx

Learning Objectives

By the end of the rotation the student should be able to:

- 1.) Be able to identify patients for whom consultation with a pediatric gastroenterologist is indicated.
- 2) Have had experience of seeing patients in the outpatient or inpatient setting with the following diagnoses: Constipation/encopresis, gastroesophageal reflux, chronic inflammatory bowel disease, chronic abdominal pain.
- 3) Have read about a few common topics in Pediatric GI/Nutrition

4. Will be able to observe Endoscopy/ Colonoscopy procedures

Schedule of Activities

Students will follow a few inpatients, and assist in the outpatient clinics. They will observe procedures such as upper endoscopy and colonoscopy. The student will be encouraged to give a talk on a Pediatric GI topic.

Didactic Activities

Students will attend Pediatric Morning report and Pediatric Grand Rounds. They are also expected to attend the weekly Pediatric Nutrition Support Service Rounds, weekly adult GI Clinical Conference, the bi weekly Pediatric GI

Pathology Conference, and the biweekly Pediatric GI/Nutrition Fellows conference

Required Reading

Suggested Reading: The URL below will take you to Wylie's text of Pediatric Gastroenterology- the chapters suggested are 12: Constipation and Encopresis, 14: Gastrointestinal Bleeding, 22: Gastroesophageal Reflux, 35: Celiac Disease, 38: Allergic GI Disorders, 44 and 45: Inflammatory Bowel Disease, 55: Hirschsprung's Disease, 69: Biliary Atresia and 85: Nutrition.

Further reading is encouraged regarding specific patient topics, as well as the major texts: Pediatric Gastrointestinal Diseases Volumes 1 & 2, Allan Walker, and Pediatric Liver Disease by Fred Suchy.

http://www.sciencedirect.com/science/book/9781437707748

Student Evaluations

The student will be evaluated on interest, enthusiasm, and participation in learning the skills imporatant in the diagnosis and management of pediatric GI diseases.. The student should show ability to perform literature searches on interesting patient topics.

PED625 Pediatric Intensive Care

Course Information

Course Director Jake J. Deines M.D. **Contact Person** Frances Cartella Frances Cartella@URMC.Rochester.edu **Class Year Name** Pediatric Intensive Care **Class Code** PED625 **Elective Tags** Inpatient Service, Multidisciplinary, Patient Care Block Lenath 2-4 weeks Students 1 Prerequisites PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Pediatric ICU (Golisano Children's Hospital Floor 6th North) What time should students report? 6:00am Who should they report to? PICU Attending on service (Phone 273-2303)

Goal

To acquaint the student with the approach to a critically ill infant, child, or adolescent and to understand the rationale for the initial treatment of critically ill pediatric patients with common disease processes.

Learning Objectives

By the end of the rotation the student should be able to:

- Identify pediatric patients with shock when they present. Discuss the common causes of shock in the pediatric patient, their pathophysiology, and the initial treatments for children in shock.
- Identify pediatric patients with respiratory failure when they present. Discuss the common causes of
 respiratory failure in the pediatric patient, their pathophysiology, and the initial treatments for children with
 respiratory failure.
- Identify neurologic disease that requires intensive care therapies in pediatric patients. Discuss the common neurologic crises that occur in the pediatric patient, their pathophysiology, and their initial treatments.
- Understand the principles of positive pressure mechanical ventilation in pediatric patients. Be able to differentiate between pressure and volume modes of mechanical ventilation.
- Be able to analyze blood gas results; understand acid-base disorders.
- Describe the effects of critical pediatric illness on parents and families.

Learn more about Pediatric Critical Care: https://www.urmc.rochester.edu/childrens-hospital/pediatric-critical-care.aspx

Learn more about our Pediatric Residency Program: https://www.urmc.rochester.edu/pediatrics/pediatrics-residency/our-residents.aspx

Visit our Department website to learn more about Pediatrics at URMC: https://www.urmc.rochester.edu/pediatrics.aspx

Schedule of Activities

Students will function as members of the care team in the PICU. They will be responsible for the direct care (under close supervision) of one or more patients. They will round with the care team (at 7:30 a.m. on weekdays) and provide care during the remainder of the day. They will attend the daily teaching conference and afternoon sign-out rounds. Each student will present at this conference once during their rotation. This presentation will make reference to a specific interesting patient. Support and guidance about this presentation is available from members of the PICU faculty. Every third or fourth night call is optional, but is strongly encouraged.

Required Reading

Resource reading material is available in the PICU. Readings will be patient-focused, and will concentrate on making clear evidenced-based approaches to the care of patients. The two major texts in Pediatric Critical Care are: Pediatric Critical Care (Fuhrman and Zimmerman); Textbook of Pediatric Intensive Care (Rogers). These books are available in the intensive care unit.

Student Evaluations

To receive a grade of pass, students must participate in the PICU program and demonstrate a beginning understanding of pediatric critical illness.

PED628 Pediatric Pulmonology

Course Information

Course Director Karen Zuidema Voter M.D. Contact Person Karen Voter@urmc.rochester.edu Monica vielkind@urmc.rochester.edu **Class Year Name** Pediatric Pulmonology Class Code **PED628 Elective Tags** Patient Care **Block Lenath** 2 weeks or 4 weeks with prior approval Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Rm: 4-3236 What time should students report? 08:30 am Who should they report to? Please email Dr. Voter and Dr. Vielkind before the elective

Goal

To diagnose and provide care for children with difficult asthma, cystic fibrosis, bronchopulmonary dysplasia, sleep disorders, and technology dependence.

Learning Objectives

By the end of the rotation the student should be able to: Perform relevant history and physical examinations for pulmonary diagnoses, interpret pediatric pulmonary function tests, and appreciate indications for bronchoscopy in children. The student should be able to develop a differential diagnoses and preliminary treatment plan for children with pulmonary diagnoses.

Schedule of Activities

This elective includes both inpatient and outpatient experiences, and the schedule may vary in each block. There are opportunities to attend pulmonary clinics and to round with the inpatient team. In addition to general pulmonary clinics, there are monthly specialized clinics including trach/vent, neuromuscular, sickle cell disease, and severe asthma which are multidisciplinary and combined with other specialists (ENT, GI, Allergy/Immunology, Hematology, and Neurology). The student will have the oppotunity to spend time in the pulmonary function lab, the Pediatric Sleep Center, and to observe bronchosopies. Multidisciplinary conferences occur to discuss patients with pulmonary hypertension, neuromuscular disorders, aerodigestive disorders, and preoperative care for complex patients.

The Pediatric Pulmonary attending on service will direct the student to optimize the learning during the specific elective rotation. Students should email the course directors prior to starting the elective to determine the best place to start.

Didactic Activities

Students can participate in Pediatric morning report on Tuesday and Friday morning. The student can also attend Pediatric noon conference. Specific pulmonary conferences include xray rounds Monday at 1:15, pre-clinic review Tuesday at 10, resident/fellow teaching Friday at 3. Other conferences include pulmonary hypertension team meeting every other Monday at 4, Pediatric perioperative surgical home every other Wednesday at 6:30 AM, multicenter videoconference the 3rd Tuesday of the month at noon.

Required Reading

Students are encouraged to read about the specific patients seen during the elective.

To learn more about Pediatric Pulmonology, visit our website: urmc.rochester.edu/pediatrics/pulmonology

For more information on pediatric education, please visit our websites:

Pediatric Residency Program: urmc.rochester.edu/pediatrics/pediatrics-residency

Department of Pediatrics: urmc.rochester.edu/pediatrics

Student Evaluations

Evaluations will be completed by the attending physician in clinic and on the inpatient service based on the student's ability to evaluate and follow patients with lung disease.

PED630 Pediatric Nephrology

Course Information

Course Director Megan Johanna Rashid M.D. Contact Person Nikita Boone P: (585) 276-6705 Nikita_Boone@urmc.rochester.edu **Class Year Name** Pediatric Nephrology Class Code PED630 **Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care Block Lenath 2-4 weeks Must get department approval before scheduling Students 1 Prerequisites PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? **URMC Room 4-8116** What time should students report? 08:30 Who should they report to? Erik Abell

Goal

To better understand the diagnosis and management of acute and chronic kidney disease, hypertension, and fluid/ electrolyte problems in children.

Be exposed to children with kidney transplants, those on hemodialysis and peritoneal dialysis, and those with acute kidney injury.

Become familiar with renal diagnostic tests including urinalysis, renal electrolyte handling, kidney ultrasound, kidney biopsy, and measurement/estimation of glomerular filtration rate.

Learning Objectives

By the end of the rotation the student should be able to:

-Identify patients for whom consultation with a pediatric nephrologist is indicated.

-Attempt to focus on specific aspects of diagnosis and management.

-Become familiar with basic aspects of fluid and electrolyte disturbances, as they relate to renal and nonrenal patients.

-Develop familiarity in analyzing urine under the microscope.

-Become familiar with normality in growing children as it pertains to blood pressure, protein excretion, and growth and development.

-Become familiar with the most common types of referrals to a pediatric nephrology practice, including the diagnosis of persistent microscopic hematuria and proteinuria.

-Develop a familiarity in reviewing renal ultrasounds.

-Become familiar with end-stage renal patients, particularly those who have been transplanted or are on peritoneal/

hemodialysis.

-Become acquainted with non-dialytic modes of supporting renal insufficient children during growth.

-Better understand the relevance of adequate renal function in the process of growth and development in children.

Schedule of Activities

Students are assigned to SMH under the direction of the faculty member and/or fellow on service from approximately 8 a.m. to 5 p.m. on weekdays. The student will participate in rounding on inpatients, compiling a summary of the results in the past 24 hours with recommendations for subsequent diagnosis and management in consultation with the faculty member. On one or two mornings per week, the student will participate in outpatient clinic, seeing patients, making his/her own formulations prior to reviewing and seeing the patient with an attending nephrologist. During outpatient clinic the student will have an opportunity to review the urinalysis on each patient that he/she has seen with the help of the faculty member.

Didactic Activities

The students are expected to attend major divisional educational conferences, including weekly clinical conferences and journal clubs as well as monthly scheduled conferences when they occur, including Pediatric Renal/GU, research, and pathology conferences.

Required Reading

A syllabus of major important articles to the pediatric nephrology literature is available on loan from the divisional secretary in 4-8116, ext. 5-9784.

Student Evaluations

Students will receive a satisfactory evaluation if they keep a log noting that they have seen each of the inpatients and at least three outpatients per week and that they have indicated that they have learned about each of the specific objectives listed above, and, finally, that they have read at least ten articles from the syllabus provided by the division.

PED635 Pediatric Genetics

Course Information

Contact Person Brianna Merlo brianna merlo@urmc.rochester.edu Claudia Burcke claudia burcke@urmc.rochester.edu **Class Year Name Pediatric Genetics** Class Code **PED635 Elective Tags** Consultation Service, Outpatient Service, Patient Care, Teaching Block Length 2-4 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? A Course Coordinator will contact trainees prior to the start date to make such arrangements What time should students report? A Course Coordinator will contact trainees prior to the start date to make such arrangements Who should they report to? A Course Coordinator will contact trainees prior to the start date to make such arrangements

Goal

To understand the applications of genetic principles in medical practice.

To gain familiarity with common genetic conditions. To experience all aspects of clinical genetics including genetic counseling, prenatal genetics, inborn errors of metabolism and dysmorphology. Although listed as a pediatric elective, this elective will offer experience in genetic practice in a wide range of age groups and specialties.

Learning Objectives

By the end of the rotation the student should be able to:

Obtain an accurate three generation pedigree.

Obtain an appropriate genetic history.

Observe and understand the genetic physical examination.

Understand the role of genetic testing in diagnosis.

Observe genetic counseling in several situations including prenatal diagnosis and clinical dysmorphology.

Assist with inpatient consultations.

Demonstrate use of the genetic literature.

Understand the concepts of alpha-feto-protein testing, chromosome testing, DNA testing and other genetic testing. Develop an area of interest and present a 15-30 minute presentation on this topic or develop a case report for publication.

Schedule of Activities

Pediatric General Genetics Clinic Monday afternoon, Wednesday morning and afternoon

Inherited Metabolic Disorders Clinic Monday afternoons or Tuesday mornings

Cancer Genetics Clinic: Thursday and Friday afternoons

Pediatric Cardiogenetics Clinic: first Wednesday afternoon of each month

Medical Genetic Clinic: Thursday afternoon

Craniofacial Team Clinic: every other Friday

Various meetings: Thursday mornings, and at other times subject to change

Didactic Activities

Ad hoc lectures

Required Reading

A syllabus will be provided.

Student Evaluations

The student should participate in patient care and discussions to demonstrate a growing expertise in genetics, be available for consultations, research patient problems encountered during the rotation, and present a topic of interest in Genetic rounds.

Course Information

Contact Person

Kristin Robinson kristin_robinson@urmc.rochester.edu Children's Heart Center at URMC Clinic 275-6108 Michael Collins, MD MichaelP Collins@urmc.rochester.edu (630) 536-7003 **Class Year Name** Pediatric Cardiology Class Code **PED643 Elective Tags Outpatient Service** Block Length 2 or 4 weeks Students 1 Prerequisites PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? AC-1 at 7:45 AM on the first Monday of the rotation, or Thursday/Friday afternoon the week prior to start of rotation. What time should students report? 7:45 AM Who should they report to? Michael Collins, MD

Goal

To understand how to distinguish normal from abnormal cardiovascular signs and symptoms, understand how to recognize, manage, and, if necessary, refer cardiovascular conditions in children, understand key principles related to the use of cardiovascular drugs, and understand the role of prevention of cardiovascular disease in pediatric patients.

Learning Objectives

By the end of the rotation the student should be able to: Recognize normal age-related changes in heart rate and blood pressure.

1. Describe the mechanisms of production of heart sounds and murmurs and recognize classic auscultatory findings of innocent and pathologic murmurs.

2. Differentiate between physiologic and pathologic variations in cardiac rhythm.

3. Describe the normal perinatal circulation and its influence on the development of signs and symptoms of heart disease in the neonate.

4. Describe the use and indications for electrocardiography, echocardiography, exercise testing, ambulatory electrocardiographic monitoring and cardiac catheterization.

5. Identify and describe the management of functional heart murmurs, musculoskeletal chest pain, and mild labile hypertension.

6. Describe the initial evaluation and management of the child presenting with serious signs and symptoms

related to the cardiovascular system such as cyanosis, palpitations and/or arrhythmias, congestive heart failure, syncope, abnormal heart sounds, and pathologic murmurs.

7. Describe the physical findings, pathophysiology, genetics, usual treatments, and prognosis for common cardiovascular conditions including ventricular septal defect, atrial septal defect, tetralogy of Fallot, patent ductus arteriosus, coarctation of the aorta, aortic and pulmonary stenosis, mitral valve prolapse, supraventricular tachycardia, Kawasaki disease, acute rheumatic fever, bacterial endocarditis, and cardiomyopathy.

8. Recognize the risk factors and identify appropriate screening and prevention strategies for atherosclerotic Heart disease.

Schedule of Activities

The student will participate in all activities and conferences of the division including time in the outpatient clinic, inpatient consultations, observation/participation in performing electrocardiograms, exercise testing, echocardiography. Opportunity will be provided to observe in the cardiac catheterization lab and operating room.

Didactic Activities

Students are expected to read about and discuss the learning objectives with their mentor throughout the rotation. In addition, students are expected to attend all the daily Pediatric Cardiology Conferences, all which are held in the morning: Monday Changeover, Tuesday Echo conference, Wednesday Fellows conference, Thursday, Cardiovascular Care Conference and Friday, Surgery conference.

Required Reading

1. Myung K. Park. Pediatric Cardiology for Practitioners. 5th edition. Mosby Elsevier, 2008.

2. Rudolph CD, Rudolph AM, ed. Rudolph's Pediatrics. 21st ed. New York: McGrae-Hill, Medical Pub. Division; 2003.

3. McMillian JA, ed. Oski's Pediatrics: Principles & Pracatice. 4th ed. Philadelphia: Lippincott Williams Wilkins; 2006.

Kliegman RM, et al., ed. Nelson Textbook of Pediatrics. 18th ed. Philadelphia: Saunders; 2007.

Student Evaluations

To receive a grade of pass, students must have demonstrated active participation in the clinical activities of the division, and in consultation with the pediatric cardiology attending on service, document that the learning objectives have been covered and met.

PED645 Pediatric Infectious Diseases

Course Information

Course Director Jennifer Lynn Nayak M.D. **Contact Person** Nadine Manns Nadine Manns@URMC.Rochester.edu **Class Year Name** Pediatric Infectious Diseases Class Code PED645 **Elective Tags** Consultation Service, Patient Care Block Length 2 -4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Medical Center, Room 4-8144 or ZOOM: https://urmc.zoom.us/i/96185767498 What time should students report? Mondays at 9:00 am Who should they report to? Please see attending physician(s)

Goal

To become familiar with and gain an initial understanding of the practice of Pediatric Infectious Diseases

https://www.urmc.rochester.edu/childrens-hospital/infectious-diseases.aspx

https://www.urmc.rochester.edu/pediatrics/pediatrics-residency.aspx

Learning Objectives

Explain the symptoms and physical findings that suggest the presence of an infectious disease and perform a PE appropriate for an ID consult.

Take an exposure history that provides clues to a specific diagnosis (ill contacts, travel, pets or other animal exposures, occupation, insect bites and diet).

Identify standardized guidelines for diagnosis and treatment of conditions common to this subspecialty area and adapt them to the individual needs of specific patients (i.e. catheter assoc infect guidelines)

Relate the importance of proper specimen collection and its effect on results, explain the limitations of those tests (sensitivity, specificity, predictive values, cost).

Schedule of Activities

Daily work rounds and teaching rounds with the Attending and Peds ID team.
 Conference participation including Pediatric Morning Report (twice per week), and weekly Peds ID clinical conference, and joint Medicine and Pediatric ID clinical conference.

Didactic Activities

As above, Peds ID clinical conference and joint Medicine and Pediatric ID clinical conference.

Required Reading

Selected papers on important and/or frequent clinical problems encountered in Peds ID are available on the Pediatric Shared drive for the residents and medical students to read. In addition, daily reading based upon questions related to ongoing patient care is expected.

Student Evaluations

Students will be evaluated by the Pediatric ID attending using the standard format provided by the School of Medicine. In addition, verbal feedback will be provided on an on-going basis by the residents, fellow, and attending on the service as applicable.

Course Information

Course Director Jeffrey R. Andolina M.D., M.S. Contact Person Dr. Jeff Andolina Jeffrey_Andolina@urmc.rochester.edu **Class Year Name** Pediatric Hematology/Oncology Class Code **PED647 Elective Tags** Inpatient Service, Outpatient Service, Patient Care Block Lenath 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Ambulatory Care Facility (AC-6) on the 6th floor What time should students report? 8:30 AM Who should they report to? The Pediatric Hematology/Oncology clinic attending physician

Goal

To provide an intensive experience in clinical Pediatric Hematology/Oncology in which students will acquire an understanding of the diagnosis, pathophysiology, and management of the common hematologic and oncologic diseases of childhood with an appreciation for the effect of these serious diseases on the patients and their families.

Learning Objectives

By the end of the rotation the student should be able to:

Explain the physiology of normal blood formation and destruction.

Accurately diagnose common causes of cytopenias (i.e., neutropenia, anemia, thrombocytopenia) in children. Given history and physical exam, efficiently utilize laboratory tests in the diagnostic work-up and be able to evaluate a blood smear.

Describe the pathophysiologic mechanisms of the anemia and the different types of crises in sickle cell disease. Describe in a step-wise manner, the work-up for a prolonged PTT, a prolonged PT, and a prolonged bleeding time. Accurately apply the various bleeding tests in the light of the patient history and physical findings.

Describe childhood ALL in terms of its incidence, peak age range, common signs and symptoms and general treatment concepts. Explain how prognostic factors have been used to define tailored therapy for ALL.

Be familiar with common forms of cancer in children in terms of peak age, clinical presentation, staging and common sites of metastatic spread. These forms of cancer include Wilms tumor, Non-Hodgkin and Hodgkin

Lymphoma, Neuroblastoma, Osteogenic Sarcoma, Ewings sarcoma family of tumors, Rhabdomyosarcoma, Medulloblastoma and other brain tumors

Describe a blast cell and be able to differentiate between a blast cell and reactive lymphocyte, and be familiar with the morphology of hematopoietic cells.

Using clinical and laboratory data, differentiate between ALL and ITP, acute mononucleosis and iron deficiency anemia.

Schedule of Activities

Students work on the outpatient (AC-6) and inpatient (4th floor SMH) service of the Pediatric Hematology/Oncology. Clinic is currently scheduled Mon, Wed and Thurs 8:30-5:00, Tues and Fri 8:30-1:00. Students perform initial consultations (history, physical, collect lab data, followed by presentation to attending, including impression and plan. Also may be responsible for dictating patient care note.) and follow-up evaluations in clinic, with an attending preceptor. They may also attend inpatient rounds each morning, see inpatient consults as appropriate, and may see limited inpatients with the attending. The elective is primarily outpatient based. Students who desire a more intensive inpatient experience may apply to do a externship on the Pediatric Heme/Onc service. Emphasis is on active participation in all aspects of patient care.

Didactic Activities

Inpatient housestaff rounds (Tue-Fri 7:30-8:30 am), Morning report (Tue., Th., Fri. 8:30-9:00 a.m.); Attending Rounds (scheduled with each housestaff rotation); Academic conference (variable Tues. 3:00-4:00 p.m.); Sign-in Conference (Mon. 8:00-9:00 a.m.). Patient conference (Fri., 3:30-5:30 p.m.)

Required Reading

Textbooks can be borrowed from the Peds Hem/Onc Library. Principles and Practice of Pediatric Oncology 2nd ed., by P. Pizzo and D. Poplack (also on line); Hematology of Infants and Children, 5th ed. By D. Nathan and F. Oski.

Student Evaluations

To receive a grade of pass, students must receive a satisfactory clinical evaluation from their preceptors during the elective. It is preferred that student's also do a short presentation at one of the division clinical conferences or housestaff teaching sessions.

Course Information

Contact Person Nadine Manns Nadine Manns@urmc.rochester.edu (585) 276-4228 **Class Year Name** Pediatric Endocrinology Class Code **PED649 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care Block Length 2 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? room 4-6221 What time should students report? 8:30 am Who should they report to? Dr. Jyotsna Gupta

Goal

To expose the student to a wide variety of pediatric endocrine disorders.

Learning Objectives

Normal growth patterns for infants, children and adolescents. The student will become familiar with the differential diagnosis of disturbances of growth. The student will become familiar with hormones that influence growth rates, such as growth hormone, thyroid hormone, glucocorticoid, and hormone sex steroids. Finally, the student will become familiar with modes of administration, indications and potential side effects of growth promoting therapy. The student will become familiar with the physiology of the posterior pituitary, with specific attention to the role of vasopressin. The differential diagnosis of diabetes insipidus will be discussed, as well as the modes of therapy. Role and regulation of thyroid hormone. Thyroid function tests will be discussed, along with tests for the integrity of the hypothalamic pituitary thyroid axis. The differential diagnosis of hypothyroidism and hyperthyroidism and the various forms of therapy will be discussed. The student will be taught how to recognize signs and symptoms of thyroid disease. Didactic sessions will be devoted to exposing the student to the broad range of phenotypic findings in thyroid disease.

Diabetes. Etiology, genetics, and pathogenesis of Type I and Type 2 diabetes will be discussed. The diagnosis and treatment of diabetic ketoacidosis will also be discussed. The inpatient and outpatient management of diabetes will be carefully reviewed. The long-term outcome of diabetes in children as well as future directions will be reviewed. Disorders of the adrenal cortex. The pathophysiology of disorders of adrenal steroidogenesis resulting in congenital adrenal hyperplasia will be discussed. Biochemical and clinical features of each of the disorders will be discussed. The signs and symptoms, laboratory tests and treatment for Cushing syndrome and Addison disease will be reviewed.

Disorders of pubertal development. Normal variations in developmental patterns and abnormal pubertal development (early or delayed) will be discussed. Tanner staging will be carefully reviewed. The effect of excess or deficient adrenal or gonadal steroids will be reviewed.

Disorders of sexual development in the newborn infant. Normal sexual differentiation will be reviewed, followed by a discussion of gonadal or chromosomal disorders of sexual differentiation and their biochemical and phenotypic

consequences.

Parathyroid and vitamin D-related disorders. Parathyroid physiology will be discussed and clinical entities including hypoparathyroidism and hypocalcemia or hyperparathyroidism will be discussed, along with their modes of therapy.

Schedule of Activities

Students will participate in all inpatient and outpatient pediatric endocrine activities. The students will participate in outpatient endocrine clinics on two half-days per week and pediatric diabetes clinics on one full day per week, as well as journal clubs and clinical conferences. The student will act as the primary source for all consultative and inpatient clinical work.

Didactic Activities

Students are expected to read about and discuss the learning objectives with their preceptor during the day.

Required Reading

Selected chapters in Clinical Pediatric Endocrinology, 2nd Ed., Editor: Solomon A. Kaplan and additional reading material is supplied by the preceptors.

Student Evaluations

The preceptor writes evaluation of the student. It is based on an assessment of fund of knowledge, acquisition of new knowledge, and improvement in reasoning ability and over.

PED650 Pediatric Neonatology

Course Information

Contact Person Dr. Divya Chhabra divya chhabra@urmc.rochester.edu **Class Year Name** Pediatric Neonatology **Class Code PED650 Elective Tags** Inpatient Service **Block Length** 2 weeks Students 1 Prereauisites (ALL) OBG300 Obstetrics and Gynecology Clerkship, PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Neonatal ICU (NICU), at Golisano Children's Hospital - 3rd floor What time should students report? 7:15am Who should they report to? Neonatology Fellow

Goal

- Understand how to resuscitate and stabilize a critically ill neonate.
- Appreciate the pathophysiologic basis for common disorders of the newborn.
- Understand how to evaluate and manage common diseases of the newborn.

Learning Objectives

By the end of the rotation the student should be able to:

- Describe the physiologic adaptation of the newborn to extrauterine life and the steps in neonatal resuscitation and stabilization.
- Demonstrate proper and effective delivery room resuscitation techniques for newborns.
- Perform an appropriate assessment (history, physical examination and initial diagnostic studies) and formulate a differential diagnosis for the following common signs and symptoms: prematurity, growth failure, respiratory distress, cyanosis, heart murmur, apnea/bradycardia, abdominal distension, dysmorphic features,

hypoglycemia, jaundice, anemia, and thrombocytopenia.

- Describe the pathophysiologic basis of and key principles of management for the following common conditions: respiratory distress syndrome, transient tachypnea, pneumonia, aspiration, bronchopulmonary dysplasia, congenital heart disease, infant of diabetic mother, hyperbilirubinemia, neonatal sepsis, necrotizing enterocolitis, apnea of prematurity.
- Explain the indications for ordering, and interpret the results of the following laboratory and radiology tests:

CBC/differential, hematocrit, blood type, Coomb's, serum electrolytes, fractionated bilirubin, blood gas, urinalysis, bacterial/viral cultures of blood/CSF/urine, CSF cell count, serologic tests, neonatal drug screening,

NYS newborn screen, chest/abdomen radiographs, and head ultrasound.

- Discuss the indications for, and appreciate the techniques in performing the following procedures: physiologic monitoring, endotracheal intubation, mechanical ventilation, venipuncture, arterial puncture, umbilical catheterization, urethral catheterization, lumbar puncture, phototherapy, pulse oximetry.
- Communicate and work effectively with members of the NICU patient care team, and with parents and families
 of critically ill neonates.

Schedule of Activities

The student is assigned to the <u>GCH Neonatal Intensive Care Unit</u> and works with the housestaff (aka Blue) team. The student will function as an acting intern, assuming primary responsibility for his/her patients under the supervision of the housestaff, neonatology fellows, and attending neonatologist. The student will work M-F, 6:00am-6:00pm.

NOTE: If you are interested in taking the elective between July-October, please contact the elective director, Dr. Divya Chhabra.

Didactic Activities

Students will participate in the daily educational activities for the pediatric housestaff in the NICU, including morning report, attending rounds, bedside work rounds, radiology conference, and sign-out rounds. Additionally, the student will attend the weekly perinatal conference, fellows conference, and health team rounds.

Required Reading

A variety of instructional materials are available: "NICU Survival Guide," and numerous neonatology textbooks electronically through Miner Library. In addition the URMC Intranet NICU Website has direct links to Housestaff Guidelines and orientation information.

Student Evaluations

The student will review their experience with the attending neonatologists. To receive a grade of satisfactory, the student must be judged by them to have appropriately achieved the learning objectives

PED661 Community Health & Advocacy Elective (CARE)

Course Information

Contact Person Rosa Lloyd 273-3737 rosa lloyd@urmc.rochester.edu Kelly McDermott 273-5942 Kelly mcdermott@urmc.rochester.edu **Class Year Name** Community Health & Advocacy Elective (CARE) Class Code PED661 **Elective Tags** Multidisciplinary Block Length 2 weeks-must have dept approval Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Rosa Lloyd 273-3737 rosa lloyd@urmc.rochester.edu Kelly McDermott 273-5942 Kelly mcdermott@urmc.rochester.edu What time should students report? TBD based on individual student experience Who should they report to? Rosa Lloyd or Kelly McDermott

Goal

v To enhance knowledge of community health v To practice and learn new skills in community health

leadership v To design a community health project in collaboration with community-based partners v To become lifelong leaders committed to improving the health of all children and families

Learning Objectives

By the end of the rotation, the student(s) will have enhanced knowledge, attitudes, skills & habits in the areas listed below

* Identifying upstream determinants of health; establishing causality between risk factors and diseases; Global health priorities.

- * Brainstorming; Establishing relationships with community-based partners; Designing projects.
- * Public speaking; talking to the media.
- * Critical thinking about evidence-based community health action.

Schedule of Activities

Please note that our annual 2-week Community Health & Advocacy Resident Education (CARE) block only occurs once a year. It will be held July 22- August 2, 2024. Click <u>here</u> for a typical 2-week block schedule.

It is necessary to obtain prior approval from Dr. Aligne by contacting him at Andrew_Aligne@URMC.Rochester.edu

If you are approved and still interested, please contact either Kelly_McDermott@URMC.Rochster.edu or Rosa_Lloyd@URMC.Rochester.edu at your earliest convenience.

Didactic Activities

Series of lectures/workshops will/can include:

- * Population Perspectives on Health and Disease
- * Evidence-Based Public Health
- * Moving from the Clinic to the Community
- * Working with CBOs (Community-based organizations)
- * Mini-Proposal Writing
- * Going Upstream/Project Planning
- * Mind-Mapping/Brainstorming
- * Grant-writing
- * Public Speaking/One-Minute Talks
- * How to Speak to the Media
- * Behavior Change
- * Leadership/Change the World
- * Teamwork
- * Advocacy: Letter Writing, etc.
- * Evaluation of Programs
- * Global Health

Required Reading

The CARE Track Handbook: Leadership in Community Pediatrics (provided) Additional articles and books available, but not required for participation.

Student Evaluations

Will formulate an evaluation to be set-up on the MedSis system

Course Information

Course Director Marc Sean Lavender M.D. **Contact Person** Rosa Lloyd Rosa Lloyd@urmc.rochester.edu 273-3737(Rosa) Kelly McDermott Kelly_mcdermott@urmc.rochester.edu 273-5942 (Kelly) **Class Year Name** Medical Student Links with the Community **Class Code PED662 Elective Tags** Primary Care, Teaching Block Length 2 wks- Students must contact Rosa Lloyd to be approved for the dates requested Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? The Hoekelman Center in the Saunders Research Building. Meetings will take place in The Library Conference room # 3.338. What time should students report? 9:30 a.m. Who should they report to? Rosa Lloyd or Kelly McDermott

Goal

The goal of this rotation is to inspire and enable medical students to gain exposure to community-based partnerships, evidenced-based programs and advocacy efforts which aim to improve the health of children, adults, and families.

As health care providers, we recognize that our common responsibility is to help maintain the health of all children and their families. Our challenges include poverty, violence, educational inequity, and lack of healthy environments in which to play, to name a few. We believe that by connecting children and families to available community resources and by advocating for effective programs and initiatives, our ultimate goal may be realized - that those we care for achieve their fullest human potential.

Students must contact Rosa Lloyd (Rosa_Lloyd@urmc.rochester.edu) to be approved for the dates requested. Given the complexities of creating course schedules and to respect the time and efforts of our community partners, students are expected to commit to the entirety of the elective with minimal disruption.

Learning Objectives

At the conclusion of this rotation, you should:

- Feel better-educated on the historical context of many of Rochester's population health challenges.
- Feel better-connected to the community-based resources available to patients and families living in the City of Rochester & Monroe County.

- Feel competent in your ability to refer your patients and their families to community-based resources.
- Feel competent in your ability to advocate on behalf of patients and families in your practice.

Schedule of Activities

During their 2 week rotation, each participant will:

- Visit between 10 and 15 community-based organizations/programs.
- Participate in didactic and guided discussion activities
- Complete the required assignments

This rotation requires the student to provide his/her own transportation.

Didactic Activities

Students will participate in the following didactic/guided discussion experiences while on rotation:

- Orientation session
- Guided discussion (mid-way through rotation)
- Wrap-up/closing session

Required Reading

Please go to <u>www.plccare.org</u> and click on "Intern Community Rotation" to access all course materials including readings, assignments, and community resources.

Student Evaluations

- Students are expected to evaluate their rotation experience to help us improve the course for future participants.
- Students will be evaluated by the Course Director at the completion of the block.

Course Information

Course Director Syed Shahzad Mustafa M.D. Contact Person S. Shahzad Mustafa, M.D. Phone: 585-739-6415 Email: shahzad.mustafa@rochesterregional.org **Class Year Name** Allergy and Clinical Immunology Elective Class Code **PED663 Elective Tags** Patient Care **Block Length** 2 wks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Rochester General Medical Group Allergy and Immunology Office - 2300 West Ridge Road, 5th Floor Rochester, NY 14626 What time should students report? 9:00 AM the first Monday of the block Who should they report to? S. Shahzad Mustafa, M.D.

Goal

To learn about the clinical presentation of atopic and immunological disorders and to understand how to appropriately diagnose and manage these increasingly common conditions.

Learning Objectives

1. Identify patients (both children and adults) who warrant an allergy and immunology consultation.

- 2. Perform an appropriate assessment (H & P) and formulate a working differential diagnosis.
- 3. Understand the indications for ordering diagnostic testing.
- Understand the utility and limitations of the available diagnostic testing.

5. Develop a preliminary treatment plan for commonly seen conditions in the field (asthma, chronic rhinitis (both allergic and non-allergic), atopic dermatitis, food allergy, chronic sinusitis, acute and chronic urticaria, drug allergy, immune deficiencies, etc).

6. Be able to successfully identify signs and symptoms of the more uncommon disorders in the field (hereditary angioedema, systemic mastocytosis, allergic bronchopulmonary aspergillosis, Churg-Strauss syndrome, hypereosinophilic syndrome, periodic fever syndromes, etc).

- 7. Understand the indications and potential adverse effects of commonly used therapies.
- 8. Communicate and work effectively with the outpatient team and with patients, as well as their families.

Schedule of Activities

Students will be working in the outpatient allergy/immunology offices from roughly 8 AM – 5 PM, Mon – Fri. Students will be expected to evaluate both pediatric and adult patients, present the history & physical, and be an active participant in developing an appropriate plan for diagnostic testing and medical management.

Didactic Activities

Students will be expected to attend the weekly allergy/immunology division conference on Wednesdays from 7:30 – 8:30 AM as well as the weekly division grand rounds on Thursdays from 8:00 – 9:00 AM.

Required Reading

Students will be provided with up-to-date literature and will also have access to Middleton's Allergy: Principles and Practice, 7th ed.

Student Evaluations

Students will discuss their elective experience with the course director and will be given direct, verbal feedback. To satisfactorily pass the elective, students must fulfill the expected activities, attend the required didactic sessions, and demonstrate they have achieved the stated learning objectives.

Course Information

Course Director

Michele L. Burtner M.S. Contact Person Please contact Dr, Casey Rosen-Carole to schedule this course. (585) 276-6455 casey_rosencarole@URMC.rochester.edu Class Year Name Lactation Medicine Elective Class Code PED670 Elective Tags Outpatient Service,Patient Care Block Length 2 weeks Students 1 Prerequisites

(ALL) OBG300 Obstetrics and Gynecology Clerkship , PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No

Available to the following medical students:

4th Year

Where should students report?

Time and who to report to depends on the schedule which is created for each student and will be communicated prior to the rotation

What time should students report?

Who should they report to?

Goal

This is a two week elective aimed at improving a medical student's experience and knowledge of common and uncommon breastfeeding concerns, public health challenges in breastfeeding, and academic/educational aspects of breastfeeding promotion in an Academic Medical Center. By seeing patients in a variety of settings - NICU, Lactation Study Center (via phone), Postpartum Floors, Outpatient Consult Clinics - and with a variety of different professionals – Breastfeeding Medicine Physician, Lactation Consultants, Pharmacists - the student will gain a well-rounded and culturally sensitive approach to caring for breastfeeding patients.

Learning Objectives

1. Patient Care

- To work with and support patients with breastfeeding challenges in the Outpatient Breastfeeding Medicine Consult Clinics.
- To take phone calls from providers with questions related to advanced breastfeeding challenges.
- To round with IBCLCs in the newborn nursery and NICU to improve knowledge and confidence of

breastfeeding care in this high-risk population.

2. Medical Knowledge

- To learn more about specific techniques for supporting breastfeeding mothers.
- To learn about how to evaluate a medication's safety during pregnancy and breastfeeding.
- To review a journal article related to a breastfeeding topic to present at the end of the rotation.
- To gain confidence with the sentinel articles on benefits of breastfeeding, breastfeeding rates and how to search the breastfeeding literature.

3. Practice Based Learning and Improvement

- To learn more about common breastfeeding challenges to incorporate into learner's practice.
- To share gained knowledge with other medical students of residents during a teaching session.
- 4. Systems Based Practice

To support, encourage and promote breastfeeding for prenatal and postpartum women and families.
5. Professionalism

• To learn compassionate and culturally sensitive ways of interacting and treating patients with breastfeeding challenges.

6. Interpersonal Skills and Professionalism:

 To work within an interdisciplinary team including Lactation Consultants, Pediatricians, OBGYNs, Family Medicine Physicians and Pharmacists.

Schedule of Activities

Work with Dr. Rosen-Carole to create a schedule from this list of activities

(see example schedule below)

- At least 1 session per week inpatient Lactation Consultant (IBCLC) shadowing at Strong Memorial Hospital
- At least 1 session per week inpatient Lactation Consultant (IBCLC) shadowing at another location (Highland Hospital, Rochester General Hospital inpatient, Rochester General Pediatric Associates)
- Other activities for this rotation:

1. Conduct a psychosocial interview with mother and family about breastfeeding, at a home visit or in clinic. Write-up about this experience in a blog post to Academy of Breastfeeding Medicine blog. Example of blog post: https://bfmed.wordpress.com/2015/06/16/two-lies-and-a-truth-formula-feeding-campaign-is-off-base/

2. Visit a breastfeeding community support program

- WIC breastfeeding peer counselor drop-in group http://www2.monroecounty.gov/health-diseases.php#WIC
- baby cafe
- 3. Attend a Centering Pregnancy group on breastfeeding

Attend a Prenatal Class at SMH https://www.urmc.rochester.edu/ob-gyn/obstetrics/strong-beginnings/classes.aspx

- 5. Attend a breastfeeding advocacy meeting
 - Rochester Regional Breastfeeding Coalition http://rochesterregionalbreastfeedingcoalition.com
 - Rochester Hospitals Breastfeeding Collaborative meeting, (contact Holly Widanka:

holly_widanka@urmc.rochester.edu)

6. Educate others (Presentation at resident or medical student educational session, blog post on a topic, build lesson plan on a particular topic, case report)

7. Article review/Journal club on breastfeeding article of choice

8. Others by discussion with Dr. Rosen-Carole

Sample 2 Week Schedule

Monday

Tuesday

Wednesday

Thursday

Friday

AM

Introduction

SMH Lactation Study Center (Pharmacists)

Rochester Regional Breastfeeding Coalition Mtng

Breastfeeding Medicine Clinic (Lattimore)

SMH IBCLC shadowing

ΡM

SMH IBCLC shadowing

Breastfeeding Medicine Clinic (Redcreek)

HH IBCLC shadowing

Breastfeeding Medicine Clinic (AC-6)

SMH IBCLC shadowing

Required Reading

To learn more about UR Medicine Breastfeeding & Lactation Services, visit our website: urmc.rochester.edu/ breastfeeding

For more information on pediatric education, please visit our websites:

- Pediatric Residency Program: urmc.rochester.edu/pediatrics/pediatrics-residency
- Department of Pediatrics: urmc.rochester.edu/pediatrics

Course Information

Course Director Jake J. Deines M.D. **Contact Person** Josephine Zanghi-Smith (585) 275-3367 Josephine Zanghi-Smith@URMC.Rochester.edu **Class Year Name** Pediatrics Acting Internship @SMH **Class Code** PEDEX1 **Block Length** 4 weeks Students 5 **Prereauisites** PED300 Pediatrics Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting Where should students report? Orientation Information Included in syllabus What time should students report?

Who should they report to?

Goal

The pediatric sub-internship is a clinically based experience, which allows students to assume primary responsibility for patients under the direct supervision of second- or third-year residents and attendings.

Learning Objectives

- Take on primary responsibility for the patient to include formulation of diagnostic and treatment plans, coordination care, and planning for discharge.
- Broaden understanding of pathophysiology and advance clinical problem-solving skills.
- Understand the influence of family, community and society on the pediatric patient during health and disease.
- Understand the importance of and strategies for health promotion and disease prevention.
- Acquire advanced knowledge of physical and psychosocial growth and development.
- Enhance interviewing and physical examination skills.
- Focus oral and written communication appropriately.
- Share information effectively with patient and family.
- Prioritize and organize work effectively.
- Function as a team player with residents, attendings, nurses, and ancillary staff, while effectively doing handoffs.
- Perform commonly used procedures.
- Be exposed to the varied aspects of pediatric practice to assist in career selection.

Schedule of Activities

Sub-interns are assigned to any one of the primary ward teams at Golisano Children's Hospital including the Pediatric Intensive Care Unit and Neonatal Intensive Care Unit. Over the four week rotation, students will spend the majority of their time working with their team during the day shifts, with occasional evening long call until 9pm or on weekend days. At least one week of the rotation will be spent as a member of the night float team, covering the service 8pm-7am.

Didactic Activities

Sub-interns are fully integrated into departmental rounds and teaching conferences with the house officers.

Required Reading

None, except as it pertains to direct patient care.

Student Evaluations

Sub-interns are evaluated by their supervising residents, interns, and attendings using the on-line system. Grades are assigned by the sub-internship director based on these evaluations.

PRM600 Community Health Improvement: Public Health and Policy

Course Information

Course Director Theresa M. Green Ph.D., M.B.A. Contact Person Theresa Green@URMC.rochester.edu Carolyn Settle@URMC.rochester.edu **Class Year Name** Community Health Improvement: Public Health and Policy Class Code **PRM600 Elective Tags** Multidisciplinary, Primary Care Block Length 2 weeks Students 25 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? We will email the students prior to class What time should students report? We will email the students prior to class Who should they report to? Theresa Green

Goal

The goals of the Community Health Improvement Course, or CHIC, are to improve medical students' knowledge of the systems that impact health beyond health care delivery. The complete course is a 4-week curriculum (CHIC 1 + CHIC 2) which includes essential components of community health including social, environmental and behavioral determinants, and the interaction of health policy, health financing, and health care delivery systems with those determinants. The course includes a community-engaged practical experience that focuses on health improvement using evidence-based interventions to create sustainable, measureable change.

The course is divided in two 2-week sections, and students can register for one or both of the sections, however registering for BOTH sections is preferred. Each section is two weeks long and includes CHIC 1: Public Health and Policy and CHIC 2: Population Health and Finance. All students registered in either section will be paired with a community partner to complete a community health improvement internship during their time in CHIC.

Learning Objectives

After completing the CHIC course (CHIC 1 or CHIC 2), students will be able to:

- Discuss the role of socioeconomic, environmental, and cultural determinants on the health status and care of individuals and populations (K-NSS-2, AB-PH-1)
- Explain how community engagement strategies may be used to improve the health of communities and to contribute to the reduction of health disparities (S-C-3)
- Participate in population health improvement strategies (e.g. systems and policy advocacy, program development, or other community-based interventions) (K-SC-1, AB-PH-1)

In addition, students who complete CHIC 1: Public Health and Policy will be able to:

- Assess the health status of a population using available data including population based data at the national, state and local level (K-SC-1)
- Discuss the structure and functions of public health systems including those that require or benefit from the contribution of clinicians, such as public health surveillance, preparedness, and prevention of chronic disease (K-SC-1, K-SC-2, K-T-1)
- Understand the health policy process including the role and impact of policies on health and health care, including policies in the social services (K-SC-1, K-SC-2)
- Describe the process of health policy making at local, state and federal levels and participate in advocacy and education to inform policy (S-C-3, AB-PH-1)

Schedule of Activities

This course includes three components of active learning. Plan to spend some time engaged in activity with the course director and your classmates, and the rest of the week engaged with your community partners.

 Didactic activities. There are at least two planned synchronous online classes on Zoom during each twoweek course however this will depend on class size and availability of students. Class time will be interactive and engaged learning with your classmates based on reading material and videos in Blackboard. Class time may also include guest lectures from Michael Mendoza, Commissioner of the Monroe County Department of Public Health, URMC representatives from the office of Government and Community Relations, and physician

providers engaged in community health work.

2. Experiential learning. CHIC will be as interactive and as experiential as possible, with activities planned to

have students learn about the community and agencies that work in the community.

3. Community Internships. Each student will spend approximately 12 hours each week with a community partner agency in Rochester. Partner agencies will be matched to the student's interests and preferences. There is no need to find a community project or partner. We will reach out prior to the start of class to learn your interests. Although course work and class will be online, it is expected that you will be in Rochester and

able to work in-person with your community partner (depending on the needs of the partner/project).

Didactic Activities

There will be both online and face-to-face learning in this course to support the objectives. Material will be relevant and from current media and news as much as possible.

Required Reading

A reading list will be provided in the syllabus and all material will be available online.

Student Evaluations

Students will be evaluated on thier participation and mastery of the material. Community partner preceptors will also evaluate student engagement during the community internship.

PRM601 Community Health Improvement: Population Health and Finance

Course Information

Course Director Theresa M. Green Ph.D., M.B.A. Contact Person Theresa Green@URMC.rochester.edu Carolyn Settle@URMC.rochester.edu **Class Year Name** Community Health Improvement: Population Health and Finance Class Code **PRM601 Elective Tags** Multidisciplinary, Primary Care Block Length 2 weeks Students 25 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? We will contact the student prior to the start of class What time should students report? We will contact the student prior to the start of class Who should they report to? Theresa Green

Goal

The goals of the Community Health Improvement Course, or CHIC, are to improve medical students' knowledge of the systems that impact health beyond health care delivery. The complete course is a 4-week curriculum (CHIC 1 + CHIC 2) which includes essential components of community health including social, environmental and behavioral determinants, and the interaction of health policy, health financing, and health care delivery systems with those determinants. The course includes a community-engaged practical experience that focuses on health improvement using evidence-based interventions to create sustainable, measureable change.

The course is divided in two 2-week sections, and students can register for only one of the sections, however registering for BOTH sections is preferred. Each section is two weeks long and includes CHIC 1: Public Health and Policy and CHIC 2: Population Health and Finance. All students registered in either section will be paired with a community partner to complete a community health improvement internship during their time in CHIC.

Learning Objectives

After completing the CHIC course (CHIC 1 or CHIC 2), students will be able to:

- Discuss the role of socioeconomic, environmental, and cultural determinants on the health status and care of individuals and populations (K-NSS-2, AB-PH-1)
- Explain how community engagement strategies may be used to improve the health of communities and to contribute to the reduction of health disparities (S-C-3)
- Participate in population health improvement strategies (e.g. systems and policy advocacy, program development, or other community-based interventions) (K-SC-1, AB-PH-1)

In addition, students who complete CHIC 2: Population Health and Finance will be able to:

- Describe the organization and financing of the US health care system, and their effects on access, utilization, and quality of care for individuals and populations including health care for the uninsured or underinsured (K-SC-1, K-SC-2)
- Gain a deeper understanding of how social circumstance impacts health particularly through food systems, social services, poverty and transportation (S-C-1, AB-PH-1)
- List several implications of the Affordable Care Act as it pertains to the Triple Aim, including payment reform, community health planning, and value based medicine (K-SC-1, K-SC-2)
- Explain the importance of an inter-professional team approach to patient care and the roles of emerging professions in care delivery and linkage to social services (S-C-2)

Schedule of Activities

This course includes three components of active learning. Plan to spend some time engaged in activity with the course director and your classmates, and the rest of the week engaged with your community partners.

 Didactic activities. There are at least two planned synchronous online classes on Zoom during each twoweek course however this will depend on class size and availability of students. Class time will be interactive and engaged learning with your classmates based on reading material and videos in Blackboard. Class time may also include guest lectures from Michael Mendoza, Commissioner of the Monroe County Department of Public Health, URMC representatives from the office of Government and Community Relations, and physician

providers engaged in community health work.

- 2. Experiential learning. CHIC will be as interactive and as experiential as possible, with activities planned to have students learn about the community and agencies that work in the community.
- **3.** Community Internships. Each student will spend approximately 12 hours each week with a community partner agency in Rochester. Partner agencies will be matched to the student's interests and preferences. There is no need to find a community project or partner. We will reach out prior to the start of class to learn your interests. Although course work and class will be online, it is expected that you will be in Rochester and

able to work in-person with your community partner (depending on the needs of the partner/project).

Didactic Activities

There will be both online and face-to-face learning in this course to support the objectives. Material will be relevant and from current media and news as much as possible.

Required Reading

Students will be given a reading list at the start of the course and all material will be available online.

Student Evaluations

Students will be evaluated on their participation and mastery of the material. Community partner preceptors will also evaluate student engagement during the community internship.

PRM606 Advanced Patient Safety and Quality Improvement Methods

Course Information

Course Director

Janice A. Schriefer M.B.A., M.S.N., Dr.P.H. Contact Person Dr. Megan Rashid Course Director Megan Rashid@URMC.Rochester.edu Dr. Jen Schriefer Course Director Jan Schriefer@URMC.Rochester.edu Dr. Tina Sosa Course Director Tina_Sosa@URMC.Rochester.edu Lauren Bestram Course Coordinator Lauren_Bestram@URMC.Rochester.edu **Class Year Name** Advanced Patient Safety and Quality Improvement Methods **Class Code PRM606 Elective Tags** Multidisciplinary Block Length 2 weeks Students 100 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year. 4th Year Where should students report?

What time should students report?

Who should they report to? Dr. Megan Rashid Dr. Jen Schriefer Dr. Tina Sosa

Goal

THIS COURSE CAN ONLY BE TAKEN ONCE

This course will provide an overview of patient safety, error prevention and leadership methods.

Learning Objectives

By the end of the elective, students should be able to do

Demonstrate that they have completed the Institute for Healthcare Improvement Basic Certificate in Quality and Safety by completing 13 on line foundational modules.?

Demonstrate that they have completed the Target Zero Harm on line training.

Use the 8 Error Prevention Techniques to promote safety in their clinical work.

Know how to submit it and analyze near miss events and safety events.

Identify their leadership style is and express how that could affect application of Leadership Methods and Interprofessional Communication.

Use PDSA cycles and IHI Patient Safety Toolkit to design, implement and present quality improvement projects

Schedule of Activities

Over the two weeks students will engage in four modules. Module content will include synchronous and synchronous lectures, simulations and case based activities as well as IHI on line learning activities, independent reading, participation in discussion board,

Didactic Activities

There will be formal lectures on Error Prevention, Diagnostic Errors, Closing the Loop, Second Victim/Just Culture and Leadership Methods.

Required Reading

Required reading will be posted on blackboard.

Student Evaluations

In order to complete the course students must submit a copy of the Institute for Healthcare Improvement Basic Certificate in Quality and Safety, complete the on line Target Zero Harm training, and participate in the discussion boards and lectures.

PSY606 Child and Adolescent Psychiatry

Course Information

Course Director Kathleen Tappen Baynes M.D. Contact Person Vicki Perry 273.1812, Vicki Perry@urmc.rochester.edu, **Class Year Name** Child and Adolescent Psychiatry Class Code **PSY606 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service, Patient Care, Teaching Block Length 2 weeks or negotiable Students 1 Prerequisites PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Discuss in advance with Chief Resident What time should students report? Discuss in advance with Chief Resident Who should they report to? Discuss in advance with Chief Resident

Goal

** All psychiatry electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry**

Students will acquire basic skills for the child and adolescent psychiatric work-up, and understand the role of the child psychiatrist both as a primary caregiver and as a consultant involved in the patient care team.

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

By the end of the rotation the student should be able to:

Interact with children/adolescents and their families, obtain full psychiatric history, and complete a written

psychiatric evaluation

- Understand basic psychopathology in children and adolescents, including mood disorders and developmental disorders
- Demonstrate basic understanding of treatments in child and adolescent psychiatry, including psychotherapies (individual, group, family; supportive and behavioral) and pharmacological treatments
- Understand the systems that provide psychiatric and related care services to children, adolescents, and their families

Schedule of Activities

** All psychiatry electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry**

The student will observe and participate in diagnostic evaluations, treatment team meetings, and group, family, and individual therapies. Specific site/service assignments will be based on student interest and availability; potential options include the Pediatric Psychiatry Consultation and Liaison Team (Golisano Children's Hospital), Child and Adolescent Outpatient Service, Child andAdolescent Partial Hospital Service, and Child and Adolescent Inpatient Service (or a combination thereof).

Didactic Activities

Students will meet individually with their preceptor to discuss patients, write-ups, and topics of mutual interest. Students may attend seminars from the Child & Adolescent Psychiatry Fellowship: exact details and schedules dependent on interest and availability.

Students are expected to complete an independent study project and present it to the clinical team they are working with by the end of their rotation. Most students prepare and present a 30 minute Powerpoint presentation, but specific details are individualized based on the nature of the project and will be determined with Rotation Preceptor.

Required Reading

Articles provided by preceptors and therapists related to cases seen

Student Evaluations

Clinical evaluations by preceptor and other clinicians with whom the student works

Course Information

Contact Person Vicki Perry, 273.1812, Vicki perry@urmc.rochester.edu Connie Smith Constance Smith@URMC.Rochester.edu **Class Year Name** Narrative Medicine Seminar: On Trauma Class Code **PSY608 Elective Tags** Medical Humanities **Block Length** 2 weeks Students 10 **Prereauisites** PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, International Visiting Where should students report? Arrange with Dr. Cardella What time should students report? Arrange with Dr. Cardella Who should they report to? Arrange with Dr. Cardella

Goal

All psychiatry electives must be pre-approved in advance by the elective director (Margaret Puelle, MD)

To gain a better understanding of the value of narrative medicine to mental health care and the experience of trauma. In particular, to understand the value of patient narratives in providing comprehensive, holistic, and empathetic mental health care and to encourage self-reflection in the provider, focusing on personal attitudes, values, and formative experiences that the provider brings to the clinical environment and that shape that provider's delivery of care.

The goal of this class is to engage with narratives in a 3-step process: close reading, close writing, and discussion and to use these discussions to understand the complex emotions and responses that can be seen in patients with significant trauma history and to use this understanding to help provide trauma-informed, empathetic care. Additional goals include understanding larger systems that perpetuate trauma and appreciating how the clinician can work within these systems to advocate for positive change.

Learning Objectives

By the end of the rotation the student should:

1. Be able to engage with required texts and media that depict trauma using close reading, close writing, and discussion to develop narrative competence to be applied to clinical care

2. Understand different narrative forms, especially the chaos narrative, in patient reports of trauma

3. Thoughtfully process their own attitudes, beliefs, and personal experiences and create their own narratives to help understand how these elements shape their delivery of clinical care

4. Explore experiences of trauma at the individual and systemic level

Schedule of Activities

Outlined on the course syllabus. Students will take part in daily 1.5 hour-long seminars, during which the required texts for the day and students' close writing assignments will be discussed.

Didactic Activities

Daily 1.5 hour long seminar-style discussions for the 2-week block

Required Reading

Required reading outlined on the course syllabus. Texts/media to be covered include films, poetry, and prose, as well as foundational papers in the field of narrative medicine.

This list is not exhaustive:

Gaslight (1940)

Nightmare Alley (2021)

Selections from Oedipus Rex and The Oresteia

Poetry by W.H. Auden and Langston Hughes

Cases of interest: Betty Broderick, Christopher Duntsch (aka Dr. Death), Robert Hadden, the Hillsong Church scandal, E. Jean Carroll v Donald Trump

Student Evaluations

Written evaluation on engagement with the course by course facilitator as well as the course director as indicated at the end of the elective.

PSY610 Inpatient Psychiatry

Course Information

Course Director Irina Statnikova M.D., Ph.D. **Contact Person** Vicki Perry, vicki perry@urmc.rochester.edu, 273.1812, **Class Year Name** Inpatient Psychiatry **Class Code PSY610 Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 - 4 weeks Students 1 Prerequisites PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Discuss in advance with Dr. Statnikova What time should students report? Discuss in advance with Dr. Statnikova Who should they report to? Discuss in advance with Dr. Statnikova

Goal

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

To gain experience and skills in evaluating and caring for patients admitted to acute psychiatric services

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

The student will be able to:

• Gather a complete clinical database for psychiatric inpatient unit, including patient interview and mental status examination, discuss with collateral informants as indicated, and record review.

- Present the clinical databases in oral and written formats
- Generate and discuss a differential diagnosis and formulation
- Help implement needed treatments as a part of multidisciplinary inpatient care team.

Schedule of Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

The emphasis is on active participation in all aspects of patient care. Students will work a minimum of 8:00 a.m. - 5:00 p.m. 5 days/week. The student will be assigned to a specific inpatient unit, based on planning with the course director, available options including general psychiatry, MICA (Mental Illness-Chemical Abuse), geriatrics and neuropsychiatry, and child and adolescent.

Didactic Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Students will be expected to read about and discuss the learning objectives with their inpatient attending. They will attend Psychiatry Grand Rounds (Wednesdays, 12:00 - 1:00 p.m.)

Required Reading

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Case-based reading assignments will be taken from Synopsis of Psychiatry 8th edition (Kaplan and Sadock), as well as from case-based review of primary literature.

Student Evaluations

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Students will be evaluated by their inpatient attending psychiatrist. To receive a grade of pass, the student must demonstrate achievements of the learning objectives to the course director, based on receiving a satisfactory clinical evaluation.

PSY612 Consultation Psychiatry

Course Information

Contact Person Vicki Perry, 273.1812 vicki perry@urmc.rochester.edu Barb Olesko, 275.4336 Connie Smith, 275.3592 **Class Year Name** Consultation Psychiatry **Class Code PSY612 Elective Tags** Consultation Service, Inpatient Service, Patient Care, Teaching Block Length By arrangement. Minimum of two full weeks. Students 1 **Prereauisites** PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? By arrangement with Dr. Puelle What time should students report? By arrangement with Dr. Puelle Who should they report to? By arrangement with Dr. Puelle

Goal

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Gain skills in diagnosing and treating psychiatric disorders that occur in the general hospital. Develop skills functioning as a psychiatric consultant and liaison in this setting.

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

By the end of the rotation the student should be more comfortable with:

- Evaluating and managing psychiatric conditions in the medically ill
- Identifying interactions between medical illness and psychiatric symptoms
- Diagnosing neuropsychiatric disorders such as delirium, dementia and catatonia, somatic symptom disorders, psychosis, suicidal behavior, anxiety, and agitation in medically ill patients
- Identifying drug-drug interactions and metabolism issues affecting the choice and use of psychopharmacologic agents in the elderly or medically ill
- Assessing medical decisional capacity

• Collaborating, communicating, and educating effectively with others in a multidisciplinary medical treatment team

Schedule of Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Evaluate new patients and follow-up on existing consult patients on the medical and surgical units. The student will work with residents, fellows, and attendings. Daily case discussion rounds and distribution of new consults occurs at 9:00 am every day. Teaching rounds with multiple attendings take place on Fridays at 1pm. Students should expect roughly 8am - 5pm hours M-F. There are no nights or weekends. Students are encouraged to present a case at the Friday teaching rounds when on service.

Didactic Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Departmental Grand Rounds weekly, Wednesdays, 12:00 - 1:00 pm.

Daily case-based and bedside teaching

Friday 1pm Teaching rounds

Required Reading

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Handouts given at orientation, access to DSM V (print or online).

Recommended Reading

- * Concise Guide to Consultation Psychiatry (Rundell and Wise)
- * Psychiatry Mentor (Privitera and Lyness)

Student Evaluations

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Mid-rotation feedback by student's preceptors. End of rotation review. Daily assessment of the student's ability to collect data, present it coherently, discuss clinical reasoning and decision-making with each case. A written evaluation with grade will be rendered by the preceptors at the end of the elective. There is also 360 input from Nurse Practitioners and a Social Worker.

PSY615 Emergency Psychiatry

Course Information

Contact Person Vicki Perry, 273.1812 vicki perry@urmc.rochester.edu **Class Year Name Emergency Psychiatry Class Code PSY615 Elective Tags** Consultation Service, Inpatient Service, Patient Care, Teaching Block Length 2 weeks Students 1 **Prerequisites** PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Arrange in advance with Dr. Rumesa What time should students report? By arrangement with Dr. Rumesa Who should they report to? By arrangement with Dr. Rumesa

Goal

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

To gain experience and skills in rapid and accurate assessment of patients presenting to a psychiatric emergency room

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

By the end of the rotation the student should be able to:

- Gather a complete clinical database for a psychiatric emergency room visit, including patient interviews and mental status examination, discussion with collateral informants as indicated and record review. Learn how to do good risk assessments
- Present the clinical database in highly focused oral and written formats

- Generate and discuss a differential diagnosis and formulation
- Discuss the recommendations and treatment options provided to the patient. Learn some of the outpatient resources for mental health, chemical dependency, and others

Schedule of Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

The emphasis is on active participation in all aspects of the patient evaluations. Students will work a minimum of 5 shifts/week, a combination of day and evening shifts to be scheduled on an individual basis.

Didactic Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Students are expected to read about and discuss the learning objectives with the psychiatric emergency room faculty, residents, and staff during their clinical day. They will attend Psychiatry Grand Rounds, Wednesdays, 12:00 - 1:00 pm. This is an active research site, and there are numerous opportunities for medical students to engage in research activities if desired.

Required Reading

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Case-based reading assignments will be taken from Synopsis of Psychiatry 9th edition (Kaplan and Sadock), as well as from case-based review of primary literature.

Student Evaluations

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Students will be evaluated by faculty for each shift worked, as well as by the course director. To receive a grade of pass, the student must demonstrate achievement of the learning objectives to the course director, based partly on receiving satisfactory clinical evaluations from their attending and residents

PSY616 Geriatric Psychiatry

Course Information

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Contact Person
Vicki Perry, 273.1812 vicki perry@urmc.rochester.edu
Class Year Name
Geriatric Psychiatry
Class Code
PSY616
Elective Tags
Consultation Service, Inpatient Service, Multidisciplinary, Patient Care, Research-Clinical
Block Length
2 weeks
Students
1
Prereauisites
PSY300 Psychiatry Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
3-9200
What time should students report?
8:30 am
Who should they report to?
Dr Greg Sherman
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Goal

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

The purpose of this elective is to give the student knowledge and clinical skills related to the assessment and treatment of mental disorders in older adults. The primary site is inpatient geriatric psychiatry, though other sites and options for learning are able to be coordinated pending availability and student preference.

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

1. The student will understand the broad range of psychopathology manifested in older adults, and the range of treatment options available to such patients, including how such conditions and their treatments may differ from those in younger adults.

2. The student will gain experience and skills in working with selected geriatric patient populations, including mood disorders, cognitive disorders, and disorders secondary to general medical conditions, as seen in inpatient, outpatient, and consultative settings.

Schedule of Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Depending on each student's specific interests, an individualized schedule will be created that will include supervised clinical experiences.

Block length: 2 weeks.

Didactic Activities

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

As per above; didactics will be chosen from our program's broad range of clinical and research seminars and case conferences.

Required Reading

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Individualized reading list from primary literature, together with relevant chapters from geriatric psychiatry texts such as the American Psychiatric Publishing Textbook of Geriatric Psychiatry (Blazer, Steffens, Busse, eds).

Student Evaluations

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

Evaluation form completed by supervisor(s) at the end of the rotation; feedback given on an ongoing basis during the rotation.

PSY622 Outpatient Psychiatry

Course Information

Course Director Annabel Shih-Hwei Fu M.D. Contact Person Vicki Perry, Coordinator: 273.1812 vicki perry@urmc.rochester.edu **Class Year Name Outpatient Psychiatry** Class Code **PSY622 Elective Tags** Consultation Service, Outpatient Service, Patient Care, Teaching Block Length 2 weeks only Students 1 Prerequisites PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? By arrangement with scheduled attending What time should students report? By arrangement with scheduled attending Who should they report to? By arrangement with scheduled attending

Goal

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

**Please note that circumstances facilitating a letter of recommendation can very rarely be accommodated, as this elective is primarily an observational experience with various providers"

To gain understanding and experience in diagnosing and treating various psychiatric disorders of a diverse outpatient population utilizing a full spectrum of modalities of treatment and community resources.

Learning Objectives

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

The student will be able to:

- observe assessment and management of psychiatric disorders of all age groups
- learn the different models of care in outpatient settings

understand the role of psychiatrist and various mental health clinicians

Schedule of Activities

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

Several half and full days will be spent at various outpatient services depending on availability and interests. These sites include but are not limited to: child and adolescent outpatient clinic, adult outpatient clinics, consultation services, outpatient transcranial magnetic stimulation, intensive outpatient services such as Mobile Crisis Team and Adult Partial Hospitalization Program. There will also be a few half-days dedicated to independent learning during which time the student is expected to engage in didactic activities. Readings and references available to student when there is downtime.

Didactic Activities

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

- Required: the student will be expected to present a case they encountered in the outpatient setting OR review
 and discuss an article pertaining to a topic or question encountered in the outpatient setting. Details to be
 discussed mid-rotation with outpatient elective director and case/article to be presented at the end of the
 rotation.
- Other didactic activities as per preceptors at the different service sites
- Strongly encouraged to attend Psychiatry Grand Rounds

Required Reading

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

Optional Readings and References:

- DSM-5 : available online through Miner Library
- Additional recommended readings as per preceptors at the different service sites

Student Evaluations

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

**Please note that circumstances facilitating a letter of recommendation can very rarely be accommodated, as this elective is primarily an observational experience with various providers"

A written evaluation will be completed by the outpatient elective director after compiling feedback from various preceptors along with completion of required didactic activity. The student is welcome to provide direct feedback regarding the elective.

PSY624 Collaborative & Integrated Care Psychiatry

Course Information

Contact Person Vicki Perry vicki perry@urmc.rochester.edu Constance Smith constance smith@urmc.rochester.edu Class Year Name Collaborative & Integrated Care Psychiatry Class Code **PSY624 Elective Tags** Consultation Service, Outpatient Service, Patient Care Block Length 2 weeks or negotiable Students 1 **Prereauisites** PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? arrange with Dr. Puelle What time should students report? arrange with Dr. Puelle Who should they report to? arrange with Dr. Puelle

Goal

*All psychiatry electives must be pre-approved in advance by the elective director (Margaret Puelle, MD)

To gain a better understanding of the value of integrated care in psychiatry and develop skills in integrating behavioral health in primary and specialty care. To experience a wide range of subspecialty consultation psychiatry settings

Learning Objectives

By the end of the rotation the student should:

1. Gain a better understanding of different team -based care models of integrating behavioral health in outpatient and inpatient settings, including the Collaborative Care Model, proactive inpatient consultation and behavioral health integration in specialty care

2. Have a basic understanding of the intersections between medical conditions, medical care, and specific manifestations of psychiatric illness

3. Become more comfortable in the assessment and psychiatric management of outpatients with complex medical conditions and psychiatric comorbidity

4. Develop a better understanding of the proactive consultation model for inpatients

Schedule of Activities

The exact schedule of this rotation is highly flexible and variable. The student will be scheduled in a variety of

inpatient and outpatient settings spanning a very wide range of consultation-liaison psychiatry. Possible offerings include: advanced heart failure & heart transplant, liver and kidney transplant, primary care collaborative care, women's mental health, inpatient proactive medicine consults, embedded neurology clinics (movement disorders & huntington's disease), pain psychiatry, psycho-oncology, and psychodermatology. Please note that circumstances facilitating a letter of recommendation can very rarely be accommodated, as this elective is primarily an observational experience with various providers. If you have a particular area of interest, please contact the course director before registering as some of these clinics only occur a few times a month and/or with a single attending physician.

Didactic Activities

- 1. Departmental Grand Rounds weekly, Wednesdays, 12 1pm (not held during the summer months)
- 2. Friday 1pm teaching rounds with the consultation-liaison service

Required Reading

- **1.** DSM-5 (print or online)
- 2. Reading lists will be provided based on the settings you are scheduled in

Recommended Reading

- Sherman, B., Block, L. 2017. Benefits Innovations in Employee Behavioral Health. Benefits Quarterly, pp 13 17.
- 2. Ciechanowski, Paul. 2018. Meetings of the Minds; How to ally medicine with behavioral health care. GPJ, pp 14 18
- Elderon Kao, L. et.al. 2017. A Model of Collaborative Spiritual and Psychiatric Care of Oncology Patients. Psychosomatics. 58:614–623
- **4.** Katzelnick, D., Williams, M. Large-Scale Dissemination of Collaborative Care and Implications for Psychiatry. Psychiatric Services 2015; 66:904–906; doi: 10.1176/appi.ps.201400529.
- Manderschield, R., Kathol, R., Fostering Sustainable, Integrated Medical and Behavioral Health Services in Medical Settings. Ann Intern Med. 2014;160:61-6
- Pinkhasov, A. et.al. A Proactive Behavioral Health Service Model to Address Use of Constant Observation in a General Hospital. Psychiatric Services 2018; 69:251–253; doi: 10.1176/appi.ps.20170045
- Sledge W.H., et.al. The Cost-Benefit from the Perspective of the Hospital of a Proactive Psychiatric Consultation Service on Inpatient General Medicine Services. Health Econ Outcome Res Open Access 2016, 2:4.

Student Evaluations

Mid-rotation feedback by student's preceptors, end of rotation review and written evaluation with grade will be rendered by course director as indicated at the end of the elective.

PSY626 Community Mental Health Interventions: Mobile Crisis Unit

Course Information

Course Director Yilmaz Yildirim M.D., Ph.D. **Contact Person** Vicki Perry, 273-1812, vicki perry@urmc.rochester.edu **Class Year Name** Community Mental Health Interventions: Mobile Crisis Unit **Class Code PSY626 Elective Tags** Multidisciplinary, Outpatient Service, Patient Care Block Length 2 weeks Students 1 Prerequisites PSY300 Psychiatry Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Mobile Crisis Office 2613 W Henrietta Rd (office in rear of bldg) What time should students report? arrange with Danielle Clabeaux, MS Who should they report to? arrange with Danielle Clabeaux, MS

Goal

*All electives must be pre-approved in advance by the elective director (Yilmaz Yildirim, MD)

To gain a better understanding of the psychiatric emergency services provided by the Mobile Crisis Team and develop skills in community psychiatric emergency care

Learning Objectives

By the end of the rotation the student should be able to:

- 1. Practice performing a psychiatric intake interview in the community setting, utilizing the understanding of crisis stabilization
- 2. Demonstrate the components of a risk assessment evaluation of a patient in the community setting (e.g. suicidal risk assessment, homicidal risk assessment), including when to refer to a higher level of care
- 3. Discuss the benefits and challenges of working on a multidisciplinary team of mental health professionals
- 4. Become familiar with community organizations / resources that collaborate with the Mobile Crisis Team

Schedule of Activities

1. Students will be expected to report to the mobile crisis team office at the designated time to review charts of

patients being seen by the team that day

2. Students will accompany the Mobile Crisis Team during the day, seeing patients and conducting interviews when appropriate. The students schedule is variable as it depends on the number of patient visits on the team's schedule each day. Students should plan to be seeing patients with the team for the full duration of the shift

Didactic Activities

- 1. Departmental grand rounds weekly, Wednesdays, 12:00 1:00 pm (if available)
- 2. Other didactics to be decided between course director and student

Required Reading

- 1. DSM-5
- 2. Other required and/or suggested readings will be customized according to the need of the student by the course director and Mobile Crisis Team staff

Suggested Reading:

- Murphy SM, Irving CB, Adams CE, Waqar M. Crisis intervention for people with severe mental illnesses. Cochrane Database Syst Rev. 2015 Dec 3;2015(12):CD001087. doi: 10.1002/14651858.CD001087.pub5.
 PMID: 26633650; PMCID: PMC7052814.
- Santermans L, Zeeuws D, Vanderbruggen N, Crunelle CL. Mobile crisis team in the Brussels region: facts and figures. Psychiatr Danub. 2019 Sep;31(Suppl 3):418-420. PMID: 31488764.

Student Evaluations

1. End of rotation feedback will be completed by Dr. Yildirim and other team members

At the end of the elective, all participants will be emailed a link from the MCT service to evaluate their experience

PTH601 Introduction to Pathology/Laboratory Medicine

Course Information

Course Director Bradley M. Turner M.D., M.P.H., M.H.A. **Contact Person** Kris Caswell 275-8546 kris_caswell@urmc.rochester.edu **Class Year Name** Introduction to Pathology/Laboratory Medicine Class Code PTH601 **Elective Tags** Consultation Service, Inpatient Service, Patient Care Block Lenath 2 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Pathology; Dr. Turner's Office (2-2113, near green elevators at Strong Memorial Hospital) A Zoom link will also be provided in your Outlook schedule in case Dr. Turner is off site. What time should students report? 9:30 AM on the first weekday of the rotation. 9:30 AM on the last day of the rotation Who should they report to? Dr. Bradley Turner

Goal

Current literature suggests that up to 85% of patient management is based off of the results that come out of the 'black box' of pathology. This elective rotation is framed primarily as an observational experience to prepare the future physician to decode at least a little bit of what comes out of the pathology 'black box".

The goal of this rotation is to give students a greater understanding of what happens in Pathology & Laboratory Medicine, in preparation for the students future roles as a patient provider interacting with the pathology laboratory. For the students who elect to further explore pathology either because of interest or as a potential career choice, the PTH601 elective course fulfills the prerequisite requirement for the PTH602, 603, and 605 elective rotations.

During this two-week rotation, students will spend time in both Anatomic Pathology (AP) and Clinical Pathology/ Laboratory Medicine (CP/LM), including 'mini rotations' in some, but not all, of the following areas: Autopsy Pathology, Clinical Chemistry, Cytopathology, Hematopathology, Microbiology, HLA, Cytogenetics, Microarray, Surgical Pathology, and Transfusion Medicine. These occur across three main sites: Strong Memorial Hospital, Highland Hospital, and the Central Laboratory (Bailey Road, Henrietta); students should ensure that they have appropriate transportation to be able to go to these 3 sites.

During their 'mini rotations' (0.5-3 days in length), students will learn from departmental faculty, staff, fellows and residents. In addition to spending time in each area, students will be provided with the opportunity to attend department-wide didactic lectures.

Learning Objectives

By the end of the rotation the student should be able to:

- Demonstrate a general understanding of the scope of pathology as a field of medicine.
- Understand the consultative role that a pathologist may play in the care of a patient, and how clinicians may utilize pathologists in this role.
- Discuss pathology-related topics initially encountered in the first and second year medical school curriculum and expand on these topics through encounters in the areas of AP and CP/LM.
- Discuss information relevant to the diagnostic process based on the required reading from "The Practice of Surgical Pathology: A Beginner's Guide to the Diagnostic Process"

Schedule of Activities

Daily schedules will vary by the area of Pathology that the student is rotating in, however the hours of the rotation are typically 9 am to 5 pm, weekdays only. Students will receive the specific schedule of their 'mini rotations' approximately 1 week before the start of the rotation. Students will work with residents, fellows, faculty and staff during the rotation. Medical students will be encouraged to attend didactic conferences with the pathology residents.

Didactic Activities

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both AP and CP/LM and involve interactive didactics at the multi-headed microscope, question-based didactics, unknown slide sessions, and gross organ/specimen review in the autopsy suite. Students additionally receive case-related teaching from residents, fellows, staff and faculty members during the daily operations of the specific areas of Pathology.

Required Reading

The Practice of Surgical Pathology: A Beginner's Guide to the Diagnostic Process (a copy should be available in the library; otherwise, a copy will be made available by the course director)

In addition, students are given access to our extensive collection of pathology textbooks/reading materials.

Student Evaluations

Rotating students will be evaluated by the members of the department that they work with in the areas specified by the medical school.

The rotating student should identify and present a "Case of the Month" to Dr. Turner on the last day of the rotation. An example of how to format the case is detailed on pages 18-20 in the PTH601 Introduction to Pathology and Laboratory Medicine handbook, which all rotating students will receive.

PTH603 Clinical Pathology

Course Information

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Course Director
Paul R Hosking M.D.
Contact Person
Kris Caswell kris caswell@URMC.Rochester.edu 585-275-8546
Class Year Name
Clinical Pathology
Class Code
PTH603
Elective Tags
Consultation Service, Inpatient Service, Patient Care
Block Length
2 weeks
Students
2
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Specific location to be provided before start of the rotation
What time should students report?
9:30 AM on first weekday of rotation.
Who should they report to?
Dr. Paul Hosking
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Goal

The goal of this rotation is to expand on the PTH601 (Introduction to Pathology/Laboratory Medicine) experience, giving students additional exposure in Clinical Pathology/Laboratory Medicine. Students will work with the Course Director/Coordinator to creating a schedule encompass time on the Transfusion Medicine (Blood Bank), Coagulation, Clinical Chemistry, Microbiology and/or Hematopathology services. These occur across two main sites: Strong Memorial Hospital and the Central Laboratory (Bailey Road, Henrietta); students should ensure that they have appropriate transportation to be able to go to these two sites

This two-week rotation is aimed at the medical student who is interested in exploring a career in Pathology, as well as those who are likely to significantly interact with Clinical Pathology in their future career (Medicine, Research), athough any medical student would benefit from further exploring this fascinating field of medicine.

Learning Objectives

By the end of the rotation the student should be able to demonstrate their understanding of how laboratory medicine impacts clinical care, and how pre-analytical variables impact the results rendered by the clinical laboratory. Additionally, students should be able to understand the process by which a clinical pathologist may act as a consultant in clinical care.

Schedule of Activities

Daily schedules will vary by the area of Pathology that the student is rotating in, however the hours of the rotation are typically 9 am to 5 pm, weekdays only. Rotation specific activities may include: Attendance at Blood Bank morning laboratory rounds; Working with Pathology residents and fellows to triage clinical issues involving the Blood Bank and

Chemistry laboratories; Reviewing of Hematopathology cases, including formulation of diagnoses. Students may attend didactic conferences with pathology residents. By the end of the rotation, students will be expected to submit a 1-2 page written pathology-focused case summary. Students will be given the option to write based upon a case seen during their rotation, or on a patient they have encountered in prior clinical rotations.

Didactic Activities

<u>Didactic Conferences</u>: Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program.

<u>One-on-one teaching</u>: Students additionally receive one-on-one case-related teaching from residents, fellows, and faculty members.

<u>Written Case Summary</u>: Students will learn through the process of investigating and writing about the pathologic processes of an interesting patient case.

Required Reading

Although there is no required reading, reference books are available on all rotations for the medical student to access.

Student Evaluations

Rotating students will be evaluated by the members of the department that they work with in the areas specified by the medical school.

PTH605 Anatomic Pathology

Course Information

Course Director Sarah K Findeis M.D. Contact Person Laura Robinson (Coordinator) Laura_Robinson1@urmc.rochester.edu 273-5564 **Class Year Name** Anatomic Pathology Class Code PTH605 **Elective Tags** Consultation Service, Inpatient Service, Patient Care Block Lenath 2-4 weeks Students 2 Prerequisites PTH601 Introduction to Pathology/Laboratory Medicine An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Pathology, G-5251 (SMH) What time should students report? 9:30 AM on the first weekday of the rotation. Who should they report to? Dr. Findeis (front desk staff in G-5251 will be able to assist you)

Goal

The goal of this rotation is build upon the PTH601 (Introduction to Pathology/Laboratory Medicine) elective and provide students with an advanced rotation in Anatomic Pathology. Students will work closely with Pathology faculty, staff, and residents at Strong Memorial Hospital. Students will work with the Course Director to create a schedule which may include time on Surgical Pathology, Cytopathology, Autopsy Pathology, and Neuropathology. To further enhance their learning during the rotation, students will attend didactic conferences with Pathology residents .

The goal of this rotation is to build upon the PTH601 (Introduction to Pathology/Laboratory Medicine) experience and give students an advanced experience in Anatomic Pathology, which may include any of the following areas of Anatomic Pathology: Surgical Pathology, Cytopathology, Autopsy Pathology, and/or Neuropathology. These occur across two main sites: Strong Memorial Hospital and Highland Hospital; students should ensure that they have appropriate transportation to be able to go to these sites.

During the course of the rotation, students will be able to encounter multiple fascets of Anatomic Pathology, potentially including participating in the workup of surgical pathology specimens within our subspecialty Surgical Pathology practice, participating in gross pathology examination of surgical specimens. working with departmental staff at the frozen section bench, attending Cytology procedures, and observing an Autopsy case (not available on every rotation). As in PTH601, students will attend didactic conferences, including departmental Grand Rounds and the Residency's didactic conference series.

This rotation is aimed at the medical student who is interested in exploring a career in Pathology, as well as those who are likely to significantly interact with Anatomic Pathology in their future career (Surgery, Research, Ob/GYN, Medicine), athough any medical student would benefit from further exploring this fascinating field of medicine.

Learning Objectives

By the end of the rotation the student should be able to: Make basic pathological diagnoses. Understand the process by which a pathologist acts as a consultant to the clinician and the interactive process involved.

Schedule of Activities

The hours of the rotation are approximately 7:30 am to 5 p.m, weekdays only. The schedule of activities will vary depending on the areas that the student rotates through, but may include the following:

Surgical Pathology: Students will typically be paired with a resident or fellow on a subspecialty service for a week at a time. During that week they will be an active member of that subspecialty service, participating in the formulation of pathologic diagnoses, as well as gaining exposure the frozen sections and the macroscopic examination of oncologic and non-oncologic surgical specimens. Exposure to an autopsy is available upon request.

Autopsy or Neuropathology: The student will be exposed to post mortem examinations and presentations of organs to the clinical attending, and participate in sign-out sessions with the attending pathologist.

Cytopathology: Students will attend daily sign-out sessions with the attending cytopathologist, as well as accompany the cytopathology faculty and staff on procedures (i.e., fine needle aspirates, EBUS, etc.)

Didactic conferences with the pathology residents are available most days at 7:30/8 a.m. and at noon.

Didactic Activities

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both anatomic and clinical pathology and involve interactive didactics at the multi-headed microscope, unknowns sessions, and gross organ specimen review in the autopsy suite.

Students additionally receive one-on-one case-related teaching from residents, fellows, and faculty members as they work to formulate pathologic diagnoses in our daily clinical practice.

Required Reading

Although there is no required reading, reference books are available on all rotations for the medical student to access.

Student Evaluations

Rotating students will be evaluated by the members of the department that they work with. They will be evaluated in reference to attendance on the rotation, fund of knowledge, synthesis of materials, understanding of the various policies and procedures involved in Anatomic Pathology, and their grossing and diagnostic skills (when applicable).

Course Information

Course Director

Nadia Granger M.D. **Contact Person** Jillian Burgen (585)753-5916 Jillianburgen@monroecounty.gov Laura Robinson (585)273-5564 laura robinson1@urmc.rochester.edu **Class Year Name** Forensic Pathology **Class Code** PTH607 **Elective Tags** Consultation Service, Patient Care **Block Length** 2 weeks-Must contact for approval of dates. Students 1 Prerequisites PTH601 Introduction to Pathology/Laboratory Medicine An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Office of the Medical Examiner 740 East Henrietta Road Rochester, NY 14623 What time should students report? 8:00 AM for the first day; the remainder of the rotation will have an 8:15 AM start time Who should they report to? Robert Zerby or Dr. Nadia Granger

Goal

Gain a deeper understanding of Forensic Pathology while rotating at the Monroe County Office of the Medical Examiner. This course is offered by request and is an advanced elective following completion of the PTH601 elective. Email the listed contact person to determine if desired dates are available.

This rotation is ideal for the medical student who is interested in exploring a career in Pathology, as well as those generally interested in Forensics.

Learning Objectives

Gain a deeper understanding of Forensic Pathology while rotating at the Monroe County Medical Examiners' Office.

Schedule of Activities

Observe autopsies at the Monroe County Medical Examiners' Office (MEO). Students may have opportunities to visit scenes or attend court to observe case-related trials. Given the legal nature of the work performed at the MEO, this is an observation-only rotation.

Didactic Activities

Students will learn via observation through a case-based approach.

Required Reading

No required reading; resources will be made available on an as needed basis.

Student Evaluations

Rotating students will be evaluated using guidelines specified by the medical school.

Course Information

Course Director Stan Lee Weiss M.D. Contact Person Cheryl Papaleo Medical Student Curriculum Coordinator; (585)-273-5476; cheryl papaleo@urmc.rochester.edu **Class Year Name** General Radiology Class Code **RAD602 Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research-Clinical **Block Length** 2 Weeks Students 4 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Students will be instructed where to report prior to the start of the rotation. What time should students report? Varies, but typically 9 am or earlier on the first day. Who should they report to? Cheryl Papaleo; Imaging Sciences, Room 3-4447.

Goal

The goal of the General Radiology elective is to allow medical students to develop an appreciation of the complexity of diagnostic imaging including an understanding of the types of studies which are available and the information they can provide.

The General Radiology elective is structured to provide an overview of the breadth of diagnostic imaging, invasive radiology, and an introduction to the fundamentals of diagnostic radiology. This includes the basics of chest, skeletal, gastrointestinal, and genitourinary system imaging, and introduces angiography, nuclear medicine, magnetic resonance imaging, computed tomography, ultrasound, and neuroradiology.

It is not the purpose of the elective to have students become skilled interpreters of imaging studies. A familiarity will be established, but directed to the use of the technologies involved.

Learning Objectives

The learning objectives of this elective are to assist medical students in:

• Developing an understanding of the differences between, and interactions among, each of the imaging specialties and the operation of these radiologic subspecialties in the context of modern radiologic and medical practice.

• Learning basic plain film and CT interpretation and becoming familiar with sonography and MR, and recognizing limitations in knowledge and understanding of radiological interpretation.

• Gaining an understanding of the diagnostic limitations of imaging studies and how these parameters affect patient care, clinical indications for obtaining studies, the relative risk/benefit of certain radiologic procedures, and the basic technical aspects of how examinations are performed.

Schedule of Activities

-During the elective, the student's major assignment will be to observe image interpretation and various procedures in the assigned Radiology imaging suite(s).

-Attendance at the daily Radiology resident conferences and selected tumor board conferences is not required but is strongly encouraged.

-Daily evaluations from the faculty, fellows, and/or residents that the medical student works with are required. It is the student's responsibility to secure the evaluations and submit them to the elective coordinator upon completion of the elective.

-In the afternoon, students are expected to complete self-learning exercises consisting of

- assigned reading in recommended textbook available on-line through the library
- completion of radiology aquifer modules
- complete weekly assigned on-line quizzes
- complete two assigned image interpretation cases (one per week).

Didactic Activities

Optional

- Daily resident conference (12:00 1:30PM)
- Selected multidisciplinary/tumor board conferences

Required Reading

Recommended:

"Learning Radiology: Recognizing the Basics", Author William Herring

http://rochester.primo.exlibrisgroup.com/permalink/01ROCH_INST/1vg5sr1/alma9978475637105216

Aquifer Radiology Modules

https://aquifer.org/courses/aquifer-radiology/

Student Evaluations

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as on their communication, medical knowledge, interpersonal, and professional skill set as well as the presentation of an interesting patient case discovered during the elective. Upon completion of the elective, it is the students' responsibility to submit their rotation evaluations and interesting case write-up to the elective coordinator.

RAD603 Nuclear Medicine

Course Information

Course Director Vaseem U. Chengazi M.D., Ph.D. Contact Person Veronica Crittenden, x5-4741, veronica crittenden@urmc.rochester.edu **Class Year Name** Nuclear Medicine Class Code **RAD603 Elective Tags** Consultation Service, Inpatient Service, Medical Humanities, Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research-Basic science, Research-Clinical, Teaching Block Length Negotiable Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? G-3207 What time should students report? 8:00 a.m. Who should they report to? Receptionist

Goal

: To understand the basics for the clinical application of diagnostic and therapeutic nuclear medicine procedures to the patient population.

Learning Objectives

By the end of the rotation the student should be able to:

?Understand the clinical basics for functional imaging in diagnostic nuclear medicine procedures such as bone scans, infectious disease localization, papillary studies, cardiac procedures, ventilation perfusion scan and tumor and endocrine imaging.

?Establish an understanding of the basic requirements for radiation safety for workers and patients.

?Be able to describe the differences in approach and calculation of dose for various radioisotopic therapeutic procedures.

?Develop at least a basic approach to the evaluation of the correlated and competitive modalities in their application to various disease states.

Schedule of Activities

During the morning, the students will participate in a basic activity with the residents and attending faculty in the diagnostic/therapeutic clinic activity. In the afternoons, students will be expected to participate in the daily reading/ instructional session from 2:30-5:00 p.m. in which the day?s caseload is used as a springboard for discussion of diagnostic and therapeutic problems and applications. Students will also be expected to participate in the routine conference schedule of both the Division of Nuclear Medicine and the Department of Radiology.

Didactic Activities

Regular conference schedule of Nuclear Medicine and Imaging Sciences.

Required Reading

A Clinician's Guide to Nuclear Medicine. Edited by Andrew Taylor, M.D., and David M. Schuster and Naomi Alazraki

Student Evaluations

Student evaluations will be collated by the course director utilizing reports from both attending and resident faculty as to student participation and development.

Course Information

Course Director Stan Lee Weiss M.D. Contact Person Cheryl Papaleo Medical Student Curriculum Coordinator; (585)-273-5476; **Class Year Name** Subspecialty Radiology **Class Code RAD610 Elective Tags** Consultation Service, Inpatient Service, Medical Humanities, Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research-Basic science, Research-Clinical, Teaching Block Length 2 Weeks Must get approval before scheduling Students 1 Prerequisites RAD602 General Radiology An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Students will be directed where to report prior to the start of the rotation. What time should students report? Varies, but typically 9:00 am or earlier on the first day. Who should they report to? Cheryl Papaleo; Imaging Sciences, Room 3-4447

Goal

This elective is intended for students who are either preparing for a career in radiology or have a particular interest in a subspecialty area (Chest; Abdominal; Breast; Pediatric; Neuroradiology) in Radiology. Completion of the General Radiology elective (RAD602) is a prerequisite.

Learning Objectives

At the completion of the elective, students should be able to increase understanding of diagnostic radiology subspecialties by supplementing exposure to radiology from didactic material taught in the first two years of medical school as well as from the General Radiology elective. This includes:

- · Identifying indications for exams based on clinical, lab, and prior radiographic information.
- Describing how the exam is performed and necessary patient preparations.
- · Identifying what alternative diagnostic procedures exist.
- Understanding the general principles of interpretation.
- Following up on clinical outcome.

Schedule of Activities

-During the elective, the student's major assignment will be to observe image interpretation and various procedures in the assigned Radiology imaging suite(s).

-Attendance at the daily Radiology resident conferences and selected tumor board conferences is not required but is strongly encouraged.

-Daily evaluations from the faculty, fellows, and/or residents that the medical student works with are required. It is the student's responsibility to secure the evaluations and submit them to the elective coordinator upon completion of the elective.

-Students will be responsible for writing and presenting one interesting patient case that has been observed and submitting the write-up to the elective coordinator upon completion of the elective. The case write up should include:

- Indications for exam radiologic findings.
- Patient history interpretation of findings.
- Type of exam performed.
- Differential diagnosis
- Diagnostic options follow-up
- Key images (include copies of films)
- Appropriate literature references

Didactic Activities

- Daily resident conference (12:00 1:30 PM)
- · Selected multidisciplinary/tumor board conferences

Required Reading

Recommended:

- Essential Radiology by Richard B. Gunderman
- Radiology Made Ridiculously Simple by Patrice Tetreault, MD
- Squire's Fundamentals of Radiology Sixth Edition by Robert Novelline

Student Evaluations

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as on their communication, medical knowledge, interpersonal, and professional skill set as well as the presentation of an interesting patient case disccovered during the elective. Upon completion of the elective, it is the students' responsibility to submit their rotation evaluations and interesting case write-up to the elective coordinator.

Course Information

Course Director Andrew J Cantos M.D. Contact Person Cheryl Papaleo Medical Student Curriculum Coordinator; (585)-273-5476; **Class Year Name** Interventional Radiology Elective Class Code **RAD668 Elective Tags** Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care, Primary Care Block Lenath 2 Weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Students will be instructed where to report prior to the start of the elective. What time should students report? Varies, but typically 6:45 am or earlier on the first day. Who should they report to? Cheryl Papaleo; Imaging Sciences, Room 3-4447

Goal

This elective is designed for students strongly interested in or committed to Interventional Radiology as a career. This is an immersive elective in the Interventional section where hands-on experience can be gained performing a diverse range of vascular and nonvascular image-guided, minimally invasive procedures. Students will work with residents, fellows, and attending radiologists performing interventions in almost all organ systems.

Learning Objectives

The learning objectives of this elective are to assist the medical student in:

- Introduction to radiologic vascular anatomy.
- Recognizing the benefits of interventional radiology procedures.
- · Familiarization and discussion of indications of procedures.

Schedule of Activities

• During the elective, the student's major assignment will be to observe/participate in various procedures in the Interventional Radiology imaging suites.

• There will be morning rounds with the residents, fellows, attending radiologists, and other interventional staff to discuss/review the scheduled patient cases.

• Attendance at the daily radiology resident conferences and selected multidisciplinary/tumor board conferences is not required but is strongly encouraged.

• Daily evaluations from the residents, fellows, and/or faculty that medical students work with are required, and it is

the students' responsibility to secure the evaluations and submit them to the elective coordinator upon completion of the elective.

Didactic Activities

- Daily resident conference (12:00 1:30 PM)
- · Selected multidisciplinary/tumor board conferences

Required Reading

Recommended:

- · Case Review: Vascular and Interventional Imaging by Suresh Vedantham and Jennifer Gould
- Handbook of Interventional Radiologic Procedures Fourth Edition by Krishna Kandarpa and Lindsay Machan
- · Squire's Fundamentals of Radiology Sixth Edition by Robert Novelline

Student Evaluations

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as on their communication, medical knowledge, interpersonal, and professional skill set. Upon completion of the elective, students are responsible to obtain their evaluations and submit them to the elective coordinator.

RHB600 Physical Medicine and Rehabilitation

Course Information

Contact Person Kurt Hauber 585-275-5321 kurt_hauber@urmc.rochester.edu Class Year Name Physical Medicine and Rehabilitation Class Code **RHB600 Elective Tags** Consultation Service, Inpatient Service, Outpatient Service Block Length 2 or 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Students should report as directed on their schedule. If a schedule is not received, report to the inpatient unit 5-1200 at 8:30 am. What time should students report? 8:15 a.m. Who should they report to? 5-1200 Inpatient Unit: Dr. Heather Ma room 52314 resident work room

Goal

To develop an appreciation of the impact of disease and injury on function, and to understand the application of physical medicine approaches and rehabilitation strategies to the alleviation of functional impairments.

Learning Objectives

By the end of the rotation the student should be able to:

Demonstrate proficiency in examination of the musculoskeletal system.

Integrate neurologic and musculoskeletal findings into the development of functional assessments.

Predict the nature of functional impairment resulting from specific neurologic or anatomic injuries.

Understand the roles of each of the members of the rehabilitation team.

Order appropriate tests as required to develop a musculoskeletal or neurologic diagnosis, as well as a rehabilitation diagnosis.

Order appropriate therapeutic interventions based on functional diagnoses.

Order appropriate interventions in the face of acute illness or injury to prevent unnecessary complications that frequently lead to disability.

Describe the breadth of the field of PM&R, and discuss the roles of various settings, including acute inpatient, subacute/SNF and outpatient rehabilitation.

Schedule of Activities

This elective is designed with flexibility in mind. Inpatient, outpatient, or a combination of experiences are possible. The elective will focus on providing students with an education and an exposure to the broad field of Physical Medicine and Rehabilitation.

Students will rotate on an inpatient service and become a part of the rehabilitation team, working with a resident and an attending physician. Students will round with the team, as well as evaluate and manage their own patients. They

will observe their patients as they undergo rehabilitation, gaining an understanding of the variety of therapeutic approaches used. Students assigned to the SMH spinal cord injury service line will see patients recovering from spinal cord injury. Students assigned to the SMH brain injury service line will see patients recovering from traumatic brain injury. Students assigned to the SMH medically complex service line will see patients recovering from various medically complex conditions, such as stroke, multiple trauma, burns, amputation, and a variety of neurological conditions.

Students will also rotate through the outpatient clinics and work with patients with a variety of needs including but not limited to: musculoskeletal injuries, electrodiagnostic consultation, pain management, post concussive syndrome, spinal cord injury, stroke, amputee care, arthritis, and the evaluation and management of rehabilitation needs in the outpatient setting. Clinic sites include SMH, Clinton Crossings, Webster, Penfield, Canandaigua, Strong West (Brockport), and AOPP.

Didactic Activities

Students will attend Rehabilitation Grand Rounds, journal club, and didactic sessions which occur on Thursday mornings.

Required Reading

Materials given on first day of rotation.

Student Evaluations

To receive a grade of satisfactory, students must see all assigned patients, write or dictate admission, discharge and progress reports in a timely fashion and demonstrate proficiency in the examination of their patients, with particular emphasis on the musculoskeletal and neurologic exams, in the evaluation of functional deficits and in the formulation of appropriate treatment plans. A faculty preceptor will observe each student, and the preceptor and student at the end of the rotation will complete a written evaluation.

Course Information

Contact Person Christina Mattle, 273-1841, Christina Mattle@urmc.rochester.edu Dr. Paritosh Prasad paritosh prasad@urmc.rochester.edu **Class Year Name** Surgical Intensive Care Unit Class Code **SUR606 Elective Tags** Inpatient Service **Block Length** 4 weeks Students 4 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? 8-2527 What time should students report? An e-mail will be sent prior to beginning of elective with reporting instructions Who should they report to? Advance Practice Provider

Goal

* Students doing an ICU rotation for their acting internship will need 2 weeks of an additional rotation, which can be fulfilled with 2 consecutive weeks of MED603 or MED601. *

To understand the pathophysiology of critically ill patients.

Learning Objectives

By the end of the rotation the student should be able to:

- Recognize critically ill patients and learn to prioritize problems.
- Explain fluid shifts and fluid management in critically ill patients.
- Solve acid/base problems.
- Understand when to use the different modalities of mechanical ventilation.
- Identify arrhythmias.
- Explain and use all the hemodynamic parameters which can be obtained from a pulmonary artery catheter.

- Identify the causes and manage hypoxia.
- •
- Identify the causes and manage hypercarbia
- Identify the causes and manage oliguria.
- Appreciate the pharmacokinetics and pharmacodynamics of drugs used in the ICU.
- Identify and treat the various forms of shock.
- Write appropriate total parenteral nutrition/total enteral nutrition orders.

Schedule of Activities

Students participate in the daily rounds in the Intensive Care Unit. They follow and present patients to the ICU Attending and participate in all didactic sessions. Sub-Internship students will be expected to take call approximately every third or fourth night. Nights that you take call you will work directly with the ICU residents and APPs. You will leave after morning rounds, or no later than 9:00 a.m. Elective students are not required to take call. Both elective and Sub-I students will be required to shadow one of the SICU nurses for one night during your rotation. You will come in at 7p and stay until 7a, and then be off the next day.

Didactic Activities

Students participate in the daily ICU lectures given in the Critical Care Learning Center (room 8-2527) from 3-4 pm.

Student Evaluations

To receive a grade of Pass, the student must participate in ICU activities and present their assigned patients on rounds. If taken as a subinternship, additional requirements will be discussed with Dr. Prasad directly.

SUR630 Vascular Surgery

Course Information

Contact Person Julie K. Burkhart, 31712/Liz Schinski, 31745 julie burkhart@urmc.rochester.edu elizabeth schinski@urmc.rochester.edu **Class Year Name** Vascular Surgery **Class Code** SUR630 **Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 or 4 weeks Students 1 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Please contact Julie K. Burkhart before scheduling a visiting medical student at 273-1712!! Julie K. Burkhart will notify the medical student where and what time to report. What time should students report? They will be notified in advance where to report!! Who should they report to? Vascular surgery chief resident

Goal

Vascular Surgery is the study and treatment of circulatory disorders outside the heart. Students will be exposed to the workup, medical, surgical and catheter-based management of vascular disease in both inpatient and outpatient venues. Teaching experiences include rounds, assisting in the operating room and catheterization laboratory, evaluating patients in the clinic. The Division holds weekly didactic teaching conferences and a daily clinical conference.

Learning Objectives

This is a clinical, "hands-on" rotation, where students will be expected to be a member of the normal operative team. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. If time and interest permits, outpatient office experience is available (particularly for students spending more time on the rotation), although the focus of this elective is inpatient care of sick patients.

By the end of this rotation, the student should be able to:

-Describe basic relevant clinical vascular anatomy

-Begin to understand basic concepts and decision-making in patients with vascular problems

-Gain experience in the acute management of pre- and postoperative surgical patients with a generally high level of acuity

-Be able to describe the basic vascular surgical procedures: Open and endovascular aortic surgery, carotid surgery, lower extremity bypass and amputation, and other operations

This rotation can be performed in two ways. Third-year students or those without extensive experience can do a two-

week rotation. Fourth-year students or those interested in general or vascular surgery as a career are encouraged to spend four weeks with us on a formal subinternship. Although the student will work with and have the full support of the interns and housestaff, he/she will be encouraged to take primary responsibility for his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

Schedule of Activities

As above, students will work as a member of the surgical team. Rounds generally begin at 6am, and the entire team meets informally at 6:45 to go over patient status and plans for the day, followed by conference at 7am. Surgery starts at 7:30 or 8am, with rounds taking place at 8am every day for those not in the operating rooms. Days end when the work is done, generally between 6 and 8pm. Evening call will not be required, but can easily be arranged if interest permits. You may rotate at Strong Memorial Hospital, Highland Hospital, and possibly in the Finger Lakes.

Didactic Activities

Mondays: 7-8am: Indications Conference (weekly)

Wednesdays: 7-8am: Interventional Cardiology Conference (third Wed every other month)

Thursdays: 7-11am: Dept Grand Rounds, M+M (first Thurs every month), CPC, and Basic Science

Fridays: 7-8am: Vascular QA/QI (second Fri every month)

Required Reading

"Vascular Surgery" chapter in Schwartz, "Principles of Surgery." Additional sources can be assigned as individual interest permits

Student Evaluations

The student will be evaluated based on interest, attendance, and participation, and on whether he/she has accomplished the objectives discussed above.

SUR640 Comprehensive Burn Care

Course Information

Course Director Derek Edward Bell M.D. Contact Person Beth Jocolano/273-3656/beth jocolano@urmc.rochester.edu **Class Year Name** Comprehensive Burn Care Class Code **SUR640 Elective Tags** Patient Care **Block Length** 2-4 weeks Students 2 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Burn Center (3-2800) at 7:30 am the first Monday of the rotation. Ask to have the burn resident paged. What time should students report? 0730 Who should they report to? Dr. Derek Bell

Goal

This rotation will expose students to the pathophysiology, assessment, treatment and rehabilitation of the burn victim.

Learning Objectives

The purpose of this elective is to acquaint future physicians with a scientific and rational approach to wound care in these complex patients. Also, it is the intention of this course to dispel the frequently associated myths and fears associated with burn care. Students will also gain experience with surgical critical care including ventilator management, resuscitation and nutritional support as well as out-patient management of thermal injury.

Schedule of Activities

Students on this elective will be expected to be a part of the Burn Care Team. They will participate in intensive care delivery, wound management techniques, surgical procedures. They will also attend rounds, multi-disciplinary conferences and burn specific lectures.

Didactic Activities

Lectures are given on Tuesdays and during the week as time permits.

Required Reading

Will come from Total Burn Care (ed. Herndon) and the Burn Section from the American College of Surgeons Care of the Surgical Patient

SUR650 Thoracic Surgery

Course Information

Course Director Carolyn E. Jones M.D. **Contact Person** Julie K. Burkhart/273-1712 julie burkhart@urmc.rochester.edu **Class Year Name** Thoracic Surgery **Class Code SUR650 Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 weeks Students 1 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? All visiting medical students need to get approved by Julie K. Burkhart at 273-1712. What time should students report? They will be notified by Julie K. Burkhart!! Who should they report to? Dr. Carolyn Jones

Goal

1. To understand common thoracic surgical disease processes and their management.

2. To provide exposure to a general thoracic surgical practice for students potentially interested in pursuing this specialty.

Learning Objectives

By the end of the rotation the student should be able to:

1.List the common types of thoracic malignancies, understand the relevant work-up and potential treatment strategies, and participate in outpatient follow-up.

2.Recognize various benign esophageal and pulmonary diseases that may require surgical intervention, the appropriate diagnostic and therapeutic considerations, and proper patient selection.

3. Understand the variety of operative techniques, including open and minimally invasive approaches, and the conduct of safe surgery.

Schedule of Activities

Monday 7:00 ? 8:00 a.m. ? Didactic teaching conference (resident lectures, morbidity/mortality conference case presentation, review questions.) Clinics: Monday, p.m., Tuesday/Wednesday/Thursday a.m. OR: Every Tuesday/Wednesday/Friday (all day); other cases as permitted Endoscopy/Manometry Lab: As scheduled A.M. Rounds Daily

Didactic Activities

Mondays ? 7:00 ? 8:00 a.m. (as per above) One Wednesday evening per month (6:30 ? 9:00 p.m.): Grand Rounds Thursday 7:00 a.m. (except summer months): Surgery Grand Rounds Saturday 8:00 a.m. (every other week): Thoracic Oncology Conference

Required Reading

No required text/syllabus. Students are expected to come to the operating room having familiarized themselves with the patient?s history & disease process, having read about the disease and planned operative procedure, and understand appropriate consideration in their postoperative management. Recommended text can be suggested by the faculty.

Student Evaluations

Students will be evaluated by all faculty members on the Thoracic Surgical team. Characteristics assessed will be: 1) Fund of knowledge as demonstrated by case specific reading and general medical base; 2)Enthusiasm/motivation/ work ethic; 3)Integrity/reliability; 4)Interpersonal skills and relationships with faculty, house staff and nurses.

SUR651 Neurosurgery Elective

Course Information

Contact Person Melanie Zandvoort, 276-5655 **Class Year Name Neurosurgery Elective Class Code** SUR651 **Elective Tags** Inpatient Service, Outpatient Service **Block Length** 2 or 4 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Melanie Zandvoort will email the student one to three weeks in advance regarding rotation specifics. What time should students report? 6:45am Who should they report to? Neurosurgery Chief Resident(s)

Goal

Introduction to evaluation of neurosurgical diseases, neurosurgical interventions and evaluation to treat neurosurgical patients. For futher information please log on to: <u>http://www.urmc.rochester.edu/neurosurgery/</u>

Learning Objectives

By the end of the rotation the student should be able to: Evaluate neurosurgical patients. Evaluate and choose neurosurgical procedures appropriate to treat a variety of conditions.

Schedule of Activities

Accompany attending MD in OR, evaluation of new patients in resident clinic, and reviewing of diagnostic studies.

Didactic Activities

Will shadow with attending, MD in his practice. Students are expected to attend weekly academic conferences, Thursdays, 7:30 - 8:15 a.m. and Fridays, 6:30- 11:00 a.m.

Required Reading

No required reading. Will recommend readings.

Student Evaluations

The student will be evaluated on their participation in the above referenced activities.

SUR656 Cardiac Surgery

Course Information

Course Director Daniel Ziazadeh M.D., M.Sc. Contact Person Julie K. Burkhart 273-1712 julie burkhart@urmc.rochester.edul **Class Year Name** Cardiac Surgery **Class Code SUR656 Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 weeks Students 1 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Please contact Julie K. Burkhart before scheduling any visiting medical students at 273-1712. Julie K. Burkhart will notify the medical student where and what time to report. What time should students report? See above! Who should they report to? Chief resident - Julie K. Burkhart to notify medical student.

Goal

To.provide a comprehensive exposure to cardiac surgery, with special emphasis on anatomy, physiology and surgical care of patients with all aspects of adult cardiac disease.

Learning Objectives

By the end of the rotation the student should be able to:

?Understand coronary anatomy and indications for coronary artery surgery.

- ?Understand basic cardiac and pulmonary physiology and how it is applied to patients after cardiac surgery
- ?Understand indications for valvular and thoracic aneurysm surgery

?Understand arrhythmis?s and their treatment

?Understand the patient care protocols for post-operative patients

?Be exposed to patient?s evaluation and follow-up in out-patient setting.

Schedule of Activities

? Exposure to one service in cardiac sugery

? A.M. Resident rounds/ Week-end optional

- ? P.M. Attending Rounds mandatory
- ? Tuesday A.M. Cardiac Service
- ? Wednesday A.M. Cardiac Cath Rounds

Didactic Activities

- ? Friday A.M. Cardiac Didactic Conference
- ? Daily O.R. exposure
- ? Wednesday A.M. Outpatient office exposure

Required Reading

Ciba Collection of Medical Illustrations Vol 5 Heart and Coronary Anatomy and Pathology Glenn?s Thoracic and Cardiovascular Surgery 6th edition, Chapters 95, 96, 97, 108, 119, 123, 124, 125, 133, 135, 136, 138

Student Evaluations

Evaluation of students will be based on their team participation, interest in learning, and fund of knowledge regarding cardiac anatomy, physiology and treatment.

SUR661 Otolaryngology Elective

Course Information

Course Director Glenn Todd Schneider M.D., M.S. Contact Person Glenn Todd Schneider, MD **Class Year Name Otolaryngology Elective** Class Code **SUR661 Elective Tags** Inpatient Service, Outpatient Service, Patient Care, Teaching Block Length 2 or 4 wks Students 3 An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Students should email the chief residents listed below a few days before elective begins. What time should students report? Time will be determined by the chief residents. Rounds usually begin between 6-6:15am at Strong. Who should they report to? Michael Castle, Catherine Loftus

Goal

To provide an overview of a wide range of disease and problems of the ear, nose, and throat, and related structures of the head and neck. To provide clinical experience in primary care otolaryngology.

Learning Objectives

By the end of the rotation the student should be able to:

Identify common otolaryngologic disorders and have basic knowledge of therapy for common situations, including neoplastic, inflammatory, congenital, traumatic and allergic immune diseases.

Be competent to complete a comprehensive examination of the head and neck.

Be skilled in the use of the following instruments: otoscope, laryngoscope, nasal speculum, and head light.

Be competent to treat acute infection of the ear, nose, and throat.

Be able to determine when a patient needs further evaluation or treatment.

Be able to identify otolaryngologic emergencies and triage them appropriately.

Have a basic working knowledge of head and neck surgical anatomy.

Schedule of Activities

All students will be expected to view the following videos in our video library: Examination of the Head and Neck and the Ear. Cummmings, Smith and Davidson; Head and Neck Surgery, Common Procedures. Coulthard and Davidson.

Didactic Activities

Typically, the student will report to the chief residents at the start of daily rounds on the Monday beginning their clerkship. The team usually begins rounds between 6:00-6:15am in the WCC5 resident room. The student will accompany the preceptor through his day of practice, **surgery, rounds**, and conferences. Students will be required to attend all formal teaching rounds, journal club, and divisional conferences, which are held during their ENT clerkship.

Please contact cheif residents with any questions or concerns before or during cleckship.

Required Reading

All students will be expected to obtain and read about specific patients/cases in a standard textbook in otolaryngology. (Several copies are available on loan in our library).

"Otolaryngology for Primary Care Physicians" will be provided to you by the chief resident.

Student Evaluations

A satisfactory performance will be based on evaluations by faculty preceptor, based on learning objectives, and each student's clinical performance, with particular emphasis on interest, initiative, conscientiousness and inter-personal skills with faculty member and patients.

SUR671 Clinical Experience in Basic Plastic Surgery

Course Information

Course Director Derek Edward Bell M.D. Contact Person Beth Jocolano; 273-3656; beth_jocolano@urmc.rochester.edu **Class Year Name** Clinical Experience in Basic Plastic Surgery Class Code SUR671 **Elective Tags** Inpatient Service, Outpatient Service, Patient Care Block Length 2 - 4 weeks Students 3 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? First Monday of the rotation to the Resident Office 2-5434 for Virtual Zoom Conference What time should students report? 6:30 am report to Resident Offce 2-5434 for virtual Monday Morning Conference Who should they report to? Derek Bell, MD

Goal

To understand the nature and scope of plastic surgery and be able to function at the R-1 level while on Plastic Surgery.

Learning Objectives

By the end of the rotation the student should be able to:

- 1. Identify which patients would benefit from care by a plastic surgeon.
- 2. Evaluate the patient presenting for plastic surgical evaluation.

3. Render clinical and surgical care (evaluate disorders, discuss treatment options, write history and physicals, write post-operative orders, write hospital progress notes, formulate treatment plans).

- 4. Management of post-operative complications.
- 5. Demonstrate clear understanding of a topic of interest to be presented at grand rounds.

Schedule of Activities

Students are assigned to the Strong Memorial Hospital. Day begins with morning rounds, usually around 6:30 a.m. Clinical or surgical activities (outpatient clinic, operating room, ambulatory surgical center, inpatient floor consults, emergency room) are followed by evening rounds, usually finishing by 5 or 6 p.m. 4 week rotations will be apprenticeship style, spending a week with each attending learning general plastic surgery, breast and microsurgery, aesthetic surgery, burn surgery, pediatric and craniofacial surgery, and body contouring after massive weight loss.

Didactic Activities

Attendance is mandatory at Monday morning didactic core conference from 6:30 to 7:30 a.m. in the Bales Library. Thursday morning grand rounds is a city wide conference in the Bales Library from 7-8 a.m., and includes morbidity and mortality conference as well as indications conferences. Journal club is typically held on the last Friday of every month in the evening at an attending's home or local restaurant. Attendance at other didactic opportunities such as hand conference or craniofacial team conference is strongly recommended.

Required Reading

Plastic and Reconstructive Surgery – Essentials for Students. This is available for free at: http:// www.plasticsurgery.org/Medical_Professionals/Publications/ Plastic_and_Reconstructive_Surgery_Essentials_for_Students.html

Student Evaluations

The student's performance will be evaluated by all faculty, house officers, and staff who are assigned to the Division of Plastic Surgery. A concise, 20 minute grand rounds presentation on a subject of interest to the student will be evaluated. One on one questioning by faculty members in particular will be used to evaluate the accomplishment of the learning objectives.

Course Information

Contact Person Julie K. Burkhart, 273-1712 julie burkhart@urmc.rochester.edu **Class Year Name Transplant Surgery Elective** Class Code SUR675 **Elective Tags** Inpatient Service, Patient Care, Teaching **Block Length** 2 weeks Students 1 **Prereauisites** SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting Where should students report? Julie K. Burkhart will notify the medical student where and what time to report. What time should students report? See above! Who should they report to? See above!

Goal

Transplant Surgery is a unique specialty that requires not only complex surgical skills, management and decision making but also a significant component of medical knowledge. It requires deep understanding of multifaceted medical and surgical conditions as well as systematic approach to deal with a very sick patient population. Students will be exposed to comprehensive patient workup, medical, surgical management of transplant and hepatobiliary conditions in both inpatient and outpatient setting. Due to the nature of our service that requires expertise from multiple different specialties, we established truly multidisciplinary treatment team with assistance from group of transplant hepatology, transplant nephrology, transplant pharmacy, surgical critical care and transplant infectious disease. Students will be also exposed to expert management on non-surgical issues on critically ill populations. Teaching experiences include rounds, assisting in the operating room, evaluating patients in the clinic. The Division holds a daily clinical conference and weekly didactic education rounds.

Learning Objectives

Students will be expected to be a member of the surgical team in the operating room and on the floor. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. Students are encouraged to observe patient evaluation at clinic at least once during their rotation, although the focus of this rotation is inpatient care of postoperative and critically ill patients.

By the end of this rotation, the student should be able to:

-Describe basic relevant clinical abdominal anatomy

-Begin to understand complex medical, surgical and infectious problems in transplant patients.

-Gain experience in the acute management of pre- and postoperative surgical patients with high level of complexity -Be able to describe the basic open abdominal surgical procedures including organ procurement, vascular access, kidney / liver transplant and liver surgery. Also student is required to make a brief presentation on interested topic in the field of transplant and/or hepatobiliary surgery.

This rotation can be performed in two ways. Third-year students or those without extensive experience can do a twoweek rotation. Fourth-year students or those interested in general surgery as a career are encouraged to spend 3-4 weeks with us on a formal sub-internship. Although the student will work with and have the full support of the interns and residents, he/she will be encouraged to take primary responsibility for his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

Schedule of Activities

Students will work as a member of the surgical team. Pre rounds generally begin at 6am, and multidisciplinary 'Table round' starts at 8am. Surgery starts at 7:30am, with rounds taking place from 8am for those not in the operating rooms. Days end when the work is done, generally between 6 and 8pm. Evening call will not be required, but can easily be arranged if interest permits.

Didactic Activities

Mondays: 2pm: Kidney transplant selection committee

Tuesdays: 3pm: Education round/Journal Club

Thursdays: 7-10am: Grand Rounds, M+M, CPC, and Basic Science

Fridays: 10-12:30: Transplant Quality Case Review/M&M, Liver transplant selection committee

Required Reading

"Transplantation" chapter in Schwartz, "Principles of Surgery"

ASTS (American Society of Transplant Surgeons) online modules, access code is included in orientation material

Other supportive reading materials including operative technique slides will be distributed at the beginning of rotation.

Student Evaluations

The student will be evaluated based on interest, attendance, participation, end of rotation presentation and on whether he/she has accomplished the objectives discussed above. Feedback will be given at an end of rotation session with the surgical attendings and residents.

SUR676 Team Care of the Pediatric Craniofacial Patient

Course Information

Course Director Clinton Strauss Morrison M.D. Contact Person Beth Jocolano 273-3656 Beth_Jocolano@Urmc.rochester.edu **Class Year Name** Team Care of the Pediatric Craniofacial Patient **Class Code SUR676 Elective Tags** Patient Care **Block Length** 2-4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Contact either Beth Jocolano or Dr. Clinton Morrison What time should students report?

Who should they report to?

Goal

Students should be able to experience and understand the multi-disciplinary treatments of children with facial differneces.

Learning Objectives

Medicine is becoming disease focused rather than specility focused. Caring for children with complex facial anomalies requires a multidisiplinary approach. The student should:

1. understand the bredth of issues associated with cleft lip and palate and other facial differences

2. be able to identify who would benifit from referal to a craniofacial team

3. experience the interplan and information transfer that is essential to team care.

Schedule of Activities

Daily time with all members of the craniofacial team. Includes conferences, clinics and operating time. Time will be spent in the areas of genetics, ENT surgery, Oral surgery, dentistry, and plastic surgery.

Didactic Activities

Daily time with all members of the craniofacial team. Includes conferences, clinics and operating time. Time will be spent in the areas of genetics, ENT surgery, Oral surgery, dentistry, and plastic surgery.

Required Reading

Provided

Student Evaluations

Students will be evaluated by multiple faculty members in the areas of genetics, oral surgery, ENT, and plastic surgery. The end of month presentation will be graded by our team.

SUR677 Pediatric Surgery

Course Information

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Contact Person
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu
Class Year Name
Pediatric Surgery
Class Code
SUR677
Elective Tags
Inpatient Service, Patient Care, Teaching
Block Length
2 weeks
Students
1
Prereauisites
SUR300 Surgery Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Please contact Julie K. Burkhart before scheduling a visiting medical student. Julie K. Burkhart will notify the medical
student where and what time to report.
What time should students report?
See above!!
Who should they report to?
See above!!
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Goal

Pediatric Surgery is the study and treatment of surgical disease in infants, children, and adolescents. Students will be exposed to the pre-operative workup, management (both medical and surgical), and post-operative care of pediatric surgical disease in both inpatient and outpatient venues. Teaching experiences include rounds, assisting in the operating room, evaluating patients in the clinic, and weekly didactic teaching conferences. By the end of the rotation, students should be able to describe the presentation, pre-operative workup, operative therapy, post-operative care, and follow-up for some routine pediatric surgical problems (umbilical hernia, inguinal hernia, pyloric stenosis, appendicitis, and one congenital neonatal condition based on their experience).

Learning Objectives

This is a clinical, "hands-on" rotation, where students will be expected to be a member of the pediatric surgical team. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. The student should also attend at least one clinic per week.

By the end of this rotation, the student should make significant strides in achieving proficiency in the following areas:

• Patient Care

- $\circ\,$ Perform a thorough and efficient history and physical examination.
- Organize laboratory, radiologic and pathologic data in a coherent fashion.
- $\circ\,$ Determine which (if any) laboratory tests are necessary.
- Understand when to order appropriate tests with attention to cost effectiveness, radiation sensitivity.

- Be comfortable with the preoperative preparation of the patient and with routine postoperative care.
- Write medically appropriate notes.
- Understand medically appropriate, weight-based orders.
- Evaluate the pediatric abdomen and determine if peritoneal signs are present.
- Demonstrate safe handling of instruments.
- Perform skin closure under supervision.

Medical Knowledge

- Exhibit a general knowledge of pediatric hernias and hydroceles, umbilical hernias, pyloric stenosis, and appendicitis in children.
- Discuss surgical risks in emergency and elective cases in children and neonates.
- Be knowledgeable in the areas of pathophysiology of vital organ systems.
- Identify straightforward problems correctly.
- $\circ\,$ Identify causes and workup of bilious emesis in the neonate.
- Recognize the difference between gastroschisis and omphalocele.

• Practice-Based Learning and Improvement

- Demonstrate competence in the basic laboratory evaluation for pediatric ward patients.
- Discuss the indications for CT Scans, barium swallows, ultrasounds, and barium enemas in the pediatric surgical population.
- Participate in daily rounds, outpatient clinics, and teaching conferences.
- Demonstrate the ability to search Medline and find evidence based articles to confirm decisions.
- Demonstrate the ability to evaluate surgical literature.

Interpersonal Relationships and Communication

- · Keep patients informed of treatment plans and operative plans after discussion with attending staff.
- Communicate effectively with residents and attending staff.
- Respond appropriately to the nursing staff.
- Communicate effectively with the pediatric house staff and faculty.

Professionalism

- Show self-initiative and integrity (this cannot be overstated; initiative and drive are often what distinguishes outstanding students.
- Show honesty in doctor-patient relationships and other medical interactions.
- Exhibit cordial and respectful behavior toward patients, families, fellow residents and the ancillary staff.
- $\circ\,$ Teach other medical students.

• Systems-Based Practice

- Display appropriate use of resources from daily staff rounds and weekly and monthly M&M conferences.
- Develop an approach to cost benefit analysis, medical economics and outcomes analysis.

This rotation can be performed in two ways.

- **1.** Third-year students or those without extensive experience can do a two-week rotation.
- 2. Fourth-year students or those interested in general or pediatric surgery as a career are encouraged to spend four weeks with us on a formal sub-internship. Although the student will work with and have the full support of the interns and housestaff, he/she will be encouraged to take primary responsibility for his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to

perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

Schedule of Activities

As above, students will work as a member of the surgical team. Rounds generally begin at 6am, but ultimately are determined by the chief resident depending on the inpatient census. Surgery starts at 7:15 or 7:30 am. We usually have cases Monday – Friday. Clinics are on Tuesday and Wednesday mornings at 830 am and Thursday afternoon at 1230 pm. Days generally end after evening rounds – usually by 6-7 pm. Overnight call is not required. However, it is not uncommon that urgent cases are added on in the evening (appendectomies). Students are encouraged to scrub these cases if their schedule allows.

Didactic Activities

Mondays: 2pm Radiology Conference alternating with Resident Teaching Conference

(weekly)

Wednesdays: 2pm Pediatric Surgery Morbidity and Mortality Conference (monthly)

3pm Resident/student teaching session with Dr Wakeman (weekly)

Thursdays: 7-10am: Grand Rounds, M+M, CPC, and Basic Science (weekly)

Required Reading

- "Pediatric Surgery" chapter in Sabiston, "Textbook of Surgery." Available online in ClinicalKey at URMC. https://www.clinicalkey.com/#!/content/book/3-s2.0-B9780323299879000667
- Pediatric Surgery Handbook accessible through MedHub
- Additional sources can be assigned as individual interest permits.

Student Evaluations

The student will be evaluated based on attendance, participation, and contributions to the pediatric surgery team.

SUR678 Hepato-biliary/Surgical Oncology

Course Information

Contact Person Julie K. Burkhart 273-1712 Julie Burkhart@urmc.rochester.edu **Class Year Name** Hepato-biliary/Surgical Oncology **Class Code SUR678 Elective Tags** Inpatient Service, Patient Care, Teaching **Block Length** 2 weeks Students 1 **Prereauisites** SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Julie K. Burkhart will notify the medical student where and what time to report. What time should students report? See above! Who should they report to? See Above!

Goal

To understand the field of hepatobiliary surgery as it relates to the multidisciplinary care of patients with complex hepatobiliary and gastrointestinal disorders. This course is appropriate for students interested in surgery but also related specialties like gastroenterology, oncology, radiology, and pathology.

Learning Objectives

Learning objectives: Can be tailored to student's needs. In general, by the end of elective the student should be able to:

1. Perform complete, accurate histories and physical examination on patients with hepatobiliary, pancreatic,

gastrointestinal and general oncologic problems

- 2. Interpret laboratory, diagnostic tests and radiological imaging studies associated with common HPB-GI diseases accurately
- **3.** Formulate from the history, physical exam, and patient studies, a differential diagnosis and develop an initial plan for further patient evaluation and management
- 4. Describe indications for operative surgery
- 5. Discuss the risks and benefits of common HPB procedures
- 6. Identify the necessary diagnostic modalities to develop a preliminary plan of management
- 7. Outline a plan of action for the management of surgical infection, with either surgery or a plan for antibiotics
- 8. Demonstrate proficiency in the preoperative preparation of patients for surgery and routine post-operative care

with guidance of faculty

- 9. Demonstrate medical communication skills by performing satisfactory (accurate and concise) oral presentations
- 10. Demonstrate interpersonal skills necessary to maintain professionalism, communicate appropriately with patients, their families, and other medical and paramedical personnel involved in patient care
- **11.** Actively participate as a member of the health care team

Schedule of Activities

HPB-GI is a busy surgical service at Strong Memorial Hospital. The team meets for morning rounds at approx. 6:30 AM and after rounds disperse to the operating rooms, clinic, and inpatient ward. Students will have input to their assignments which will be adjusted by the senior resident on a daily basis on weekdays. They perform preoperative evaluation, intraoperative care, and postoperative follow-up of surgical and non-operative patients with an assigned preceptor (a resident or attending). Emphasis is on active participation in all aspects of patient care, including procedural skills.

Didactic Activities

Students are expected to read about and discuss the learning objectives with the faculty during the clinical day. In addition, students participate in 2 weekly divisional conferences on Tuesday (selected HPB topics) and Friday (Indications Conference) both at 7:00 AM. Students are encouraged to do at least one full day per week in the various clinics with preparation the day before. discuss with a faculty preceptor the last day of the clerkship. Students are expected to attend Surgery Grand Rounds (7:00 - 8:00 a.m. Thursdays).

Required Reading

In addition to assigned journal articles, students are expected to read Chapters in Schwartz's Principles of Surgery:

- Minimally Invasive Surgery, Robotics, and Natural Office Transluminal Endoscopic Surgery
- Gallbladder and the Extrahepatic Biliary System
- Abdominal Wall, Omentum, Mesentery, and Retroperitoneum
- Soft Tissue Sarcomas
- Inguinal Hernias
- Ethics, Palliative Care, and Care at the End of Life

Student Evaluations

Students should debrief with course director or designee at the end of the rotation regarding learning objectives. Evaluation will be a composite of Attending's and Resident's input.

SUR679 Colorectal Surgery

Course Information

Contact Person Julie K. Burkhart 273-1712 julie burkhart@urmc.rochester.edu Class Year Name Colorectal Surgery Class Code **SUR679 Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 weeks Students 1 **Prereauisites** SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? Julie K. Burkhart will notify the medical student where and what time to report. What time should students report? See above! Who should they report to? See above!

Goal

The goal of the colorectal clerkship is to develop an understanding of and be able to develop a diagnostic and therapeutic plan for a number of colorectal surgical diseases such as diverticulitis, colon cancer, hemorrhoidal disease, and anorectal sepsis.

Learning Objectives

- 1. Develop patient management plans with senior/ attending guidance.
- 2. Perform simple procedures under supervision such subcuticular skin closure, cyst excision and incision and drainage of perianal abscesses.
- **3.** Assist competently in operative procedures. The student will occasionally function as a first assist to the attending physician or senior resident.
- 4. Develop a practice of safe handling of instruments and tissues
- 5. Increase knowledge in all areas of the general surgery curriculum including but not limited to: colon and rectal disease, surgical ICU care and common gastrointestinal malignancies.
- **6.** Develop the skill to tailor laboratory tests appropriately for the targeted disease.
- 7. Discuss basic laboratory evaluation of the surgical patients.

Schedule of Activities

The student is expected to attend and participate in daily morning rounds with the team.

The student will be assigned to cover cases in the OR either at Strong or Sawgrass Surgical Center

The student is expected to attend at least one clinic day a week. During this time the student will workup patients independently and present to an attending.

Didactic Activities

Attend the formal lecture series

Attend the departmental didactic sessions.

Be responsible for one presentation about a topic of his/her choice addressing one problem with a literature review and critique.

Required Reading

Disease of colon and rectum chapter in Schwartz principles of surgery- available on line at Miner library. Articles for journal clubs will be emailed to the group.

Student Evaluations

The student will be evaluated based on the domain of competencies of patient care, medical knowledge and professionalism.

Contact Person Julie K. Burkhart 273-1712 julie burkhart@urmc.rochester.edu **Class Year Name** Highland Hospital Surgery **Class Code SUR680 Elective Tags** Inpatient Service, Patient Care, Teaching Block Length 2 weeks Students 1 Prerequisites SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Julie K. Burkhart will notify the medical students where and what time to report. What time should students report? See above! Who should they report to? See above!

Goal

Develop expertise in morbid obesity, complications of morbid obesity, and surgical correction of morbid obesity.

Learning Objectives

- 1. Define morbid obesity.
- 2. Understand the comorbid conditions of obesity, including diabetes, hypertension, sleep apnea, and osteoarthritis.
- 3. Learn how different bariatric procedures work.
- 4. Learn about the complications of morbid obesity surgery.

Schedule of Activities

- 1. Round on team with residents and physicasn assistants.
- 2. Assist at surgery.
- 3. Attend clinic.
- 4. Attend monthly seminar concering morbid obesity surgeries.

Didactic Activities

Tuesday morning (7-8) Surgery Conference, including M&M

Monthly 2 hour patient seminar on morbid obesity

Required Reading

Standard surgical textbook on Morbid Obesity

Contact Person Julie K. Burkhart 273-1712 julie burkhart@urmc.rochester.edu Class Year Name Acute Care/Trauma Surgery Class Code SUR681 **Elective Tags** Inpatient Service, Patient Care, Teaching **Block Length** 2 weeks Students 1 **Prereauisites** SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year, Visiting Where should students report? All visiting medical students need to get approved through Julie K. Burkhart. Juile K. Burkhart will notify the medical student where and what time to report. What time should students report? See above!! Who should they report to? See above!!

Goal

The work life of a modern trauma/acute care surgeon is multifaceted and includes trauma care, critical care medicine, and emergency general surgery. A rotation on the trauma/acute care surgery service would expose the student to the surgical aspect of a trauma surgeon's work. The student should become familiar with the Advance Trauma Life Support (ATLS) resuscitation algorithm for the acutely injured patient. He/She should also understand the broad goals of a trauma laparotomy as well as the multidisciplinary care involved in the comprehensive management of the trauma patient. He/She will gain understanding of the priorities in trauma care and the role of subspecialty services such as orthopedic surgery and neurosurgery in the treatment of the acutely injured. Additionally, the student will be exposed to many common emergency general surgical diseases and gain an understanding of their work up and operative management.

Learning Objectives

- 1. Display an understanding of the principles of ATLS
- 2. Exhibit an understanding of the pathophysiology of peritonitis and the acute abdomen.
 - a.) Exhibit an understanding of the pathophysiology of appendicitis.
 - b.) Exhibit an understanding of the pathophysiology of acute gallbladder disease
 - c.) Exhibit an understanding of the management of peritonitis

3. Develop an in-depth understanding of fundamentals of basic science as they apply to patients with acute surgical problems. Examples include the pathophysiology of peritonitis, etiology of abscess formation, management of fluid and electrolyte balance in the emergency patient, and surgical anatomy and surgical pathology of trauma and acute

care patients.

4. dentify different forms of shock associated with the injured patient, including hemorrhagic, neurogenic, cardiogenic and septic shock, as well as understand classes of hemorrhagic shock.

5. Assist with resuscitation in trauma patients presenting to the emergency department. Assist the trauma team with various tasks during trauma resuscitation.

6. With supervision of the resident and advance practitioner team, assume responsibility for care of a small number of patients on the hospital ward, including initial assessment, creating a therapeutic plan, evaluation of daily progress, and initial assessment of new problems.

7. With supervision of the resident and advance practitioner team, assist in the discharging of patients, including writing the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

8. First or second assist in the operating rooms. Gain basic surgical skills such as knot tying, skin closures, drain placement and removal, etc.

9. Recognize own limitations and know when to call for help.

Schedule of Activities

The student will follow the work schedule of one of three trauma teams in order to be fully incorporated into the daily routine of the trauma service. This schedule requires a week of day shifts and two weeks of alternating night call. As the weekend days tend to be the busiest and offer the greatest opportunity for clinical exposure, the student will take their days off on Sundays and Mondays. Further details of the schedule can be obtained from the course director.

The student will be asked to give a brief presentation (10min) on an acute care surgical topic of his/her choice during the last week of the rotation.

Didactic Activities

1.) Daily morning report rounds on new patients from previous 24 hours with discussions on work up and treatment decisions (7AM except Thursday at 10:30AM)

- 2.) Weekly divisional M&M (Tuesdays 8:30AM)
- 3.) Weekly department resident educational conference (Thursday 7AM-10AM)
- 4.) Monthly journal club (Wednesday 5PM)
- 5.) Monthly AAST grand rounds (Wednesdays 5PM

Required Reading

- 1.) Essentials of General Surgery (Lawrence) Chapters 5, 9, 11, 14, 16
- 2.) Acute Care Surgery: Principles and Practice (Britt)- Chapters 1, 3, 4, 11, 12, 28, 30, 31, 35
- 3.) ATLS Student Manual (for reference)

SUREX2 Adult Cardiac Surgery Acting Internship

Course Information

Contact Person

Julie Burkhart (Julie Burkhart@urmc.rochester.edu) (585) 273-1712 Rachel Zapata-Bermudez (Rachel Zapata-Bermudez@urmc.rochester.edu) **Class Year Name** Adult Cardiac Surgery Acting Internship Class Code SUREX2 **Block Length** 4 weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Contact Julie Burkhart for reporting instructions. What time should students report?

Who should they report to?

Goal

This is a four-week (4) externship that offers a student clinical experience on the Adult Cardiac Surgery service at the University of Rochester - Strong Memorial Hospital. The student will participate in the preoperative, intra-operative and postoperative care of a variety of patients suffering from acquired cardiac diseases, including but not limited to coronary artery disease, valvular disease, arrhythmia surgery, and end-stage ventricular failure. The student will be required to grasp anatomic concepts that will be reviewed from preoperative studies and available for intra-operative interpretation. The student will have significant exposure with the Integrated Cardiothoracic Surgery residents and will be integral members of the team. Students will be involved in the management of patients to promote a better understanding of the physiology involved. They will be exposed to a variety of clinical environments including the Clinic, CVICU, Cardiac Floor, and Cardiac Operating Rooms. Students are expected to participate in one 1/2 day session of clinic per week and will perform a complete history and physical examination on two patients. Weekly Thursday morning didactic sessions will be run by the Cardiothoracic Surgery residents and one of the Adult Cardiac Surgery attendings. Students will be exposed to advance heart failure procedures including but not limited to Impella, ECMO, RVAD, LVAD, Total Artificial Heart, and Heart Transplantation.

Strong Memorial Hospital is Upstate New York's only Heart Transplant Center and has performed over 240 Heart Transplant to date. In 2018, the University of Rochester was one of the busiest heart failure programs in the country and one of the highest implanters of HeartMate 3 left ventricular assist devices.

Learning Objectives

Clerkship Objectives

1. Diagnosis and management of patients with acquired disease of the heart, including coronary artery disease, valvular diseases, arrhythmias, aortic disease, and end stage ventricular failure.

2. Become familiar with mediastinal and cardiac anatomy and participate regularly in the operating room.

3. Become familiar with the cardiac pathophysiology in peri-operative patients.

4. Develop strong surgical skills while assisting in opening and closing sternal and thoracotomy incisions.

5. Be involved in the management of patients transferred from the postoperative period including participating in ICU and floor rounds.

6. Become familiar with the evaluation and use of cardiac diagnostic studies, including echocardiograms, cardiac MRI and cardiac catheterization.

7. Become exposed to minimally invasive cardiac surgery, including sternal sparing aortic valve, mitral valve, aortic root, Bentall, TAVR, and LVAD implantation.

Schedule of Activities

Students will be expected to work every weekday and two of the four weekends. Students are not scheduled to be oncall, but are encouraged to attend emergent cases as they become available.

80% - Inpatient care

10% - Clinical Rounds/Clinic

10% - Conferences/Lectures

Didactic Activities

Conferences, Rounds, History/Physical Exam, Clinic, Interpretation of Lab Results, Observe Procedures, Perform Procedures with Direct Supervision

Contact Person

Julie Burkhart (julie burkhart@urmc.rochester.edu) (585) 273-1712 Rachel Zapata-Bermudez (rachel zapatabermudez@urmc.rochester.edu) **Class Year Name** Thoracic & Foregut Surgery Acting Internship Class Code SUREX3 **Block Length** 4 Weeks Students 1 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? Contact Julie Burkhart for reporting instructions. What time should students report?

Who should they report to?

Goal

This is a four-week (4) externship that offers students clinical experience on the Thoracic & Foregut Surgery service at the University of Rochester - Strong Memorial Hospital. The Division of Thoracic & Foregut Surgery at URMC is one of the busiest Thoracic Surgery services in the country. Students will be exposed to a breadth of patients with general thoracic surgical diseases of the chest including pulmonary and esophageal cancers, chest wall tumors, benign esophageal disease, pulmonary insufficiency, diaphragmatic hernias, and abnormalities of the airway. They will become familiar with the anatomy of the chest including the heart, great vessels, lung, esophagus, mediastinum, chest wall and diaphragm. Students will become familiar with the pathophysiology and management of achalasia, gastroesophageal reflux disease, and paraesophageal hernias. They will participate in the preoperative, intraoperative, and postoperative care of the patients. They will participate in the operations used to treat these conditions including esophageal and pulmonary resections (esophagectomy, lung wedge resections, anatomic segmentectomy, lobectomy, and pneumonectomy), anti-reflux surgery (Dor, Toupet, and Nissen Fundoplication), esophagomyotomy, chest wall resection and reconstruction, thoracoscopic and robotic approaches to thoracic surgery, and endoscopic esophageal and airway interventions including stents, dilatation, and laser therapy. Focus will include minimally invasive laparoscopic, thoracoscopic, and robotic approaches to these complex operations. Students will get broad exposure to diagnostic bronchoscopy, EBUS, esophagoscopy, manometry, and Bravo pH testing in our state of the art Esophageal Lab. Students will be expected to participate in the operating rooms, the inpatient care unit, and the clinic. They will assist in skin suturing, chest tube insertion, and surgical knot-tying. Students will be expected to function as a member of the inpatient team and will have significant exposure to the Integrated Cardiothoracic Surgery residents. They will have the opportunity to see consults and staff patients with attendings. Students will be expected to make one 30 minute presentation to the faculty and staff on a thoracic surgery topic which will be determined in collaboration with one of the faculty mentors. Students will participate in clinic one day per week and will have the opportunity to see patients in the Wilmot Cancer Center and participate in weekly thoracic conferences including indications, tumor board, and resident teaching.

Learning Objectives

Clerkship Objectives

1. Diagnosis and management of patients with benign and malignant pulmonary and esophageal disease, chest wall tumors, airway abnormalities.

2. Become familiar with mediastinal, thoracic, and esophageal anatomy and participate regularly in the operating room.

3. Become familiar with the thoracic pathophysiology in peri-operative patients. .

4. Develop strong surgical skills while assisting in opening and closing laparoscopic and thoracoscopic incisions.

5. Be involved in the management of patients transferred from the postoperative period including participating in ICU and floor rounds.

6. Become familiar with the evaluation and use of thoracic and esophageal diagnostic studies, including barium swallow, esophagoscopy, Bravo pH, manometry, PFT, and CT/PET.

7. Become exposed to minimally invasive thoracic surgery, including VATS/Robotic lobectomy, thymectomy, esophagectomy, Nissen fundoplication, and Heller myotomy.

Schedule of Activities

Students will be expected to work every weekday and two of the four weekends. Students are not scheduled to be oncall, but are encouraged to attend emergent cases as they become available.

80% - Inpatient care

10% - Clinical Rounds/Clinic

10% - Conferences/Lectures

Didactic Activities

Conferences, Rounds, History/Physical Exam, Clinic, Interpretation of Lab Results, Observe Procedures, Perform Procedures with Direct Supervision

Course Director Michael J Nabozny M.D. Contact Person Julie Burkhart 273-1712 julie burkhart@urmc.rochester.edu **Class Year Name** Surgery Acting Internship Class Code SUREXT **Block Length** 4 week Sub-I Students 4 **Prereauisites** SUR300 Surgery Clerkship An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 3rd Year, 4th Year Where should students report? Please contact Julie K. Burkhart before scheduling a visiting medical student at 273-1712. All students will be given information prior to their start date on where they will be reporting. What time should students report? See above! Who should they report to? See above!

Goal

Fourth-year medical students are required to participate in a sub-internship of at least four weeks' duration. The goals of this rotation are to allow medical students who have completed their third year clinical surgical rotation a hands on, in-depth experiences in which they can function at the level of a surgical intern. The sub-internship is designed to be a broadly based experience, which allows students to assume primary responsibility for and involvement in the care of surgical patients across the duration of the healthcare encounter. The sub-internship requirements can be satisfied by a rotation on the general inpatient surgical service or a surgical sub-specialty service. The requirement cannot be fulfilled by rotating through a service that only provides consultative care.

Each sub-internship has defined pre-requisites courses, which will usually include the core third year clinical clerkship. This limits the earliest that a medical student could fulfill the sub-internship requirement to June of their fourth year. Sub-interns will work under the direct supervision of residents and faculty preceptors. A mentor will be assigned to you, who will guide and assist you with your service related responsibilities. You will work closely with the fellows, chief residents, interns and physician extenders on the surgical service. Taking call is not an option and you should expect to be "on call" 1-2 days/week. This will closely resemble the experience of a surgical intern.

The curriculum for sub-interns varies amongst the surgical services, but typically is at an advanced level compared to the third year surgical clerkship rotation. A course outline will be provided to you on the first day of your rotation. Students are expected to fulfill the sub-internship requirement at a University of Rochester teaching hospital

Learning Objectives

At the completion of the rotation, the sub-intern is expected to be able to organize data (laboratory, radiologic & pathologic) in a concise and coherent manner. The individual should be able to perform an efficient and thorough history and physical examination. Based on the findings of the history and physical exam, the sub-intern should be able to define and initiate an appropriate care plan. They should be comfortable with the preparation of a patient for surgery and the routine management of post-operative care. During the rotation the sub-intern should expect to perform (under direct supervision) suturing of incisions, suture and drain removal, abscess drainage and dressing changes. Competency based evaluations will offer an excellent basis on which to assess the medical student's progress.

I. Patient Care

- Be reliable, keep track of all clinical events and participate on daily rounds, be primarily responsible for 23 patients at a time

- Work closely with interns, residents and fellows
- Perform detailed and thorough history and physical examinations
- Devise patient care plans and participate in decision making process for patients
- Learn to write medically appropriate, errorfree orders
- Maintain thorough and legible medical records

II. Medical Knowledge

- Develop a general knowledge of fundamental clinical principles and decision making process of basic surgical problems

- Learn relevant anatomy & physiology to aid in patient care
- Understand the fundamentals of evaluating surgical risk in both elective and emergent settings
- Analyze available data relevant to your patient care
- Read about each surgical problem you encounter and be prepared to discuss this with your preceptor

III. Practice-based Learning

- Learn basic laboratory evaluation of emergent and elective patients
- Understand basic indications for various radiologic studies
- Reinforce basic concepts of tissue handling, suturing techniques and operating room procedures
- Use instruments appropriately

- While scrubbed in the operating room, learn various exposure techniques, and become facile with suctioning, cutting and retraction techniques

- Participate in daily rounds and all service related conferences
- Plan to attend an outpatient clinic 1 day/week with a designated faulty member

IV. Professionalism

- Be responsible and dependable

- Understand the importance of honesty in the doctorpatient relationship
- Learn about ethical issues such as informed consent and end of life issues
- Learn how to participate in discussions and becomes an effective part of the surgical team
- Maintain a presentable appearance that sets the standard for others

V. Systems-Based Practice

- Pay attention to and learn from the assessment of patient care as discussed during rounds and the weekly M&M conferences

- Be introduced to outcomes analysis, quality improvement and costbenefit considerations of patient care

- Begin to practice evidence based medicine though the use of practice guidelines and clinical pathways

VI. Research

- Develop a basic understanding of and participate in the evaluation of surgical literature for credibility and applicability

Schedule of Activities

Surgical Grand Rounds at SMH – Thursday morning at 7 am (Upper S wing Auditorium)

Resident Case Presentation Conference – Thursday morning at SMH at 8 am Upper S wing Auditorium)

Resident Basic Science Conference - Thursday morning at SMH at 9 am Upper S wing Auditorium)

Course Director Thomas Patrick Frye D.O. Contact Person Stephany Greenough, 273-1904 stephany greenough@urmc.rochester.edu **Class Year Name** Surgical Specialties: Urology Clerkship **Class Code URO604 Elective Tags** Inpatient Service **Block Length** 1-4 weeks Students 2 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 2nd Year, 3rd Year, 4th Year, International Visiting, Visiting Where should students report? James P. Wilmot Cancer Center, 5th floor (WCC5) What time should students report? 6:30 a.m. Who should they report to? Urology Chief Resident

Goal

This course is offered to students to build upon the basic urology learning accomplished in the second year Primary Care Clerkship. This course is designed to prepare students to evaluate and manage urologic disorders at a primary care level and to recognize those problems which need further specialty consultation. During this elective, the student is attached to the urology resident team, working side by side with faculty and residents, rounding on inpatients, going to the operating room, emergency room and hospital consults, going to clinic with a urology attending physician and attending departmental conferences.

Learning Objectives

By the end of the rotation the student should be able to:

1- History skills -obtain an accurate history from patients with a urologic complaint

2) Physical examination skills - perform a focused urologic examination on patients

3) Demonstrate knowledge of the basic urologic laboratory exams, urine analysis, PSA, renal function tests, imaging studies, endoscopy, extracorporeal shockwave lithotripsy (ESWL), urodynamics

4) Demonstrate an understanding of assignments and common urologic problems including renal, bladder, prostate cancer; kidney stones; urinary incontinence; significance of hematuria; male erectile dysfunction/infertility; UTI's; intrascrotal lesions and how to differentiate between them

5) Formulate an appropriate differential diagnosis

6) Professionalism - demonstrate professional responsibility as a working team member with faculty, residents, patients and families

Schedule of Activities

Each student is given a schedule including approximately 8 hours of faculty-supervised evaluation, examination and treatment of patients in the ambulatory setting. In addition, there are weekly didactic activities. There are multiple opportunities to participate in the operating room, including ESWL stone treatment. The typical hours are Monday through Friday, 6:00 a.m. 6:00 p.m. The home base for all student activity is the urology inpatient team.

Didactic Activities

Students are expected to participate in weekly departmental conferences including Grand Rounds, Journal Club, Indications, QA and lectures given by faculty and visiting guests.

Required Reading

Students are required to read select topics in the Medical Student Curriculum (core content) found on the AUA website.

Student Evaluations

Final grading is done by the course director and is based on feedback from faculty, residents and clinical staff. Completion of a patient history and exam is required.

Course Director Hani H. Rashid M.D. **Contact Person** Course Coordinator: Stephany Greenough (585) 273-1904 **Class Year Name** Urology Acting Internship Class Code UROEXT **Block Length** 4 weeks Students 4 An elective experience is sometimes "split" by these weeks. Is it okay to split? No Available to the following medical students: 4th Year, Visiting Where should students report? James P. Wilmot Cancer Center, 5th floor (WCC5) What time should students report? 6:30 a.m. Who should they report to? Chief Residents

Goal

The goal of the Urology Sub-Internship is to allow the student to function in the capacity of an intern under the close supervision of residents and attending physicians. This includes inpatient, operating room, and daily rounding responsibilities. Students have exposure to the various sub-specialties within urology, including oncology, endourology, stone disease, female urology, pediatric urology, infertility, reconstruction and minimally invasive urology. The full spectrum of adult and pediatric urologic disease is managed from medical and surgical approaches. The 4-week experience generally consists of one week each in pediatric urology and oncology; the other 2 weeks are arranged based on the student's choice and area of interest. Students admit new patients and may also assume the care of those admitted by other attending physicians. They will have primary responsibility under supervision for a panel of inpatients. The average census for urology inpatients is 16, and up to 26. The student is **assigned a faculty mentor to help guide them through a successful rotation.**

Learning Objectives

Objectives: By the end of the rotation, the student is expected to:

- 1. Obtain an accurate history from assigned patients with a urologic complaint.
- 2. Perform a general physical exam and focused urologic exam on their patients.
- **3.** Identify and order appropriate diagnostic laboratory and imaging studies for the clinical problem at hand after formulating a differential diagnosis
- 4. Propose medical or surgical management for their panel of patients.
- 5. Manage a panel of patients according to team/faculty decisions.
- **6.** Prepare and deliver a 15-20 minute presentation related to clinical material and experiences encountered during this experience, and related research.

7. Be able to perform the following bedside or operating room procedures under supervision:

- Simple and difficult Foley catheter placement
- Bladder irrigation
- Bedside drain removal
- Basic wound care
- · Wound closure; simple, running, mattress, subcuticular as indicated
- Assistance with open and endoscopic cases

Schedule of Activities

Activities:

Students actively participate with selected faculty members and resident staff on the inpatient service and in the operating room. Attending and house staff supervision and teaching are parts of all aspects of the rotation, and there is the expectation of complete integration into the resident team. Students are required to participate in the following activities during this urology Sub-Internship:

- 1. Assume responsibility for the care of a panel of four patients on average within resident team as determined by the Chief Resident.
- 2. Participate in an active manner in daily patient rounds with the resident team.
- 3. Participate in the operating room as assigned by the Chief Resident.
- 4. Participate in faculty clinic one half day per week per precepting faculty member's clinic schedule.
- 5. Take call alongside the on-call resident on a schedule jointly determined.
- 6. Attend the weekly scheduled teaching sessions including Grand Rounds, Journal Club, Professor Rounds, Quality Assurance/Improvement, Indications and any other conferences given by staff and/or visiting professors.
- **7.** Prepare a well-researched 20 minute presentation to be given during departmental conference time. This can be a presentation of an interesting case, a topic of interest, or a research project.
- 8. Maintain a tracking log for procedures performed.

Required Reading

Students are required to become members of the American Urological Association if they aren't already. Membership is free and the department assists as needed. Membership is required because it allows full Web access to the AUA*university* – the American Urologic Association's educational offerings for urologists, residents and all medical students, including written content, videos, podcasts, etc. It is the primary educational resource for the Sub-Internship.

The AUA*university*/Medical Student Education are the main educational resources for students and residents in urology. Students are encouraged to use this website as the main learning resource, in addition to Hinman's Atlas of Urologic Surgery. Please see the Program Coordinator for a copy of the book. There are many other fine learning aids, which can be discussed with the residents and faculty. Most are available for use in the Resident Room of the Department.

https://www.auanet.org/education/educational-programs/medical-student-education/medical-student-curriculum

Student Evaluations

Grading:

- **1.** Per standard grade reporting for electives.
- 2. Attendance is mandatory. Exceptions must be discussed with the Program Director.
- 3. Performance evaluations based on the 6 ACGME Competencies: patient care, medical knowledge,

professionalism, interpersonal and communication skills, practice-based learning (searching for best evidence; self-education); systems-based practice (working with staff, other services, other settings) as well as the student's Grand Rounds presentation. Evaluations will be confidential and will be obtained from residents,

faculty, nursing, other staff as indicated.

4. Review of procedure log