



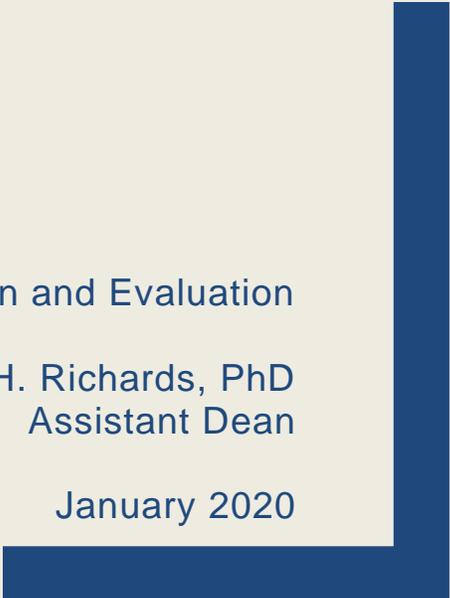
University of Illinois College of Medicine Rockford

ELECTIVES CATALOG

Department of Medical Education and Evaluation

Maureen H. Richards, PhD
Assistant Dean

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Requirements of the Phase 2 and Phase 3 Curriculum

During Phase 2 and Phase 3 medical students are able to take electives in order to engage in career exploration. These electives will form the building blocks of Phase 3, the Pathways of Medicine. Across Phase 2 and Phase 3 students are required to complete 82 credit hours. During Phase 2, 44 of these credit hours are met by the required clerkships (surgery, internal medicine, family medicine, pediatrics, psychiatry, obstetrics/gynecology, and neurology). Students are able to take 4 weeks of elective time during phase 2.

All Phase 3 students must complete a 4 week sub-internship and one of the three pathways of medicine (surgery, medicine, or rural). Each pathway of medicine is 12 weeks long. A complete listing of the electives and which pathway component they fulfill can be found [here](#). Students in the surgery pathway must complete 4 weeks of either critical care or emergency medicine, 4 weeks of surgical anatomy or radiology, and 4 weeks of surgical electives. Students in the medicine pathway must complete 4 weeks of either critical care or emergency medicine, 4 weeks of medical selective, and 4 weeks of a core specialty care selective (orthopedic, ophthalmology, otolaryngology, dermatology, urology, or radiology). Students on the rural pathway must complete 16 weeks of a Family Medicine rural medicine immersion experience and 2 weeks of Community Oriented Primary Care Research.

The remaining required credits for completion of Phase 2 and Phase 3 of the medical college curriculum is met in free elective and required longitudinal courses.

Students should work with representatives from the Office of Student Affairs and the Office of Medical Education and Evaluation to choose electives.

Visiting Students

Students from outside the University of Illinois who attend LCME- or AOA-accredited schools may participate in M4 Elective experiences at Rockford. Extramural students may take no more than a total of 12 weeks of elective experiences throughout the University of Illinois system.

All visiting students must be in their final year of training leading to the M.D. degree and must have completed core clerkships in internal medicine, surgery, pediatrics, obstetrics and gynecology, and psychiatry. Visiting students must show the same evidence of immunization required of intramural students, must provide proof of training in both basic cardiac life support and universal precautions, and must be covered by malpractice insurance. The University does not provide housing or transportation.

Please forward all inquiries for scheduling Electives to Jodi Pirrello, Office Manager, Student and Alumni Affairs, A213; 815-395-5581; jlpirre2@uic.edu.

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DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE

Correctional Medicine

Phase 2 Course Number: ELEC404

Phase 3 Course Number: ELEC106

Program Directors: Trisha Corrigan

Departmental Contact Information: Tracey Riverdahl (triver@uic.edu); 815-395-5802

Location: Winnebago County Jail, Rockford, Illinois

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: This two-week experience at the Winnebago County Jail will allow students to participate in the healthcare of Winnebago County inmates. It is important that students enrolling in this experience understand the elevated level of professionalism that will be demanded of them in the jail environment along with the increased importance of confidentiality.

Prerequisites: Completion of one Phase 2 core clerkship; security clearance; Family and Community Medicine faculty attestation of student's professionalism

Learning Objectives: The student who successfully completes this rotation will be able to:

1. Explain the organization and financing of medical care in a correctional facility.
2. Describe the common medical and mental health conditions affecting adult and juvenile inmates.
3. Describe what a drug formulary is and explain how it can be used to provide cost-effective care.
4. Perform an initial medical evaluation of inmates at the time of booking.

Learning Activities:

1. The student will keep a journal, summarizing their daily activities and their personal observations & thoughts about the experience.
2. Tour jail, paying particular attention to security measures as explained by corrections staff.
3. Observe and participate in medical and dental care of adult and juvenile inmates.
4. Participate in assessment of inmates referred for mental health evaluation.
5. Participate in medical evaluations done at booking and triage of inmate complaints.
6. Attend a session of mental health court.
7. Develop a project (e.g. presentation, educational literature, etc.) pertinent to health care in a correctional facility. The project must be pre-approved by the supervising provider.

Method of Evaluation:

1. The supervising provider will evaluate the student's performance in areas of professionalism, level of interest and clinical work, with additional input solicited from medical and corrections staff. The comments will be incorporated in the student's final evaluation.
2. Student's journal will be reviewed by supervising provider.
3. Faculty/staff evaluations of the student's project will be reviewed with scores and comments taken into consideration by the supervising provider when calculating the student's final grade.

Required Reading:

Medicine and the epidemic of incarceration in the United States.

Rich JD, Wakeman SE, Dickman SL. N Engl J Med. 2011 Jun 2;364(22):2081-3.

Additional Resources:

Textbook of Correctional Medicine, edited by Puisis

CDC website on corrections health: <http://www.cdc.gov/nchstp/od/cccwg/default.htm>

Miscellaneous Information:

Attendance: One (1) excused absence is allowed during the 2-week experience. Absences in excess of

this limit must be made up at the convenience of the site and/or provider(s) and may require rescheduling of block. [BackToTOC](#)

Family Medicine Clinical Experience

Phase 3 Course Number: ELEC814

Program Directors: Mitchell King, MD; OSF Poplar Grove - Atisak Sapying, MD

Departmental Contact Information: Tracey Riverdahl (triver@uic.edu); 815-395-5802

Location: Family Medicine Clinics

Length of Time: 2 OR 4 weeks

Call: No

Available for Phase: Phase 3

Narrative Description: This two or four-week clinical experience at a Family Medicine clinic will focus on diagnosis, development of a management plan and practice issues such as phone triage and practice management.

Prerequisites: Completion of ALL Phase 2 clerkships

Learning Objectives: The student who successfully completes this rotation will be able to:

1. Develop and implement a management plan for common acute and chronic illnesses.
 2. Adequately handle phone triage of patient calls.
 3. Be knowledgeable with the basics of practice management.
 4. Be knowledgeable with academic medicine including mentoring M2/M3 students and preparing a teaching session.
 5. Continue self-awareness through continual self-evaluation.
- Additional objective for the 4 week block---**
6. Participate in hospital and nursing home rounds.

Learning Activities:

1. Complete pre-experience self-evaluation.
2. The student will keep a journal, summarizing their daily activities and their personal observations & thoughts about the experience.
3. Introduction to Phone Triage
 - a. Spend time with the nursing staff and become familiar with answering phones, returning patient calls and delivering lab results to patients.
 - b. Complete a phone triage lecture on Blackboard.
 - c. Write a reflection paragraph on your experience.
4. Introduction to Practice Management
 - a. Spend time with the office manager and support staff.
 - b. Attend a staff meeting if available. Note service style, phone management, billing services, appointment setting, records management, and referral management.
 - c. Write a reflection paragraph on your experience.
5. Professionalism and Academic Preparation
 - a. Prepare and deliver a presentation for students, faculty & staff at the clinic. Follow the Lesson Plan Outline in preparation and provide a copy of your lesson to your faculty mentor.
 - b. With faculty supervision, precept five (5) M2/M3 student patient encounters. Record encounters in your journal. Complete a Mentoring Feedback Form for each encounter.
6. Patient care and procedures
 - a. The M4 student – already accomplished in history taking and physical exam – will be expected to focus on diagnosis and development of a management plan. When completing the patient visit, the faculty preceptor will shadow the M4 in the encounter so that the student will have the full responsibility to complete the visit on their own with minimal faculty interjection. The student may want to consider videotaping the encounter for self-reflection (patient must sign consent prior to videotaping.)

- b. Reflect on the acute and chronic nature of the visits, any patient care plans and education needs that were met, and how this focus affected your thoughts on Family Medicine. Document your thoughts in your journal.
 - c. Pick one patient encounter and work up the case using the Evidence-Based Case Study Evaluation Form as your guide. Utilize appropriate techniques in searching for evidence-based research and reference your sources. You should use a minimum of three references.
 - d. With your faculty mentor's assistance, seek out and participate in procedural opportunities in the clinic. Document the procedures in your journal.
 - e. The 4-week course will include hospital and nursing home rounds with a family practice resident and supervising physician.
 - f. Using the Case Study guidelines, develop a case study on a patient who was seen in the hospital or nursing home – preferably one that was subsequently seen at the office for follow-up care.
7. Complete post-experience self-evaluation.

Method of Evaluation:

1. The supervising provider will evaluate the student's performance in areas of professionalism, level of interest and clinical work, with additional input solicited from other faculty and staff. The comments will be incorporated in the student's final evaluation.
2. Student's journal will be reviewed by supervising provider.
3. Student pre- and post-experience self-evaluations will be reviewed by supervising provider.
4. Faculty/staff evaluations of the student's presentation will be reviewed with scores and comments taken into consideration by the supervising provider when calculating the student's final grade.
5. Student mentoring/precepting of M2/M3 students will be taken into consideration by the supervising provider when calculating the final grade.
6. Supervising provider will review student's case study for content, use of evidence-based research methods and quality of the final product.

Required Reading: None

Additional Resources: None

Miscellaneous Information: Attendance: One (1) excused absence is allowed during the 2-week experience; two (2) absences are allowed during the 4-week experience. Any absences in excess of these limits must be made up at the convenience of the site and/or provider(s) and may require rescheduling of block.

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Family Medicine Geriatric Care

Phase 2 Course Number: ELEC403

Phase 3 Course Number: ELEC181

Program Directors: Vasil Nika, MD

Departmental Contact Information: Tracey Riverdahl (triver@uic.edu); 815-395-5802

Location: P.A. Peterson Center for Health, other sites possible

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: This 2-week Family and Community Medicine rotation is designed to provide students the opportunity to increase their knowledge of geriatric care in long-term care facilities, nursing homes and end-of-life programs in the Rockford area.

Prerequisites: Completion of one Phase 2 core clerkship

Learning Objectives: The student who successfully completes this rotation will be able to:

1. Demonstrate understanding of the unique issues facing family practice providers who care for patients in long-term care facilities, nursing homes and end-of-life programs.
2. Actively experience the complex responsibilities of family medicine providers related to patient management in a long-term care facility, nursing home or end-of-life program under the supervision of a supervising provider.
3. Demonstrate understanding of the role of family practice providers as the coordinators of care for the geriatric/disabled patient.
4. Identify and discuss the professional and leadership responsibilities of a medical director in a long-term care facility.

Learning Activities:

1. The student will keep a journal, summarizing their daily activities and their personal observations & thoughts about the experience.
2. Shadow and work with a supervising provider at a long-term care facility, nursing home and/or hospice program providing management of care for geriatric/disabled patients.
3. Experience family practice responsibilities of patient care in an end-of-life program.
4. Shadow the medical director of a long-term care facility, nursing home or hospice program experiencing the responsibilities of leadership, medical management and patient-care collaboration between patient, family, provider and staff.
5. Utilizing appropriate evidence-based research techniques and actual patients, the student will choose six topics from the list below and write a case study for each:
 - o Agitated Dementia
 - o Anemia
 - o Depression
 - o Diarrhea/Constipation
 - o Neuromuscular Disorders
 - o Medical Management in the Elderly
 - o UTI/Urinary Incontinence
 - o COPD
 - o End of Life
 - o Renal Insufficiency
 - o CHF

Method of Evaluation:

1. The supervising provider will evaluate the student's performance in areas of professionalism, level of interest and clinical work, with additional input solicited from other faculty and staff. The comments will be incorporated in the student's final evaluation.
2. Student's journal will be reviewed by supervising provider.
3. The supervising provider will review student's three journal articles for content and use of evidence-based principles.
4. Topical case studies will be reviewed by the supervising provider for content and use of evidence-based research techniques; each case will be evaluated based on the student's skill set, thought processes and decision-making abilities.
5. The supervising provider will evaluate the student's performance in areas of professionalism, level of interest and clinical work. The comments will be incorporated into the student's final evaluation.

Required Reading: Students may be assigned readings from the book Primary Care Geriatrics: A Case-Based Approach, 5th Edition, from the journal Geriatrics, or from other print and electronic geriatric journals. The book is available in the University library, and in the exam room at P.A. Peterson. Geriatrics journal is available in the University library and assistance is available from library staff for electronic journals.

Additional Resources: None

Miscellaneous Information: Attendance: One (1) excused absence is allowed during the 2 week experience. Absences in excess of this limit must be made up at the convenience of the site and/or provider(s) and may require rescheduling of block.

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DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE

Family Medicine Inpatient

Phase 2 Course Number: ELEC412

Phase 3 Course Number: ELEC609

Program Directors: Joseph Ross, MD

Departmental Contact Information: Tracey Riverdahl (triver@uic.edu); 815-395-5802

Location: SwedishAmerican Hospital

Length of Time: 2 or 4 week

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: This two- or four-week experience will give students the opportunity shadow a family practice resident and supervising physician in the hospital setting.

Prerequisites: Completion of the Phase 2 clerkship in Medicine or Family Medicine

Learning Objectives: The student who successfully completes this rotation will be able to:

1. Demonstrate understanding of the unique issues facing family practice physicians who care for patients in the hospital/nursing home setting.
2. Provide medical care to hospitalized/nursing home patients in a supervised setting.
3. Demonstrate understanding of the role of the hospitalist and coordination of patient care.
4. Demonstrate understanding of hospital administration activities and responsibilities of the family practitioner with hospital privileges.
5. Experience family practice in a residency/primary care setting.

Learning Activities:

1. The student will keep a journal, summarizing their daily activities and their personal observations & thoughts about the experience.
2. Shadow a family practice resident/attending physician in the hospital, rounding on patients and providing input into the management of their care.
3. Attend organizational meetings of the hospital administration as possible.
4. Evaluate two journal articles (four articles for a 4-week block) on topics related to Family Practice Inpatient Care. Following evidence-based medicine principles and documenting your search strategy, write a brief review using the Journal Article Review form. If clinic scheduling allows, one article review should be presented to available faculty, staff and residents.
5. Experience family practice patient care responsibilities in all departments of the hospital (i.e., ER, OB, ICU, Medical floors, etc.).
6. If available, shadow a physician at a nursing home, rounding on patients and providing input into the management of their care.

Method of Evaluation:

1. Student's journal will be reviewed by supervising provider.
2. The journal article reviews will be reviewed by the supervising provider. If a presentation was done, evaluations will be solicited from faculty, staff and residents in attendance.
3. The supervising provider(s) will evaluate the student's performance in the areas of professionalism, level of interest and clinical work. The comments will be incorporated in the student's final evaluation.

Required Reading: None

Additional Resources: None

Miscellaneous Information: Attendance: One (1) excused absence is allowed during the 2-week experience; two (2) absences are allowed during the 4-week experience. Any absences in excess of these limits must be made up at the convenience of the site and/or provider(s) and may require rescheduling of block.

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DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE

Family Medicine Sub-Internship

Course Number: ELEC446

Program Directors: Mitchell King, MD

Departmental Contact Information: Tracey Riverdahl (triver@uic.edu); 815-395-5802

Location: Department of Family and Community Medicine, UIC-Rockford

Length of Time: 4 weeks

Call: No

Available for Phase: Phase 3

Narrative Description: The overarching goal of this Sub-I is for the student to develop the appropriate skills to be ready for the transition to residency. As such, he/she will work directly with attending physicians on the Family Medicine service on a daily basis, learning the skills and responsibilities of a resident physician and may follow-up patients in their clinic. The goals of this rotation are to continue to sharpen skills as future diagnosticians and improve interviewing and note writing skills, formulate detailed assessments and plans in an inpatient and outpatient setting, and to prepare for a residency.

Pre-Requisites: Completion of ALL Phase 2 clerkships

Learning Objectives:

I. Time management skills

1. Organize a daily patient care task list for each patient in a structured and systematic way so that required tasks (e.g., daily notes, orders, etc.) are not overlooked.
2. Prioritize daily patient care task list according to degree of importance/urgency.
3. Prioritize patients' clinical problems according to degree of clinical importance/urgency.
4. Recognize one's own limitations and call on other team members to help.

II. Communicating effectively within healthcare teams

1. Write accurate, concise, and well-organized consult and progress notes; and where applicable, transfer notes, discharge summaries, and cross-cover notes
2. Provide an oral presentation of a clinical encounter, tailoring length and content according to context.
3. Give and receive patient handoffs (both in writing and verbally) to transition care responsibility.
4. Speak with specialist/subspecialist colleagues to request consultation.
5. Communicate collaboratively with nursing and pharmacy staff to enhance patient care.
6. Communicate effectively with team case manager, social worker, and outpatient care to facilitate discharge planning

III. Patient evaluation skills—recognizing sick vs. non-sick patients

1. Gather appropriate clinical data from all appropriate sources (e.g., patient, family, nurse, medical records) in hypothesis-driven fashion to address the main clinical problems (Reporter function of RIME)
2. Analyze and synthesize the collected clinical data set to formulate a prioritized differential diagnosis for the main undifferentiated problems (Interpreter function of RIME)
3. Recognize which clinical situations require additional assistance from upper level resident, faculty attending, and/or specialty consultants.

4. Develop initial diagnostic and/or therapeutic management plans for the main clinical problems (Manager function of RIME)
5. Prioritize problem list according to degree of clinical importance (Interpreter function of RIME).

IV. Knowing when to ask for assistance

1. Recognize various techniques that can enhance and develop metacognitive skills
2. Generate clinical questions and retrieve evidence to advance patient care
3. Identify clinical and contextual situations that require assistance from clinical supervisors
4. Utilize a communication framework when calling for clinical support

Daily Responsibilities:

1. Performing a full history and physical on admission, formulating a differential diagnosis, and developing preliminary evaluation and treatment plans for all new patients assigned to him/her, with review by the attending physician. [the sub intern should admit no more than 2 new patients a day].
2. Bedside presentation of his/her patients and written daily SOAP progress notes and orders [the sub intern may provide continuity of care to no more than 5 patients per day].
3. He/she may call for consults consistent with hospital policy.
4. Review of daily orders with the attending physician.
5. Night call not currently scheduled
6. Communicating with his/her patients, their families, nurses, ancillary staff and other providers about the day-to-day needs and action plans as reviewed with the attending physician.
7. Beginning discharge planning, discussing with discharge planners [case managers, social workers] regarding outpatient therapy (OPAT) and assisting in the process of obtaining the resources and referrals needed for a safe discharge.
8. Generating a discharge summary for his/her patients which will be reviewed and signed by the responsible attending physician.
9. Contacting the PCP at discharge re: follow-up plans if requested by the attending.
10. Participate fully in family meetings, end of life and code discussions, and emergent bedside management of his/her patients.
11. Participate in all educational sessions scheduled during the sub-Internship.
12. Keep a log of patients seen and lessons learned from the patients.

Specific Family Medicine Objectives and Learning Activities:

1. Write complete and detailed notes on an inpatient or outpatient basis, including labor and delivery.
2. Research and discuss family medicine topics in detail.
3. Critically appraise the medical literature.
4. Perform advanced history and physical exam skills.
5. Work in a team with M3 students and residents.
6. Effectively utilize electronic health record to obtain information and enter orders.
7. Sharpen assessment and plan skills.

Learning Activities:

1. Perform history and physical examinations as well as focused outpatient evaluations.
2. Formulate a differential diagnosis and assessment of each patient that is evaluated.
3. Formulate management plans for each patient.
4. Orally present patients that have been worked up.
5. Write detailed notes about the patients worked up.
6. Follow inpatients on a daily basis and write daily progress notes.
7. Research and discuss family medicine topics in detail. Present this information to the preceptor and M3 students.
8. Keep a log of patients seen.

9. Have a weekly session with the preceptor providing feedback regarding the student's progress and performance.
10. Attend conferences at Swedish American hospital or the FHC.
11. Supervise M3 students on the FP inpatient service and provide them with feedback and teaching.
12. Observe and if possible participate in code blue resuscitations in the hospital.
13. Schedule will mirror that of an intern and during their office hours they will, ideally, pair up with the same senior resident/attending each week during the rotation.

Method of Evaluation:

1. The student will be evaluated in areas of professionalism, interest in clinical work, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Student will also be evaluated regarding interpretation of medical literature.
3. Patient Log will be reviewed by supervising provider.
4. Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading/Education Resources: Students are expected to utilize appropriate online sources, medical textbooks, and medical journals in researching and learning about the patients they see. Students are expected to utilize appropriate sources such as UpToDate, DynaMed, medical textbooks, and medical journals in researching the patients they see and in presenting journal articles

Miscellaneous Information: One (1) excused absence allowed per two-weeks of experience. Absences in excess of this limit must be made up at the convenience of the provider.

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DEPARTMENT OF HEALTH SCIENCES EDUCATION

Artificial (Augmented) Intelligence in Medicine

Course Number: ELEC440

Program Directors: Dr. Linda Chang, Dr. Radhika Sreedhar

Departmental Contact Information: Dr. Linda Chang (lchang@uic.edu)

Location: Online

Length of Time: 4 weeks

Call: No

Available for Phase: Phase 3 only.

Narrative Description: Recent years have seen an explosive growth in use of artificial intelligence in medicine arising from big data, e-commerce, and automation. Developments in information technologies, analytical and quantitative techniques have enabled the processing and analyses of vast troves of data to provide better patient care. This trend has fueled a demand for people with requisite technology and analytical knowledge and skills for utilizing the data obtain to perform quality improvement activities and improve patient safety. This elective will prepare healthcare students to have adequate foundational knowledge to participate on a technical team implementing an AI project.

This is an online course with a virtual face to face meeting twice a week. Students will be expected to commit to four to five hours of work time per day to cover the following topics. There will be weekly quizzes and students are expected to complete a capstone project to present on research day.

Prerequisites: Only fourth year medical students or senior year health professions students are invited to take this elective course. In addition, students must complete all core clerkships.

Learning Objectives: Prepare healthcare students to have adequate foundational knowledge to participate on a technical team implementing an AI project.

1. Define and describe the linkages between evidence-based medicine, high-value care, precision medicine, mobile computing and artificial intelligence.
2. Explain various forms of artificial intelligence and how they are applied today in healthcare to improve outcomes. Review use cases of applied AI in value-based care being used by health systems today.
3. Identify the drivers, decision factors and collaboration required across clinical, operational and technology teams to realize return on investment from AI. (Interprofessional Collaborative Practice)

Learning Activities:

This is an online course with a virtual face to face meeting twice a week. Students will be expected to commit to four to five hours of work time per day to cover the following topics. There will be weekly quizzes and students are expected to complete a capstone project to present on research day.

Week 1. Biomedical informatics foundations

1. EMR essentials.
2. Information systems design principles.
3. Healthcare project management principles: systems development lifecycle (SDLC), waterfall technology development, agile software development.

4. Infrastructure and networking essentials: the basics of computer networking, telemedicine, cloud computing, Big Data infrastructure, computer databases.
5. Ethical considerations in informatics and clinical analytics.
6. Economics of clinical analytics and healthcare informatics.

Week 2. Essentials of Healthcare Data Science

1. Population health, small data, big data.
2. Health outcomes research and support from Big Data.
3. Introduction to business and clinical intelligence: dashboards, reports, clinical measures.
4. Data analytics and evidence-based medicine.
5. Detailed review of medical data ontologies (ICD, CPT, LOINC, RxNORM, UMLS, DRG, SNOMED, and more).
6. Healthcare systems interoperability standards: intro to HL7, JSON, XML, and jq.
7. Biomedical informatics and healthcare data interoperability across all healthcare domains: provider care, life sciences, genetics and personalized medicine, payers, retail pharmacies, biomedical device engineering, mobile health.
8. The basics of data visualization.
9. Practical skills with workflows, data flows, business data diagrams, and use case diagrams.
10. Soft skills for data scientists: ability to present complex concepts to general audiences in simple terms.

Week 3. Predictive Analytics and Artificial Intelligence

1. Introduction to algorithms.
2. Hypothesis development.
3. Essentials of predictive analytics.
4. Introduction to statistical methods in clinical analytics.
5. Supervised learning, rule based programming, and expert systems.
6. Fundamentals of clinical decision support systems: supervised and unsupervised learning.
7. Introduction to fuzzy logic.
8. Unsupervised learning, machine learning, deep learning.
9. Imaging analysis and frequent subgraph mapping. Integration of image analysis into clinical analytics, machine learning algorithms, and workflows.
10. Real world evidence (RWE) and clinical data integration across all healthcare domains.
11. Artificial intelligence for precision medicine and drug discovery.

Week 4. Integrating and Applying AI

1. Bringing it all together: medicine at the crossroads of tradition and innovation, what AI means to new and already practicing physicians, what AI is and is not in medicine.
2. Challenges and opportunities of traditional and machine learning analytics in medicine: the AI value problem.
3. Hot topic discussion: as a clinician, how to embrace rather than fight and fear AI.
4. Telling a story with data: how to bring data wrangling, analysis, visualizations, and testing together into a cohesive business and clinical story that resonates with those not familiar with AI.
5. Presentation to virtual (or physical) audience and a comprehensive project building blueprints for a new AI application from the ground up, utilizing all knowledge gained in the course.

Method of Evaluation:

Week	LO	Content	Assessment
1	Overview of the impact of AI How AI will help providers practice medicine.	Biomedical informatics Foundatio11s	Quiz
2	Foundational concepts of AI and how it works	Essentials of Healthcare Data Science	Quiz

3	Linkages between evidence-based medicine, high-value care, precision medicine, mobile computing and artificial intelligence	Predictive Analytics and Artificial Intelligence	Quiz
4	Forms of artificial intelligence and its application Cases of applied AI in value-based care	Integrating and Applying AI	Quiz
4	Identify the drivers, decision factors and collaboration required across clinical, operational and technology teams to realize return on investment from AI	Integrating and Applying AI	Team Project & project presentation on research day

Required Reading: Benson, Tim. Principles of Health Interoperability HL7 and SNOMED (3rd Ed). Springer, 2016. ISBN: 978-3-319-30368-0. Reddy, Chandan K., Aggarwal, Charu C. (Ed.) (2015). Healthcare Data Analytics. United States: Boca Raton, Florida, CRC Press, Taylor and Francis Group. ISBN: 978-1-482- 23211-0. Shotts, William E. (2019). The Linux Command Line: A Complete Introduction (2nd Ed.). United States: San Francisco, California, No Starch Press. ISBN: 978-1593279523.

Additional Resources: Required Software will be provided free of charge by the university.

Miscellaneous Information: None

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DoCS (Doctoring and Clinical Skills Course) Mentoring

Phase 3 Course Number: ELEC397

Program Directors: Peggy Shiels, MD; Joann Davis, MD; Carrie Sharkey, MD

Departmental Contact Information: Peggy Shiels, MD (pwshiels@uic.edu); Joann Davis, MD; (davisjmk@uic.edu); Carrie Sharkey, MD (csa@uic.edu)

Location: 1601 Parkview Ave, Rockford, IL 61107

Length of Time: Longitudinal course in phase 1 both semesters (August – March)

Call: No

Available for Phase: Phase 3

Narrative Description: The purpose of the elective is to provide M4s with the opportunity to teach, facilitate small groups, and provide written and oral feedback to Phase 1 students. The M4s also serve as role models for the Phase 1 students in their groups. The experience allows students to receive individual mentoring from faculty and enhances their credentials for residency particularly if they plan to work at an academic medical center.

Prerequisites: Students must have completed ALL Phase 2 Core Clerkships by the start of the elective and be in good academic standing. Final approval is at the discretion of the course directors.

Learning Objectives:

1. To improve leadership and organizational skills
2. How to teach in a small group
3. How to facilitate discussion
4. How to manage challenging situations that occur in a small group
5. How to provide written and oral feedback
6. How to evaluate students

Learning Activities:

1. Lectures
2. Case reviews
3. Conferences
4. Outpatient evaluation
5. Observation of student clinical skill (Hx/PE)
6. Literature reviews
7. Group work

Method of Evaluation:

1. Students will be provided feedback by faculty co-tutors throughout the elective.
2. Phase 1 students will provide formative feedback to the M4/Faculty tutors about their performance as a group facilitator.

Required Reading: None

Additional Resources: Training sessions: Orientation/Teaching in Small Groups including use of various presentation applications (ppt and Prezi), group dynamics, managing challenging students, Formative feedback (written and oral)/Grading Assignments and Summative feedback

Miscellaneous Information: Time varies from week to week. Some weeks there may be no sessions and others there may be two.

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DEPARTMENT OF HEALTH SCIENCES EDUCATION

Emerging Infectious Diseases & Pandemic Planning

Course Number: ELEC441

Program Directors: Maureen H. Richards, PhD (Weeks 1 & 2); Kristi Kirschner, MD (Weeks 3 & 4)

Course Faculty: Sam Pope, JD, PhD; Janet Jokela, MD; Richard Tapping, PhD; Kristi Kirschner, MD; Elsa Vazquez MD; Alfredo Mena Lora, MD

Departmental Contact Information: Donna Johnson, dojohnso@uic.edu, (815) 395-5590

Location: University of Illinois College of Medicine, all campuses (Online course)

Length of Time: 2 OR 4 weeks; A student may take weeks 1 and 2 of this course for 2 weeks of credit or all 4 weeks for 4 weeks of credit.

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: This 2- to 4-week online course will provide students with an instruction on the recent COVID-19 pandemic and compares it to yearly influenza outbreaks. Students will learn the microbiology behind COVID-19 and influenza as well as other organisms that may cause Severe Acute Respiratory Syndrome. Students will learn the foundations of caring for patients with influenza and the progressing severity of COVID-19. Testing for influenza and COVID-19 and test development will be discussed as well as vaccine development. Students will also learn to appreciate the impact of a pandemic on ethical decisions practitioners need to make when resources become scarce. Students will also complete the National Incident Management (NIMS) Training. This program outlines the responsibilities and activities that were mandated as part of the Post-Katrina Management Reform Act of 2006.

Prerequisites:

- A. **For cohorts in the Spring and Summer Terms of 2020:** This course is open for enrollment to students in the class of 2020, 2021, and 2022 who have completed all of the Phase 1 curriculum with the exception of Block 9: Transition to Clerkships and sitting for Step 1.
- B. **For all future cohorts beginning Fall of 2020:** This course will be open for enrollment to students in Phase 2, who have successfully completed all core clerkships and all phase 3 students.

Learning Objectives: Learning Objectives are broken down by course parts. Part I (Weeks 1 & 2) focuses on Microbiology, Immunology, and Clinical Care of Infected patients. Part II (Weeks 3 & 4) focuses on Population Health, Ethics & Health Humanities.

At the conclusion of Part I of this course a student will be able to:

1. Explain the differences in microbiology, transmission, infectivity, and presentation between the Influenza virus and COVID-19 virus.
2. Discuss the impact of the yearly influenza season on the population.
3. Compare the 1918 pandemic response to the COVID-19 pandemic response.
4. Utilize personal protective equipment.
5. Discuss the measures a hospital system may put in place to keep its patients and community safe while preparing for a pandemic.

6. Discuss the mechanisms by which experimental treatment options may be vetted during the early stages of a pandemic.
7. The testing of potential treatment options for a patient with COVID-19.
8. Participate in and evaluate the responses of an incident management team.

At the conclusion of Part II of this course a student will be able to:

1. Describe the overarching public health framework, nomenclature, and taxonomy of epidemic/ pandemics: e.g., prevention, tracking and surveillance, public health messaging, crisis preparation and management, resource allocation and triage decisions during the various stages of a pandemic.
2. Discuss the differences in population health ethics and clinical medical ethics, when and how community interests take precedence over individual rights, and the types of ethical dilemmas that health professionals will need to be prepared to negotiate during a pandemic.
3. Critique the critical roles of governance and advocacy groups in managing a pandemic, and fast-tracking therapeutics and vaccines for emerging illnesses.
4. Understand common themes and experiences of patients and health professionals during a pandemic (including fear, stigma, anxiety, abandonment, social isolation, moral distress) and strategies to mitigate on an individual and structural level
5. Evaluate the possible moral distress and post-traumatic stress that can result when health professionals are called to work in high risk, resource- limited clinical settings, and must make conflictual decisions that compromise their identities as persons and professionals.
6. Explore the liminal role and responsibilities of being a health professions student during a pandemic and how it is similar to and different from being a layperson and a licensed treating professional.

Instructional Method:

For Part I:

This course will be an online only course. Students will be asked to complete various online learning modules, read papers, and attend worldwide conferences offered virtually by the CDC, WHO, and CROI. Students will then meet with faculty members 1-2 times per week to discuss journal articles and scenarios. Students will be required to complete any assessments contained within online learning modules and submit up to three reflection papers during the course on data acquired during the outbreak, pandemic management, or ethical considerations.

For Part II:

1. There will be approximately 90 mins of prep materials a day (usually short readings, online modules, narrated ppts) with 60- 75 mins of virtual synchronous contact in a large group format on Monday, Wednesday and Friday of week 3, and on Monday and Wednesday for week 4 (depending on size of students we may break into two groups).
2. On Tuesday and Thursday for Week 3, and Tuesday of week 4 we will have facilitated small ethics and humanities groups (size 10-12 students each) lasting 60-75 mins. These small groups will stay together for the duration of these two weeks.
3. For the special Part II project assignment, the small groups will be broken into teams of 4-6 students, which will work together to complete one of 3 possible projects (of their choosing). For the last two days of their course, each team will do a formal presentation of their project to their fellow classmates.

Method of Evaluation: This is a Pass/Fail course. In order to pass the course students must complete all assigned online modules, attend and participate in all online discussions, submit completion certificates for any online modules for which one exists and verbally attest to completion of those for which one does not exist using a supplied survey. Students may write reflective essays during the course. For the final project in part 2 of the course the students are expected to participate in the research around a chosen problem, the development of a proposal, and presentation to their fellow students of their projects.

Weekly Schedule:

Students must complete all the assigned readings and online modules for a given week and attend mandatory sessions as scheduled. The schedule will vary by week. Types of sessions offered per week:

1. Journal Clubs/Paper Discussion
2. Small group health humanities and ethics case discussions
3. Reflection on resources
4. Small group projects

Required Reading:

Additional Resources:

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DEPARTMENT OF HEALTH SCIENCES EDUCATION

Wikipedia For The Medical Editor

Course Number: ELEC442

Program Directors: Maureen H. Richards, PhD; Kevin Wombacher, PhD

Departmental Contact Information: Donna Johnson, dojohnso@uic.edu (815) 395-5590

Location: University of Illinois College of Medicine, all campuses (online course)

Length of Time: 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: This course will be offered to third- and fourth-year medical students to enhance their communication skills as it pertains to explaining complex medical conditions, treatments, and healthcare systems to non-medically trained individuals. Being able to successfully communicate complex medical information to patients is an invaluable skill for students and physicians to have. This course will help develop the ability of students to communicate with individuals who have a lower health literacy level. Students will also learn how to condense information from secondary resources into best practice guides using systematic reviews, literature reviews, and foundation papers to update wiki-articles.

Prerequisites:

1. Students must have completed all of Phase 1 curriculum with the exception of Block 9: Transition to Clerkships and sitting for Step 1 in the 19-20 academic year only.
2. If offered in future academic years, all phase 1 curricular requirements must be met.
3. If offered in future academic years, this course will be restricted to Phase 3 students or Phase 2 students who have successfully completed all core clerkships.
4. If offered in future academic years, this course will be offered longitudinally across the M4 year and should be able to be taken concurrently with other courses.

Learning Objectives:

1. Discuss neutrality, conflict of interest and bias avoidance in scientific writing and discussing medicine with patients and society.
2. Identify resources that provide a broad understanding of a topic and synthesize that information to educate non-medical educated individuals on a given topic.
3. Evaluate the importance of primary research and reliable secondary sources in continuing to educate a clinician's practice over the course of their career.
4. Understand the influence that Wikipedia and other resources have in managing patient expectations and knowledge of medicine.
5. Practice utilizing information from a wide variety of sources to update Wikipedia while avoiding plagiarism and close paraphrasing.
6. Discuss the difference between editing an open-access encyclopedia like Wikipedia from writing literature or systemic review.
7. Understand health literacy and how it can impact how a physician interacts with a patient.
8. Learn best practices for communicating with patients with low health literacy.

Learning Activities: This will be an online course. Students will be enrolled in the course for 4 weeks in total. During this course, students will be grouped into groups of 6 or fewer students. Students will be responsible for completing all of the Wiki-training modules. Each week students will meet with instructors online to engage in classroom discussions on the topics listed below in the weekly schedule. Students will be required to choose a page to edit or create during the first week of the block, they will then have 2 weeks to edit their page before engaging in the peer-review process. During the final week, they will respond to peer review and present what they learned during the course.

Method of Evaluation: Students will be assessed by the following parameters:

1. Completion of all required online training modules.
2. Attendance at each of the weekly online discussion classes.
3. Completion of edits made to at least 1 article per group; this will be tracked using the wiki-course dashboard and the article's talk page.
4. Completion of the peer review project; this will be tracked using the wiki-course dashboard and the article's talk page.
5. Presentation video submitted to course directors on what was learned.

Required Reading:

Additional Resources:

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Adult Care Medicine

Phase 3 Course Number: ELEC333

Program Directors: Charles Welford, MD; Rajbir Dhillon, MD; Various Hospitalists

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: OSF St. Anthony Medical Center

Length of Time: 2 or 4 weeks

Call: Every 4th night

Available for Phase: Phase 3 ONLY

Narrative Description: The goals of this rotation are to continue to sharpen skills as future diagnosticians and improve interviewing and note writing skills, formulate detailed assessments and plans in an inpatient setting and to prepare for a residency in Internal Medicine.

Prerequisites: Completion of ALL Phase 2 Clerkships

Learning Objectives: The student who successfully completes this rotation will be able to

1. Write complete and detailed notes on an inpatient basis;
2. Research and discuss internal medicine topics in detail;
3. Critically appraise the medical literature;
4. Perform advanced history and physical exam skills;
5. Work in a team with M3 students;
6. Effectively utilize electronic health record to obtain information and enter orders; and
7. Sharpen assessment and plan skills.

Learning Activities:

1. Perform history and physical examinations for inpatients of the hospitalists;
2. Formulate a differential diagnosis and assessment of each admitted patient that is evaluated;
3. Formulate management plans for each admitted patient;
4. Orally present patients that have been worked up;
5. Write detailed notes about the patients worked up;
6. Follow inpatients on a daily basis and write daily progress notes;
7. Research and discuss internal medicine topics in detail. Present this information to Dr. Welford and M3 students;
8. Critically evaluate at least one journal article weekly;
9. Keep a log of patients seen and lessons learned from the patients;
10. Have a weekly session with Dr. Welford providing feedback regarding the student's progress and performance;
11. Attend Grand Rounds at St. Anthony Medical Center when in session;
12. Supervise M3 students on Dr. Welford's service and provide them with feedback and teaching; and
13. Observe and if possible participate in code blue resuscitations in the hospital.

Method of Evaluation:

1. The student will be evaluated in areas of professionalism, interest in clinical work, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Student will also be evaluated regarding interpretation of medical literature;
3. Patient Log will be reviewed by supervising provider; and
4. Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: Students are expected to utilize appropriate sources such as UpToDate, DynaMed, medical textbooks, and medical journals in researching the patients they see and in presenting journal articles

Additional Resources: Internal Medicine Subinternship Curriculum 2.0, Primer to the I.M. Subinternship, (both on Blackboard)

Miscellaneous Information: One (1) excused absence allowed per two-week experience. Absences in excess of this limit must be made up at the convenience of the provider.

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Adult Internal Medicine Sub-Internship

Course Number: ELEC445

Program Directors: Charles Welford, MD; Rajbir Dhillon, MD; Binoy Kamal, MD; various hospitalists

Departmental Contact Information: Susan Hollander (sueh@uic.edu); (815) 395-5610

Location: OSF Saint Anthony Medical Center

Length of Time: 4 weeks

Call: Every 4th night

Available for Phase: Phase 3

Four-week rotation meets qualifications of Sub-I

Narrative Description:

The overarching goal of this Sub-I is for the student to develop the appropriate skills to be ready for the transition to residency including sharpening skills as future diagnosticians, improving interviewing, exam, note writing, and formulating detailed assessments and plans in an inpatient setting. As such, he/she will work directly with the attending Medicine hospital physicians on a daily basis, learning the skills and responsibilities of a resident physician.

Pre-Requisites: Completion of all Phase 2 clerkships

Learning Objectives and Activities:

I. Time management skills

1. Organize a daily patient care task list for each patient in a structured and systematic way so that required tasks (e.g., daily notes, orders, etc.) are not overlooked.
2. Prioritize daily patient care task list according to degree of importance/urgency.
3. Prioritize patients' clinical problems according to degree of clinical importance/urgency.
4. Recognize one's own limitations and call on other team members to help.

II. Communicating effectively within healthcare teams

1. Write accurate, concise, and well-organized consult and progress notes; and where applicable, transfer notes, discharge summaries, and cross-cover notes
2. Provide an oral presentation of a clinical encounter, tailoring length and content according to context.
3. Give and receive patient handoffs (both in writing and verbally) to transition care responsibility.
4. Speak with specialist/subspecialist colleagues to request consultation.
5. Communicate collaboratively with nursing and pharmacy staff to enhance patient care.
6. Communicate effectively with team case manager, social worker, and outpatient care to facilitate discharge planning

III. Patient evaluation skills—recognizing sick vs. non-sick patients

1. Gather appropriate clinical data from all appropriate sources (e.g., patient, family, nurse, medical records) in hypothesis-driven fashion to address the main clinical problems (Reporter function of RIME)
2. Analyze and synthesize the collected clinical data set to formulate a prioritized differential diagnosis for the main undifferentiated problems (Interpreter function of RIME)
3. Recognize which clinical situations require additional assistance from upper level resident, faculty attending, and/or specialty consultants.

4. Develop initial diagnostic and/or therapeutic management plans for the main clinical problems (Manager function of RIME)
5. Prioritize problem list according to degree of clinical importance (Interpreter function of RIME).

IV. Knowing when to ask for assistance

1. Recognize various techniques that can enhance and develop metacognitive skills
2. Generate clinical questions and retrieve evidence to advance patient care
3. Identify clinical and contextual situations that require assistance from clinical supervisors
4. Utilize a communication framework when calling for clinical support

Daily Responsibilities:

1. Performing a full history and physical on admission, formulating a differential diagnosis, and developing preliminary evaluation and treatment plans for all new patients assigned to him/her, with review by the attending physician. [the sub intern should admit no more than 2 new patients a day].
2. Bedside presentation of his/her patients and written daily SOAP progress notes and orders [the sub intern may provide continuity of care to no more than 5 patients per day].
3. He/she may call for consults consistent with hospital policy.
4. Review of daily orders with the attending physician.
5. Night call not currently scheduled
6. Communicating with his/her patients, their families, nurses, ancillary staff and other providers about the day-to-day needs and action plans as reviewed with the attending physician.
7. Beginning discharge planning, discussing with discharge planners [case managers, social workers] regarding outpatient therapy (OPAT), and assisting in the process of obtaining the resources and referrals needed for a safe discharge.
8. Generating a discharge summary for his/her patients which will be reviewed and signed by the responsible attending physician.
9. Contacting the PCP at discharge re: follow-up plans if requested by the attending.
10. Participate fully in family meetings, end of life and code discussions, and emergent bedside management of his/her patients.
11. Participate in all educational sessions scheduled during the sub-Internship.
12. Keep a log of patients seen and lessons learned from the patients.

Specific Internal Medicine Responsibilities:

1. Research and discuss internal medicine topics in detail including a critical appraisal of the medical literature; presentation of this information to Dr. Welford, hospitalists and M3 students.
2. Work in a team with M3 students including supervision, teaching and feedback.
3. Effectively utilize electronic health record to obtain information and enter orders;
4. Sharpen assessment and plan skills including performing advanced history and physical exam skills;
5. Critically evaluate at least one journal article weekly;
6. Observe and if possible participate in code blue resuscitations in the hospital
7. Attend Grand Rounds at St. Anthony Medical Center when in session.

Method of Evaluation:

1. The student will be evaluated by the attending physicians in areas of professionalism, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Patient Log will be reviewed by supervising attending;
3. Standard UIC evaluation form completed and submitted.
4. Additional evaluation forms for cross-cover notes and discharge summaries may be used for formative evaluation

Required Reading: Students are expected to utilize appropriate sources such as UpToDate, DynaMed, standard medical textbooks, and medical journals in researching and learning about the patients they see.

Additional Resources: None

Miscellaneous Information: Excused absences will follow College guidelines.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Allergy/Asthma

Course Number: ELEC299

Program Directors: Fatima Mohiuddin, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: SwedishAmerican Brookside Specialty Center; 1253 North Alpine Road; Rockford, IL

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 & 3

Narrative Description: During the rotation, the student will spend 2 weeks focusing on adult and/or pediatric patients. Every week the student will participate in ambulatory clinic sessions with adults or children seeking diagnosis and/or treatment of asthma and many other hypersensitivity diseases. The student will observe and participate in various procedures, including IgE skin testing, patch testing, spirometry and immunotherapy.

Prerequisites: Completion of Phase 2 Family Medicine or Medicine clerkship

Learning Objectives: At the completion of this elective, the student will be able to:

1. Describe the basic structure and function of the immune system;
2. Explain the immunopathophysiology of the four major types of hypersensitivity;
3. Perform a history and physical examination of an adult and child suspected to have a hypersensitivity disease; and
4. Describe diagnostic and treatment strategies for the most common hypersensitivity diseases.

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: None

Additional Resources: None

Miscellaneous Information:

Monday – Friday, regular physician workday hours

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Cardiology

Phase 2 Course Number: ELEC401

Phase 3 Course Number: ELEC608

Program Directors: Joel Hellman, MD (jhellman@uic.edu)

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: OSF Saint Anthony Medical Center, SwedishAmerican Hospital, Mercyhealth

Length of Time: 2 or 4 weeks

Call: Based on Preceptor*

Available for Phase: Phase 2 and Phase 3

Narrative Description: This rotation will allow the student to gain knowledge in various aspects of cardiology. Students will be exposed to Cardiology office and hospital visits, EKG's, echocardiograms, and routine and pharmacologic stress tests. Exposure to heart catheterizations, PTCA's, stent insertion, cardioversion, electrophysiology studies and transesophageal echo and cardiovascular surgery may occur. The student will accompany the cardiologist on all phases of the practice.

Prerequisites: Completion of Phase 2 Medicine clerkship

Learning Objectives: At the end of the rotation, the student will be expected to develop an understanding of the basic pathophysiology, diagnosis and therapy of ischemic heart disease, congestive heart failure and cardiac arrhythmias **AND** exhibit the ability to:

1. Interview patients collecting pertinent data concerning the patient's presenting problems;
1. Perform a complete or focused physical examination as appropriate and distinguish normal from abnormal findings;
2. Synthesize information to develop a reasonable differential diagnosis and be prepared to present to preceptor;
3. Following an assessment of all assigned patients, students will describe the chief problems and a plan for treatment.
4. Prepare a complete H & P for a new patient admitted to the service;
5. Periodically re-evaluate patients' status including interpretation of new history and physical exam findings;
6. Use and interpret laboratory and radiographic tests used in diagnosing common cardiac & vascular diseases;
7. Recognize and manage situations related to common cardiac & vascular diseases that are potential emergencies; and
8. Identify ethical problems which arise in patient treatment and care.

All students participating on this clerkship will meet the institutional standards for professional behaviors.

Learning Activities:

1. Outpatient and inpatient evaluations;
2. Participation in development of therapy strategies and plans and evaluation of responses to therapy;
3. Exposure to EKGs, echocardiography and stress testing; and
4. Exposure to invasive cardiac procedures to be determined by both the preceptor's scope of practice and the pathology evaluated.

Method of Evaluation: Preceptor will evaluate the student's performance based upon direct observation as well as additional feedback from members of the clinical staff. Standard UIC evaluation form completed and submitted

Required Reading: None

Additional Resources:

ACC/AHA Clinical Guidelines

Up-to-Date

Standard Cardiology Texts - Braunwald, Hurst and/or Topol

Current Medical Literature

Miscellaneous Information: Minimum of five full days per week with on-call/weekend responsibilities at the discretion of the preceptor.*

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Dermatology

Phase 2 Course Number: ELEC402

Phase 3 Course Number: ELEC602

Program Directors: Michael Bukhalo, MD; Melissa Stenstrom, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Dr. Bukhalo: Arlington Dermatology; 5301 Keystone Ct., Rolling Meadows, IL 60008; Phone (847) 392-5440; Dr. Stenstrom; MD SkinCenter; 1235 N. Mulford Rd, Suite 205, Rockford

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: During the course of two or four weeks the students should be exposed to approximately 250-500 dermatologic patients.

Prerequisites: Completion of Phase 2 Family Medicine, Medicine, or Pediatrics clerkship

Learning Objectives:

Emphasis of instruction will be in three main areas. These would include:

1. Proper dermatologic description and classification of the cutaneous disorders seen
2. Differential diagnosis of dermatologic diseases and
3. Basic therapeutic principles

Learning Activities:

The student may participate and learn to do some basic dermatologic procedures including skin biopsy, shave biopsy, skin tag excision, wart destruction and simple excisional surgery.

The rotating student would also be invited to attend the monthly meeting of the Chicago Dermatological Society held in Chicago on the third Wednesday of each month. The student would also be participating in evaluation of any hospital consultations that arise during the month.

All students are required to review a topic of interest related to dermatology and their chosen specialty and present their topic in a brief 10-minute presentation.

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: Textbook Required: Principles of Dermatology, Fourth Edition, Lookingbills/marks, W.B. Saunders Elsevier, 2006.

Additional Resources: None

Miscellaneous Information:

Monday – Friday, 9:30 a.m. – 5:00 p.m., per physician's schedule.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Endocrinology

Phase 2 Course Number: ELEC409

Phase 3 Course Number: ELEC613

Program Directors: Sameer Ansar MD, Aliya Naseer MD, Hiralal Maheshwari, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Dr. Ansar, 5688 E. State St, Suite 2000, Rockford; Dr. Naseer, 2300 N. Rockton Ave, Rockford; Dr. Maheshwari, Midwest Endocrinology, 380 N. Terra Cotta Rd Suite A, Crystal Lake, Illinois

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: Students attend endocrine outpatient clinics, which are held Monday to Friday, from 8:00 a.m. to 5 p.m. They also accompany consultation physicians for inpatient consultations and are required to be present for one thyroid biopsy clinic and diabetes group class.

Prerequisites: Completion of Phase 2 Medicine or Family Medicine Clerkship

Learning Objectives: To demonstrate competency in the ambulatory and hospital care of patients with common endocrine and metabolic disorders, including the ability to perform appropriately directed history and physical examination, interpretation of basic endocrine laboratory data and determination of management options

Learning Activities:

1. Shadowing physicians.
2. Taking history and physical examination, determining a differential diagnosis and coming up with a basic diagnostic plan.
3. Attending diabetes group classes, new insulin pump and continuous glucose monitor starts.
4. Observing thyroid biopsies and ultrasounds is being done at OSF/SAMC only

Method of Evaluation: At the end of the rotation, the attending physicians, educators and nursing staff will give students feedback and submit standard UIC evaluation forms.

Required Reading: None

Additional Resources:

American Diabetes Association "Standard of Medical Care in Diabetes Mellitus"

Williams Textbook of Endocrinology

NEJM – review articles

Journal of Endocrinology and Metabolism

Miscellaneous Information: Monday – Friday, at least 8 hours/day, per physician schedule.

Dr. Naseer's clinic hours are Monday - Thursday from 8am - 5pm. Friday is her day off.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Gastroenterology

Phase 2 Course Number: ELEC396

Phase 3 Course Number: ELEC614

Program Directors: Sumeet Tewani, MD; Nicole Gentile MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Dr. Tewani, 401 Roxbury Road, Rockford; Dr. Gentile, Mercyhealth, 8201 E. Riverside Blvd, Rockford

Length of Time: 4 Weeks

Call: Yes

Available for Phase: Phase 2 and Phase 3

Narrative Description: The medical student will function much like a medicine intern during this elective. The student will actively participate in the management of an inpatient gastroenterology service at one of the two hospitals covered by Rockford Gastroenterology Associates. The emphasis is on patient evaluation and management. The student will be exposed to the various procedures performed in gastroenterology including upper endoscopy, colonoscopy, liver biopsy, ERCP, and endoscopic ultrasound.

Prerequisites: Completion of Phase 2 Medicine clerkship

Learning Objectives: The gastroenterology elective is designed to provide the student who has completed his/her Medicine clerkship with exposure to the field of gastroenterology as is practiced in an academic and private practice setting. The student should complete the course with knowledge of the pathophysiology, evaluation, and management of common and uncommon gastrointestinal, liver, gallbladder, and pancreatic diseases.

Learning Activities:

1. Direct participation in inpatient gastroenterology service; and
2. Case-based learning sessions covering the major topics in gastroenterology.

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: Students *strongly* encouraged to review GI textbooks, UpToDate as it applies to their patients and the case-based learning sessions posted on Blackboard.

Additional Resources: None

Miscellaneous Information: 7:30 a.m. – 5:00 p.m. Monday through Friday / 7:30 a.m. – 12:00 p.m. Saturday & One (1) call weekend.*

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Gastroenterology Sub-Internship

Course Number: ELEC448

Program Directors: Sumeet Tewani, MD

Departmental Contact Information: Susan Hollander SueH@uic.edu; (815) 395-5610

Location: OSF St. Anthony and SwedishAmerican Hospitals

Length of Time: 4 weeks

Call: Two overnight calls and one weekend call

Available for Phase: Phase 3

Narrative Description: The goal of this Sub-I is for the medical student to develop the appropriate skills for transition to residency. The medical student will function much like a medicine intern during this elective. The student will actively participate in the management of an inpatient gastroenterology service at one of the two hospitals covered by Rockford Gastroenterology Associates, with an emphasis on patient evaluation and management. The student will work directly with the attending physicians (and NPs) on service on a daily basis, learning the skills and responsibilities of a resident physician. The student will also be exposed to the various procedures performed in gastroenterology including upper endoscopy, colonoscopy, ERCP, and endoscopic ultrasound.

Prerequisites: Completion of all Phase 2 required clerkships

Learning Objectives and Activities:

I. Time management skills

1. Organize a daily patient care task list for each patient in a structured and systematic way so that required tasks (e.g., daily notes, orders, etc.) are not overlooked.
2. Prioritize daily patient care task list according to degree of importance/urgency.
3. Prioritize patients' clinical problems according to degree of clinical importance/urgency.
4. Recognize one's own limitations and call on other team members to help.

II. Communicating effectively within healthcare teams

1. Write accurate, concise, and well-organized transfer/accept notes, discharge summaries, and cross-cover notes.
2. Provide an oral presentation of a clinical encounter, tailoring length and content according to context.
3. Give and receive patient handoffs (both in writing and verbally) to transition care responsibility.
4. Speak with specialist/subspecialist colleagues to request consultation.
5. Communicate collaboratively with nursing and pharmacy staff to enhance patient care.
6. Communicate effectively with team case manager, social worker, and outpatient care providers to facilitate discharge planning.

III. Patient evaluation skills—recognizing sick vs. non-sick patients

1. Gather appropriate clinical data from all appropriate sources (e.g., patient, family, nurse, medical records) in hypothesis-driven fashion to address the main clinical problems (Reporter function of RIME).

2. Analyze and synthesize the collected clinical data set to formulate a prioritized differential diagnosis for the main undifferentiated problems (Interpreter function of RIME).
3. Recognize which clinical situations require additional assistance from upper level resident, faculty attending, and/or specialty consultants.
4. Develop initial diagnostic and/or therapeutic management plans for the main clinical problems (Manager function of RIME).
5. Prioritize problem list according to degree of clinical importance (Interpreter function of RIME).

IV. Knowing when to ask for assistance

1. Recognize various techniques that can enhance and develop metacognitive skills.
2. Generate clinical questions and retrieve evidence to advance patient care.
3. Identify clinical and contextual situations that require assistance from clinical supervisors.
4. Utilize a communication framework when calling for clinical support.

Daily Responsibilities:

1. Performing gastroenterology consultations and assessments including a full history and physical exam, formulation of a differential diagnosis, and developing preliminary evaluation and treatment plans for all patients assigned to the student, with review by the attending.
2. Bedside presentation of his/her patients and written daily notes and orders. He/she may call for consults consistent with hospital policy.
3. Review of daily orders with the attending.
4. Communication with patients, their families, nurses, ancillary staff and other providers about the day-to-day needs and action plans as reviewed with the attending.
5. Discuss with discharge planners and assist in the process of obtaining the resources and referrals needed for a safe discharge, as appropriate.
6. Generate a discharge plan for his/her patients which will be reviewed by the responsible attending.
7. Contact the PCP and/or primary outpatient gastroenterologist at discharge re: follow-up plans if requested by the attending.
8. Participate in family meetings, end of life and code discussions, and emergent bedside management of his/her patients.
9. Participate in all educational sessions scheduled during the Sub-I.
10. Schedule 7:30 AM - 5:00 PM Monday through Friday.
11. One call weekend and two night calls during the Sub-I.

Specific Gastroenterology Responsibilities /Learning Activities:

1. Direct participation in the inpatient gastroenterology service.
2. Evaluation and development of a management plan for acute upper and lower GI bleeding, abdominal pain, diarrhea, anemia, jaundice, inflammatory bowel disease, abnormal liver function tests, complications of chronic liver disease and acute and chronic pancreatitis, and other common clinical presentations.
3. Observe procedures performed by the attending or participate in procedures when instructed to by the attending on the student's patients, or other procedures when available.
4. Understand the process of informed consent for procedures and participate in obtaining informed consent for procedures when directed by attending.

5. Maintain a patient log to reflect the number of new consults and follow-up patients seen on a daily basis, including the most relevant problems requiring GI consultative input, and procedures observed/participated in as they relate to the specific patient.
6. Case-based learning sessions covering the major topics in gastroenterology.

Method of Evaluation:

1. The student will be evaluated by the attending physicians in areas of professionalism, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Patient Log will be reviewed by supervising attending.
3. Standard UIC evaluation form completed and submitted.

Required Reading: Students are expected to utilize appropriate sources such as UpToDate, medical textbooks, and medical journals as they apply to the patients and case-based learning sessions.

Miscellaneous Information: Excused absences will follow College guidelines.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Hematology/Oncology

Phase 2 Course Number: ELEC411

Phase 3 Course Number: ELEC804

Program Directors: Thomas McFarland, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: 2400 N. Rockton Avenue, Rockford, (815) 971-5000

Length of Time: 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: The hematology/oncology rotation consists of 4 weeks' time working with a preceptor, witnessing and participating in the inpatient and outpatient care of oncology and hematology patients. Screening, genetics, risk evaluation, radiation therapy, and community exposures are on a prn basis as opportunities present themselves. Students are expected to be prompt, neat, and pleasant.

M4 students will be expected to function as a "sub-intern", performing histories, physicals, and consultations on inpatients, presenting daily on the patients they are responsible for, following their inpatients and attending any procedures they undergo, attending clinic and seeing outpatients in the company of the preceptor, and attending weekly cancer conference. Call is something that is earned by demonstrating interest and enthusiasm. Residents will round on a panel of patients in the morning and coordinate with the on call physician for clinic and consults.

A daily topic is provided in the Hem/Onc Workbook for each weekday of the rotation. The first week is focused on oncologic emergencies, the second on more common tumors (emphasizing the organization of approach rather than a compendium of facts), the third on hematology problems, and the fourth on topics such as therapeutics and supportive care. The last day is the student's day to present a topic of his/her choice. The workbook has been derived from a variety of sources, most importantly feedback from prior students. The final topic is reserved for the students to present a disease, a clinical scenario, a basic science finding, or a humanistic interlude.

IM Essentials, available electronically in the UIC library, will serve as a condensed text that expands on the topics of this curriculum as well as other oncology and hematology topics. There is a test following the sections and it is suggested students take that test as they start the rotation – both to set a baseline and to identify potential areas to concentrate on.

It is critical that students be able to function with a variety of tools and in the environment of the medical resident. Just as clinical medicine remains an empiric science amidst the modeling and speculation of research, being a physician still entails "doing it" amidst theorizing and presentations! We will try to "do" a bone marrow or two, but will also read ECGs and radiology studies, and anything that our consultants will involve us in, whether a scope or surgery. Student clinical cases are the important, real life, studies. Additional ones are provided in the book.

Included are formatted sheets for reading the ECGs, adjacent to the graphics, and formatted H and P sheets. There is also a daily radiology study or picture of a microscope slide to review and report on. Again, a space is provided in the workbook for these reports. Students are welcome to alter these to their usual practice as long as they remain consistent, organized, and communicative. Please use the workbook, although we are all in transition to EMRs. Do not write actual patient names or identifiers in the book, as a matter of confidentiality. The tactile experience can be useful, and will give the student a chart to carry and follow their patients. Students are to document visits, procedures, and questions. I appreciate corrections and references, particularly hyperlinks, to literature, graphics, slide shows, and illustrations, as I seek to morph to an electronic experience.

(cont'd)

Prerequisites: Completion of Phase 2 Medicine Clerkship

Learning Objectives: Topics covered:

1. Febrile Neutropenia;
2. Hypercalcemia;
3. Spinal Cord Compression;
4. SIADH;
5. Acute Leukemia at Presentation;
6. Colon, Breast, Lung Cancer;
7. Lymphoma, Adult Acute Leukemia, Myeloproliferative Disorders;
8. Thrombocytopenia, Anemia, Bleeding & Thrombolytic Disorders;
9. Pain Control, Chemotherapeutic Agents;
10. Suffering, Clinical Trials in Oncology; and
11. "Wild Card."

Learning Activities: Tumor Conference, Breast Conference, Grand Rounds. In-patient rounding/documentation/procedures. Outpatient clinic with rotating preceptors. Radiation oncology clinic (typically one (1) day).

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Personal consultation with the student will also be completed.

Required Reading: Workbook on M4 Medicine Blackboard Site

Additional Resources: None

Miscellaneous Information: Monday – Friday, per physician's schedule. This rotation is not available over the holidays or post-graduation.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Infectious Disease Inpatient

Phase 2 Course Number: ELEC413

Phase 3 Course Number: ELEC617

Program Directors: Scott Homann, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: SwedishAmerican Hospital

Length of Time: 4 Weeks

Call: Yes*

Available for Phase: Phase 2 and Phase 3

Narrative Description: Academic Infectious Disease setting. Students will be expected to perform comprehensive histories & physicals, develop a differential diagnosis and an evaluation/treatment plan. Students will be following patients daily. Students will do two brief presentations (10-15 minutes) during morning conference.

Prerequisites: Completion of Phase 2 Medicine clerkship

Learning Objectives: At the end of this rotation, students will:

1. Hone history, physical & presentation skills;
2. Become comfortable with antibiotic choice & use;
3. Learn to order and interpret microbiology tests; and
4. Learn to evaluate and manage complex patients with infections.

Learning Activities:

1. Direct patient care;
2. Teaching rounds;
3. Twice weekly conferences;
4. Trips to Radiology/Micro/Path as needed; and
5. Close interaction with other MD's, pharmacists, nurses and other healthcare providers.

Method of Evaluation: Direct faculty evaluation of performance, which includes questions on rounds, and standard UIC evaluation form completed and submitted.

Required Reading: Handout & textbook (provided prior to orientation).

Additional Resources: None

Miscellaneous Information:

Begin rotation approximately between 7:00/7:30 a.m. Generally finished between 5:00/7:00 p.m.

Weeknight call is rare; 3 weekend days is required.*

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Infectious Diseases Sub-Internship

Course Number: ELEC444

Program Directors: Dr. Geoffrey Tsaras

Departmental Contact Information: Susan Hollander (sueh@uic.edu); (815) 395-5610

Location: SwedishAmerican Hospital and Infectious Disease Clinic

Length of Time: 4 weeks

Call: Saturday or Sunday rotation every week for the first three weekends. No overnight call.

Available for Phase: Phase 3

Narrative Description:

The overarching goal of this Sub-I is for the student to develop the appropriate skills to be ready for the transition to residency. As such, he/she will work directly with the attending physicians on the Infectious Disease Service on a daily basis, learning the skills and responsibilities of a resident physician and may follow-up patients in the clinic.

- Medical Students (Sub Interns) will develop an appreciation of the scope of care provided by infectious disease service:
 - Recognition and definition of infectious disease syndromes.
 - Diagnosis and treatment of infectious disease syndromes.
 - Referral of patients requiring other specialty intervention and/or counseling.
- Technical Skills (Procedures): Sub Interns will learn the indication, interpretation, and complications of the following procedures:
 - Blood and other body fluids stains, and cultures, and antibiotic sensitivity.
 - Spinal, pleural, peritoneal and synovial fluid taps
 - Skin tests
 - Serological tests
- The Sub Intern will independently evaluate adult patients referred for infectious disease consultation and recommend appropriate work up and care of the patient, under the supervision of an Infectious Disease Attending Physician / Specialist / Consultant.

Pre-Requisites: Completion of all Phase 2 required clerkships

Learning Objectives:

I. Time management skills

1. Organize a daily patient care task list for each patient in a structured and systematic way so that required tasks (e.g., daily notes, orders, etc.) are not overlooked.
2. Prioritize daily patient care task list according to degree of importance/urgency.
3. Prioritize patients' clinical problems according to degree of clinical importance/urgency.
4. Recognize one's own limitations and call on other team members to help.

II. Communicating effectively within healthcare teams

1. Write accurate, concise, and well-organized consult and progress notes; and where applicable, transfer notes, discharge summaries, and cross-cover notes
2. Provide an oral presentation of a clinical encounter, tailoring length and content according to context.
3. Give and receive patient handoffs (both in writing and verbally) to transition care responsibility.
4. Speak with specialist/subspecialist colleagues to request consultation.
5. Communicate collaboratively with nursing and pharmacy staff to enhance patient care.
6. Communicate effectively with team case manager, social worker, and outpatient care providers including ID clinical staff, to facilitate ID discharge planning

III. Patient evaluation skills—recognizing sick vs. non-sick patients

1. Gather appropriate clinical data from all appropriate sources (e.g., patient, family, nurse, medical

records) in hypothesis-driven fashion to address the main clinical problems (Reporter function of RIME)

2. Analyze and synthesize the collected clinical data set to formulate a prioritized differential diagnosis for
3. the main undifferentiated problems (Interpreter function of RIME)
4. (continued)
5. Recognize which clinical situations require additional assistance from upper level resident, faculty attending, and/or specialty consultants.
6. Develop initial diagnostic and/or therapeutic management plans for the main clinical problems
7. (Manager function of RIME)
8. Prioritize problem list according to degree of clinical importance (Interpreter function of RIME).

IV. Knowing when to ask for assistance

1. Recognize various techniques that can enhance and develop metacognitive skills
2. Generate clinical questions and retrieve evidence to advance patient care
3. Identify clinical and contextual situations that require assistance from clinical supervisors
4. Utilize a communication framework when calling for clinical support

Daily Responsibilities:

1. Performing a full history and physical on initial consultation, formulating a differential diagnosis, and developing preliminary evaluation and treatment plans for all new patients assigned to him/her, with review by the attending physician [the sub intern may consult on no more than 2 new patients a day].
2. Bedside presentation of his/her patients and written daily SOAP /ID progress notes and orders [the sub intern may provide continuity of care to no more than 5 patients per day].
3. He/she may call for consults consistent with hospital policy.
4. Review of daily orders with the attending ID physician.
5. Night call not currently scheduled
6. Communicating with his/her patients, their families, nurses, ancillary staff and other providers about the day-to day needs and action plans as reviewed with the attending ID physician.
7. Beginning ID discharge planning, discussing with discharge planners [case managers, social workers] regarding outpatient parenteral antibiotic therapy (OPAT) and assisting in the process of obtaining the resources and referrals needed for a safe discharge.
8. Generating an ID discharge summary for his/her patients which will be reviewed and signed by the responsible attending physician.
9. Contacting the PCP at discharge re: follow-up plans if requested by the attending.
10. Participate fully in family meetings, end of life and code discussions, and emergent bedside management of his/her patients.
11. Perform ID consultations and assessments at the discretion and under the guidance of the attending ID physician.
12. Participate in all educational sessions scheduled during the sub-Internship.
13. Keep a log of patients seen and lessons learned from the patients in Benware.

Specific Infectious Disease Responsibilities:

1. Able to perform a focused infectious disease evaluation; obtain relevant past/family/social/occupational and travel history that may be pertinent to the infectious disease syndrome.
2. Learn the indication and interpretation of blood, body fluid or tissue gram stain and special stains; cultures and antibiotic sensitivity; skin tests, serological tests and novel molecular methods for the diagnosis of infectious diseases.
3. Learn the management of commonly encountered infectious diseases through patient-based learning and review of the literature.
4. Participate in bedside procedures such as cerebrospinal fluid taps, synovial fluid aspiration, incision and drainage of abscesses; under supervision of credentialed physicians.
5. Attend all didactic seminars and recommended conferences:
 - a. Student seminars; two hour didactic sessions, twice a week (Mondays and Fridays), with a 15-20 minute presentation by student, followed by ID physician-led discussion of case

- vignettes (from selected ID categories, below)*. Six sessions during the 4-week rotation.
- b. Infection Prevention meeting, Antimicrobial Stewardship meeting or Case-management conference – at least once during the 4-week rotation.
- c. ID journal club – review of a contemporary ID article from a reputable national/international journal – once during the 4-week rotation.
- d. End of Rotation Antibiotic Quiz / Round Table Discussion.

Method of Evaluation:

1. The student will be evaluated by the ID attending physicians in areas of professionalism, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Patient Log will be reviewed by supervising attending physician;
3. Standard UIC evaluation form completed and submitted.
4. Additional evaluation forms for cross-cover notes and discharge summaries may be used for formative evaluation.

Required Reading/Educational Resources:

Students are expected to utilize appropriate on line sources, medical textbooks, and medical journals in researching and learning about the patients they see.

- General Syllabus/ Recommended Resources /Reference Material.
 - ID Textbooks such as Mandell's Principles and Practice of Infectious Diseases, 9th Edition (2019).
 - ID section of Internal Medicine Textbooks such as Harrison's Principles of Internal Medicine, 19th Edition, Part 8 (2015).
 - ID Review Articles from journals such as NEJM, Clinical Infectious Diseases, Lancet, JAMA and Annals of Internal Medicine.
- UpToDate, as a point of care reference.
- MEDLINE, PUBMED and GOOGLE SCHOLAR online literature search.
- IDSA Guidelines [idsociety.org]
- CDC website [cdc.gov]

Miscellaneous Information: Excused absences will follow College guidelines.

*Major disease/ID categories for student seminars.

1. Septic arthritis/Osteomyelitis
2. Soft tissue infections, diabetic foot infections and complications
3. Community-acquired and hospital-acquired pneumonia including ventilator-associated pneumonia
4. Community-acquired and health care associated urinary tract infections (UTI), including prostatitis.
5. Bacteremia, sepsis, septic shock and endocarditis
6. Infectious diarrhea and intra-abdominal infections
7. Meningitis-encephalitis, and other CNS infections
8. HIV disease and related opportunistic infections
9. Infections in non-HIV immunocompromised patients
10. Viral infections – HSV, influenza, mononucleosis etc.
11. Viral hepatitis
12. Surgical site infection and trauma associated infection
13. Sexually transmitted diseases: genital ulcer diseases, cervicitis, vaginitis, pelvic Inflammatory disease (PID)
14. Superficial and deep fungal infections
15. Tuberculosis and other mycobacterial diseases
16. Immunization and prophylaxis
17. Isolation patterns and infection prevention and control measures
18. Emergence and management of multidrug resistant organisms
19. Understanding of utility of different antimicrobial agents for various infections.

20. Antimicrobial stewardship
21. Fever of unknown origin
22. ENT infections – sinusitis, otitis media/externa, pharyngitis

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Med/Peds Ambulatory Care

Course Number: ELEC447

Program Directors: Todd Giese, MD

Departmental Contact Information: Susan Hollander (sueh@uic.edu); (815) 395-5610

Location: 781 McHenry Avenue, Crystal Lake, IL, 60014 (815) 459-2200

Length of Time: 4 weeks

Call: None

Available for Phase: Phase 2 and Phase 3

Narrative Description: This 4-week clinical elective in an ambulatory Med/Peds practice will focus on patient evaluation and treatment, development of an ongoing management plan, and practice management in a clinic setting.

Prerequisites: Successful completion of Medicine or Family Medicine and Pediatric Clerkships

Learning Objectives:

1. Become proficient in the exam of healthy infants, children and adults.
2. Understand developmental milestones of infants and children.
3. Learn the schedules for childhood and adult immunizations and be able to explain the rationale to patients and caregivers.
4. Develop and implement a management plan for common acute and chronic illnesses.
5. Understand the basic social, financial, and cultural challenges of geriatric patients.
6. Become familiar with the basics of practice management.

Learning Activities:

1. The student will keep a journal summarizing his/her daily activities, patient encounters, and personal observations and reflections.
2. The student will learn to perform a more focused history and physical exam directed to the patient's reason(s) for the clinic visit and develop a diagnosis and management plan. Once reviewed with the preceptor, the student will have responsibility for completing the visit and writing the chart note.
3. The student will spend time with the office manager, nursing, and support staff, becoming familiar with their responsibilities, phone triage, billing services, record keeping, and referral management. If possible, the student will attend a staff meeting, noting practice style, interaction of providers, and patient discussions. The student should write a paragraph reflecting his/her observations and review with the preceptor.
4. The student will become familiar with and may participate in any office-based procedures.
5. The student will research current evidence-based guidelines for patients with diseases/illnesses seen in the office (e.g. hypertension, lipid management, outpatient antibiotic usage) and discuss with the preceptor.
6. The student will do a short (30 minute) presentation on a clinical topic, in consultation with the preceptor, to the preceptor and staff.

Work Load:

Students are instructed to report to the clinic at 9 am the Monday of their first day on this elective. Students should expect to work full time (approximately 9am-5pm) Monday through Friday while the clinic is open. Students should expect to perform research and prepare for presentations outside of clinic hours, but may work on these activities during clinic if time allows. The expectation is the student will be engaged in educational activities for a minimum of 35 hours per week.

Method of Evaluation:

1. The faculty preceptor will evaluate the student's performance in the areas of professionalism, clinical knowledge, patient interaction, and level of interest, with additional input from other faculty providers, nurses, and support staff.
2. The student will receive regular feedback throughout the elective.
3. The student's journal will be reviewed by the faculty preceptor.
4. Standard UIC evaluation form will be completed and submitted at the end of the clerkship. Specific written faculty comments and observations are encouraged.

Required Reading: . Standard Medicine and Pediatric ambulatory texts. Up-to date, DynaMed.

Additional Resources:

Clinical Practice Guidelines <https://nccih.nih.gov/health/providers/clinicalpractice.htm>
<https://www.cochranelibrary.com/cdsr/reviews>
<https://www.cdc.gov/mmwr/index.html>

Miscellaneous Information:

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Nephrology

Phase 2 Course Number: ELEC388

Phase 3 Course Number: ELEC621

Program Directors: Krishna Sankaran, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Rockford Nephrology Associates (& area hospitals)

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: The elective will involve the evaluation and treatment of problems in the scope of nephrology. Evaluation will include history taking and chart review specifically as it relates to the renal problem in question (general history and physical will also be important). Assessment of the problem will include a discussion of renal physiology and mechanism of the disease process. Finally, physiologic principles will be discussed with respect to interventions/treatment. Discussions will be patient based and didactic to include acute kidney injury, chronic kidney disease, dialysis, fluid and electrolyte disorders, glomerulonephritis, hypertension as possible. The student is welcome to invite topics of discussion/lecture in Nephrology. This is a working rotation where most of the teaching will be on rounds and in discussion of cases. Students will be involved in seeing patients as new consults and as follow up, writing computer notes after discussing cases, management issues and discussion of the nephrology aspects of diagnosis and treatment with the nephrology team. Finalized notes with a discussed plan will then be done by the student. The attending will co-sign these with an addendum and put in any relevant orders. As time allows additional nephrology lectures can be done by the attending, and students are welcome to request topics to cover.

Prerequisites: Completion of Phase 2 Medicine clerkship

Learning Objectives: The objective of the nephrology rotation is to learn renal physiology, pathophysiology and treatment principles in the setting of patient care. In evaluating discussing and taking care of patients with acute kidney injury, fluid/electrolyte disorders and chronic kidney disease (including ESRD), the student will strive to integrate physiology and pathophysiology in decision making and interventions in renal disorders.

Learning Activities: Students will be expected to be on rotation from 8:00 a.m. to 5:00 p.m. Monday through Thursday and until 3:00 p.m. on Friday (the same schedule as the attending). The student will work with a nephrology attending for one week at a time with an opportunity to work with 4 attendings (with some variance in style and approach to teaching and patient care). The student can find out their attending for the week by calling the Mercyhealth Answering Service at 815-971-5000 and finding out who is assigned for their hospital for that week. The student will then meet with their attending at 8:00 a.m. on Monday of each week to discuss the plan/schedule for the week.

Method of Evaluation: Each attending will complete the UIC evaluation form for the assessment of skills, character, reliability and knowledge. Dr. Sankaran will complete composite grades for the rotation. Feedback will be given throughout and at the end of the rotation, with standard UIC evaluation completed and submitted.

Required Reading: None

Additional Resources: There are no specific instructional materials required by the nephrology rotation. Your own text in renal physiology and pathology will be a good base to review for the rotation. Sections on the following topics in any medicine text are suggested and students are encouraged to

review the Nephrology section and questions in IM Essentials: Acute Kidney Injury, Chronic Kidney Disease, Hyponatremia, Hypernatremia, Hyperkalemia, Proteinuria/ Glomerulonephritis, and Edema/Diuretics, which are our most common reasons for consultation. Topics related to dialysis will not be expected reading but discussed by the attending.

Miscellaneous Information: Students are also encouraged to comment on their experience, constructive criticism or any problems with the rotation or their attendings directly to Dr.Sankaran via email (ksankaran@rockfordnephrology.org).

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Neurology

Course Number: ELEC635

Program Directors: Gary Rifkin, MD and Mitchell King, MD

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); (815) 395-5952

Location: Various

Length of Time: 4 weeks

Call: No

Available for Phase: Phase 2

Narrative Description: The objective of this program is to give the student clinical experience in neurology.

Prerequisites: Successful completion of Phase 1.

Learning Objectives:

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

1. Perform an accurate and appropriate neurologic examination;
2. Identify and describe the significance of key neurologic findings on examination;
3. Describe the pathophysiology, clinical course, and management of patients with common neurologic conditions and key neurologic emergencies;
4. Distinguish normal and abnormal CT and MRI scans of the brain;
5. Communicate effectively about neurologic patients—in order to summarize a case to consult a neurologist or sign out to a colleague and counsel caregivers about patients with neurologic terminal illness.

Learning Activities: The student will participate in the care of neurology patients on neurology inpatient service, consult service or outpatient clinics. Students will have the responsibility of taking the history, doing the neurological examination, and participating in the plan for care along with the resident and the attending.

Method of Evaluation: Evaluation by the resident and faculty who supervised the student.

Required Reading: Readings may be assigned by preceptors.

Additional Resources: Additional resources found on Blackboard.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Nutrition

Phase 3 Course Number: ELEC865

Program Directors: Barbara Osborn, MS, RD, LDN, CDE

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: OSF Saint Anthony Medical Center

Length of Time: 2 Weeks (Rotation only available after Labor Day – May 1st.)

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: Student will spend time with the Clinical Dietitian, attending multidisciplinary rounds, visiting, assessing and instructing patients. During the rotation the student will also spend a few hours in the following services – Wound care, GI lab for PEG placement, Cardiac Rehab education, Diabetes Education, Bariatric lap band, Pharmacy for TPN prep, and Speech Pathology for video swallow. This helps the student understand the importance of good nutrition in many disease states.

Prerequisites: None

Learning Objectives:

1. Discuss markers to determine nutrition status:
 - understand nutrition risk screening and nutritional status assessment
 - identify markers for malnutrition diagnosis (ICD-10 codes)
2. Determine energy, protein and fluid requirements for selected patients and evaluate best method to meet those needs;
3. Understand the different routes of administration of both enteral and parenteral nutrition and what route is indicated for specific patient problems/diagnosis;
4. Select appropriate parenteral and enteral products based on patients calculated needs and disease state;
5. Discuss Best Practice/Evidence Based Practice nutrition strategies and therapies for common diagnosis; and
6. Identify common hospital diet orders and application of each.

References: Krause's Food Nutrition and Diet Therapy, ASPEN Core Curriculum

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted. Oral exam/dialogue, attitude and participation.

Required Reading:

Patient Education Materials, Krause's Food Nutrition and Diet Therapy, Journal Articles & ASPEN Core Curriculum

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Orthollinois Outpatient Musculoskeletal Elective

Course Number: ELEC457

Program Directors: Richard Olson, MD

Departmental Contact Information: Stacy Welitschinsky, GME Coordinator, 779-774-1270

Location: Orthollinois, 5875 East Riverside Blvd., Rockford, Illinois, 61114

Length of Time: 2 weeks

Call: None

Available for Phase: Phase 2 and Phase 3

Narrative Description:

This 2-week elective is designed for students that are planning a career in adult primary care (Family Practice or Internal Medicine).

The elective will improve the student's understanding of:

1. Diagnostic approach to common musculoskeletal problems.
2. Musculoskeletal physical exam as performed in specialty clinics
3. Management of common conditions in Rheumatology, Podiatry, and Physiatry
4. Optimal use of referrals to Rheumatology, Podiatry, and Physiatry

Pre-Requisites: Completion of Medicine OR Family Medicine Phase 2 clerkship

Learning Objectives:

Evaluation and management of:

1. Osteoarthritis;
2. Rheumatoid arthritis and other forms of inflammatory polyarthritis;
3. Osteoporosis;
4. Gout;
5. Fibromyalgia;
6. Common foot conditions: including bunions, hammer toes, plantar fasciitis, metatarsal stress fractures, and other foot injuries;
7. Musculoskeletal injuries seen in a walk-in clinic;
8. Neck and lower back pain and associated radiculopathies.

Learning Activities:

Teaching will occur during normal outpatient clinics. None of the clinics are specialized to evaluate or manage one particular illness, but instead serve patients with a wide variety of common musculoskeletal problems- many of which have been referred by primary care providers. Students will frequently shadow the attending physician, but when possible students will perform an independent assessment of patients.

- Bone Density (DEXA) interpretation
- Laboratory test interpretation in rheumatic disease

- Musculoskeletal imaging: X-ray, MRI
- Ultrasound guided therapeutic injections
- Use of electrodiagnostic testing: EMG-NCV
- Procedures for management of spine pain, including epidural injections

Example 2 week rotation (Schedule to be modified as needed for each rotation.)

Rheumatology: Olson, Jasek, Tariq 8 sessions
Physiatry: Enke, Ahmad 4 sessions
Podiatry: John, Residents 4 sessions
Ambulatory Care: Borchardt 4 sessions

DAY	Morning	Afternoon
Monday	Rheumatology- Olson	Rheumatology- Olson
Tuesday	Physiatry- Ahmad/Enke	Physiatry- Ahmad/Enke
Wednesday	Rheumatology- Jasek	Rheumatology- Tariq
Thursday	Physiatry- Ahmad/Enke	Physiatry- Ahmad/Enke
Friday	Podiatry- John (Roxbury)	Podiatry-John (Roxbury)
Saturday		
Sunday		
Monday	Rheumatology- Olson	Rheumatology-Olson
Tuesday	Podiatry- John	Podiatry-John
Wednesday	Rheumatology- Jasek	Rheumatology- Tariq
Thursday	Ambulatory Care- Borchardt	Ambulatory Care- Borchardt
Friday	Ambulatory Care- Borchardt	Ambulatory Care- Borchardt

Method of Evaluation:

1. The faculty preceptors will evaluate the student’s performance in the areas of professionalism, clinical knowledge, patient interaction, and level of interest.
2. The student will receive regular feedback throughout the elective.
3. Standard UIC evaluation form will be completed and submitted at the end of the clerkship. Specific written faculty comments and observations are encouraged.

Required Reading: Selected core reading materials (review articles and key studies) will be discussed with attending physicians. The intent of this 2-week experience is not to perform a comprehensive textbook review of musculoskeletal medicine, but to provide hands-on experience and lay the groundwork for approaching diverse MSK problems during continued training and medical practice.

Additional Resources: None

Miscellaneous Information: Excused absences will follow College guidelines.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Palliative Medicine

Phase 2 Course Number: ELEC390

Phase 3 Course Number: ELEC294

Program Directors: Moshin Khan,MD, Juliette Kalweit, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Dr. Khan, Mercyhealth, Dr. Kalweit, SwedishAmerican Hospital

Length of Time: 2 or 4 Weeks (based on preceptor)

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description:

1. Seeing patients with physician in the hospital for consultation services;
2. Half day per week supportive oncology clinic, if possible;
3. Half day per week hospice or pal care IDT; and
4. Shadow physician, nurse practitioner, hospice nurse, hospital social worker, hospice chaplain and palliative care pharmacist to understand team roles and responsibilities

Prerequisites: Completion of Phase 2 Medicine or Family Medicine clerkship

Learning Objectives:

1. Understanding the differences between Medicare hospice benefit and palliative care services;
2. Evaluation, assessment and management of pain and other symptoms in patients with advanced illness/diseases;
3. Communicating and breaking bad news with patients and their families;
4. Review SPIKES & ADAPT protocols; and
5. To understand the basic social, financial and cultural challenges faced by palliative care and hospice physicians; and understand the importance of advance directives, etc.

Learning Activities:

1. By completion of rotation, the student will be able to learn how to care appropriately for the patients with advanced illness diseases;
2. The student will be able to assess and evaluate different symptoms in terminally ill patients;
3. The student will have a better understanding of the pharmacological options and their implications while managing at this difficult phase of the patient's life; and
4. In addition, the student will understand the different ways to communicate and deliver bad news to patients and their families.

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: Being Mortal, Atul Gawande.

Additional Resources:

Access to CAPC (Center for Advance Palliative Care) online modules. Miscellaneous articles and video assignments, including Extremis.

Miscellaneous Information: Note - No Hospice at SwedishAmerican.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Pulmonary ICU

Phase 3 Course Number: ELEC245

Program Directors: Zaher Qassem,MD, Abdullah Altayeh, MD, Bharti Roy, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Mercyhealth

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 3 ONLY

Narrative Description: Exposure and obtaining experience in both ICU and pulmonary medicine/patients

Prerequisites: Completion of ALL Phase 2 clerkships

Learning Objectives:

1. Diagnosis of the severely ill patient;
2. Management of ventilator;
3. Management of shock/sepsis;
4. Use of antibiotics/pressor agents;
5. Understanding electrolyte disorders;
6. Role of ICU nurse; and
7. Getting critical care experience in the pulmonary inpatient and outpatient setting.

Learning Activities: Students will see 2-4 patients per day, with a maximum of 5 patients per day. Students will diagnosis and care for the severely ill patient with multisystem disease in the following settings: ICU inpatient; consults on the floor and outpatient setting. Students will become familiar with the following procedures: bronchoscopy, thoracentesis, central/arterial lines and chest tubes.

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted, including knowledge and participation/attendance.

Required Reading: Textbooks: ICU book by Paul Marino ISBN: 078174802X 9780781748025 / up-to-date/ovid --->CCM Journal/chest journal.

Additional Resources: None

Miscellaneous Information: Monday – Friday 8:00 a.m. – 5:00 p.m. & some weekends, based on preceptor schedule.

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Pulmonary ICU - Medicine Sub-Internship

Phase 3 Course Number: ELEC443

Program Directors: Dr. Tabassum Nafsi

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: SwedishAmerican Hospital ICU and Pulmonary clinics

Length of Time: 4 weeks

Call: Saturday or Sunday rotation every week. No overnight calls

Available for Phase: Phase 3

Narrative Description: The overarching goal of this Sub-I is for the student to develop the appropriate skills to be ready for the transition to residency. As such, he/she will work directly with the attending physicians in the Medicine ICU on a daily basis, learning the skills and responsibilities of a resident physician and may follow up patients in the clinic.

Prerequisites: Completion of all Phase 2 required clerkships

Learning Objectives and Activities:

I. Time management skills

1. Organize a daily patient care task list for each patient in a structured and systematic way so that required tasks (e.g., daily notes, orders, etc.) are not overlooked.
2. Prioritize daily patient care task list according to degree of importance/urgency.
3. Prioritize patients' clinical problems according to degree of clinical importance/urgency.
4. Recognize one's own limitations and call on other team members to help.

II. Communicating effectively within healthcare teams

1. Write accurate, concise, and well-organized transfer/accept notes, discharge summaries, and cross-cover notes
2. Provide an oral presentation of a clinical encounter, tailoring length and content according to context
3. Give and receive patient handoffs (both in writing and verbally) to transition care responsibility
4. Speak with specialist/subspecialist colleagues to request consultation
5. Communicate collaboratively with nursing and pharmacy staff to enhance patient care
6. Communicate effectively with team case manager, social worker, and outpatient care providers to facilitate discharge planning

III. Patient evaluation skills—recognizing sick vs. non-sick patients

1. Gather appropriate clinical data from all appropriate sources (e.g., patient, family, nurse, medical records) in hypothesis-driven fashion to address the main clinical problems (Reporter function of RIME)
2. Analyze and synthesize the collected clinical data set to formulate a prioritized differential diagnosis for the main undifferentiated problems (Interpreter function of RIME)
3. Recognize which clinical situations require additional assistance from upper level resident, faculty attending, and/or specialty consultants
4. Develop initial diagnostic and/or therapeutic management plans for the main clinical problems (Manager function of RIME)
5. Prioritize problem list according to degree of clinical importance (Interpreter function of RIME).

IV. Knowing when to ask for assistance

1. Recognize various techniques that can enhance and develop metacognitive skills
2. Generate clinical questions and retrieve evidence to advance patient care
3. Identify clinical and contextual situations that require assistance from clinical supervisors
4. Utilize a communication framework when calling for clinical support

V. Medical student wellness

1. Utilize a validated tool to assess one's personal risk of burnout
2. Recall multiple evidence-based interventions that may aid in wellness
3. Reflect on identified "at-risk" domains and experiment with suggested interventions to improve wellness
4. Incorporate helpful techniques into daily practice by creating a behavior change plan (BCP)

Daily Responsibilities:

1. Performing a full history and physical, formulating a differential diagnosis, and developing preliminary evaluation and treatment plans for all patients assigned to him/her, with review by the attending.
2. Bedside presentation of his/her patients and written daily notes and orders. He/she may call for consults consistent with hospital policy.
3. Review of daily orders with the attending
4. Night call not currently scheduled
5. Communicating with his/her patients, their families, nurses, ancillary staff and other providers about the day-to day needs and action plans as reviewed with the attending.
6. Beginning discharge planning, discussing with discharge planners, and assisting in the process of obtaining the resources and referrals needed for a safe discharge.
7. Generating a discharge summary for his/her patients which will be reviewed and signed by the responsible attending.
8. Contacting the PCP at discharge re: follow-up plans if requested by the attending.
9. Participate fully in family meetings, end of life and code discussions, and emergent bedside management of his/her patients.
10. Perform pulmonary consultations and assessments at the discretion and under the guidance of the attending.
11. Participate in all educational; sessions scheduled during the sub-I.
12. Keep a log of patients seen and lessons learned from the patients in Benware.

Specific Pulmonary Responsibilities:

1. Performing a focused pulmonary evaluation including full history and physical exam, obtaining relevant past, family, social, and occupational history that may be pertinent to the pulmonary illness, formulation of a differential diagnosis, and developing preliminary evaluation and treatment plans for all patients assigned to the student, with review by the attending.
2. Learn the management of respiratory failure, sepsis, shock, renal failure and other common critical care presentations.
3. Learn to interpret CXR and ABG.
4. Participate in bedside procedures as supervised by the pulmonary attending.

Method of Evaluation:

1. The student will be evaluated by the attending physicians in areas of professionalism, history taking and physical examination skills, differential diagnosis skills, management planning skills, oral and written communication skills, and interpersonal collaboration.
2. Patient Log will be reviewed by supervising attending;
3. Standard UIC evaluation form completed and submitted.
4. Additional evaluation forms for cross-cover notes and discharge summaries may be used for formative evaluation

Required Reading:

Students are expected to utilize appropriate sources such as UpToDate, DynaMed, medical textbooks, and medical journals in researching and learning about the patients they see.

Miscellaneous Information:

Excused absences will follow College guidelines.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Radiology

Phase 2 Course Number: ELEC387

Phase 3 Course Number: ELEC670

Program Directors: Anil Rao, MD; Robert Murray, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Dr. Rao, Mercyhealth; Dr. Murray, OSF Saint Anthony Hospital

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: The purpose of this elective is to familiarize the student with the scope of diagnostic and interventional radiology, including: The consulting role radiologists provide to primary care and specialty providers, an overview of the imaging appearance of common abnormalities, risks/benefits and cost effectiveness of radiologic examinations, and guidelines for ordering common studies. Students on the 4-week elective will rotate for 2 weeks each through 2 different areas of radiology including both general and interventional radiology. Those on the 2-week elective may choose either area of radiology but also may have an introduction to other areas.

Prerequisites: None

Learning Objectives:

1. Students should know the basic principles of radiation physics, including image production, radiation protection, types, and purposes of contrast material.
2. Students should know the basic principles of ultrasound, computed tomography, nuclear medicine, Magnetic Resonance Imaging and special procedures.
3. Students should be able to order radiologic examinations appropriately and judiciously.
4. Students should be able to distinguish normal from abnormal findings on plain radiographic examinations of the chest, abdomen, skeleton and head.
5. Students should be able to use radiographic findings to narrow differential diagnoses or to develop a tentative diagnosis.
6. Students should be able to interpret a radiologist's report.
7. Students should understand the role of the radiologist on the health care team and the relationship to other clinical disciplines.
8. Students should appreciate the radiologist's need for adequate clinical history and a clear statement of the indications for the examination being requested.

Learning Activities may include any of the following:

Imaging

1. **General Radiology:** While on the general radiology 2-week portion of the elective, students will be exposed to a variety of procedures including but not limited to CT, MRI, GI/GU, ultrasound, pediatric studies, fluoroscopic examinations, musculoskeletal examinations, radiographs, as well as nuclear medicine. If there is a particular interest, a student may also request to spend a day or two at the women's imaging center. Students should report to the reading rooms by 8:00 a.m.
2. **Interventional Radiology:** During the interventional radiology two-week portion of the elective, the student will be exposed to a wide array of imaging guided procedures including biopsies, drainages, vascular interventions, injections, paracentesis, thoracentesis, and many other additional procedures.
3. **Interactive Workstation:** This workstation has access to ~300 cases common to general diagnostic and reflective of basic pathology you will experience during your intern year/residency. The purpose of this workstation is to give the students an opportunity to simulate the real-life everyday experience of being a radiologist, changing the student role from observational to

interactive. There is no requirement for total number of cases completed; however, students are encouraged to try to complete all cases.

Case Presentations

1. Each student will be expected to show one case over the elective.
2. At the conclusion of the elective, each student will select their cases for inclusion in the radiology teaching file.

Method of Evaluation: Grades will be based on attendance and participation and case presentations. Direct faculty evaluation of performance and standard UIC evaluation form will be completed and submitted.

Required Reading Dependent on Site: Mercyhealth: Suggested reading(s) will be provided; Felson's Principles of Chest Roentgenology. OSF Saint Anthony Hospital: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: Attendance Requirements: Students are expected to fully participate in the radiology elective during their rotation.

Student Conduct/Professional Expectations:

1. Students are expected to conduct themselves in a professional manner while on service.
2. Arriving to conferences and the reading rooms on time is expected.
3. Do not discuss patient care issues in public places such as elevators or hallways.
4. A white coat and name badge must be worn on service. Students rotating through the interventional service should wear scrubs and a white coat.

The goal of this elective is for a student to gain a basic appreciation for the field of radiology along with its various subspecialties. In particular, the student will develop an understanding of the role that radiology plays in patient care especially as it pertains to making clinical diagnoses. All future physicians will need a working knowledge of medical imaging algorithms ("what test to order"), an understanding of cost-effective and safe ordering practices, and preliminary training in basic image interpretation to help manage their own patients.

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DEPARTMENT OF MEDICINE AND MEDICAL SPECIALTIES

Rheumatology

Phase 3 Course Number: ELEC626

Program Directors: Juliane Bolek-Berquist, MD

Departmental Contact Information: Department of Medicine, UIC-Rockford, Telephone: (815) 395-5610

Location: Mercy Clinic-East, Janesville, WI

Length of Time: 2 Weeks (Available November 1 – March 31)

Call: No

Available for Phase: Phase 3

Narrative Description: Students will work with Dr. Berquist at the Rheumatology Clinic and accompany doctor to the hospital to see inpatient consults.

Prerequisites: Completion of all Phase 2 Core Clerkships

Learning Objectives:

1. Learn the spectrum of rheumatic diseases;
2. Obtain comfort with the musculoskeletal exam;
3. Observe/perform common rheumatology procedures; and
4. Gain knowledge regarding common rheumatologic medications.

Learning Activities:

1. Obtain basic history/physical;
2. Observe/perform procedures;
3. Readings assigned nightly; and
4. Lunchtime mini-lectures.

Method of Evaluation: Direct faculty evaluation of performance and standard UIC evaluation form completed and submitted.

Required Reading: Brigham & Women's Experts Approach to Rheumatology (provided by instructor).

Additional Resources: None

Miscellaneous Information: M, T, W & Friday 8:00 a.m. – 5:00 p.m.

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NATIONAL CENTER FOR RURAL HEALTH PROFESSIONS

Rural Medicine Preceptorship in Family Medicine A & B

Course Number: ELEC454 (A) and ELEC455 (B)

Program Directors: Dr. Michael Glasser, Dr. Hana Hinkle, or The Rural Medicine Program Director

Departmental Contact Information: Dr. Michael Glasser, michaelg@uic.edu

Location: UIC College of Medicine Rockford sites across Illinois

Length of Time: 2-16 weeks per section. Section A must be immediately followed by Section B. May not exceed 16 weeks total. Must meet 16 weeks total. Must be taken concurrently with RMED Community Oriented Primary Care Research course (ELEC456).

Call: No

Available for Phase: Phase 3

Narrative Description: A 2- to 16-week rotation to allow a student to have an extended experience providing ambulatory and hospital care in a more rural setting offering the student an improved understanding of clinical medicine and decision making in the rural setting, rural health care systems/rural practice patterns, the nature of rural people and rural communities, the process of how all of the above comes together in defining and solving rural health care problems (community-oriented primary care). While chiefly an office-based ambulatory experience, preceptors may occasionally allow students to participate in care in the local hospital while under direct supervision. At no time will the student provide any patient care or entries to the medical record without their preceptor being directly present

Prerequisites: Completion of Phase 2

Learning Objectives:

1. By the conclusion of the preceptorship, the student will have an understanding of the following as they apply to the rural setting:
 - a. common undifferentiated medical problems, common acute medical problems and common chronic medical problems--their presentation and manifestation
 - b. health maintenance and disease prevention
 - c. patient education
 - d. tests and treatments (taking into account access and cost-effective decision making)
 - e. consultations and referrals
2. Through a series of exercises and resource studies, the student will gain an appreciation of the overall rural community structure and function. The ability to assess and understand the context in which a physician will be functioning is critical to successful and effective patient care.
 - a. The student will have an understanding of the local health care system from the micro level (preceptor's office) to the macro level (community systems for health care).
 - b. The student will have an understanding of the larger social/political/economic community in which health care is delivered.

Learning Activities:

1. Students participate in a 16-week rural Illinois preceptorship. RMED students receive assistance and support from collaborating rural hospitals, rural family physicians, county cooperative extension and health department staffs, among others.
2. The preceptorship experience consists of participation in clinical responsibilities as instructed by the preceptor site to occur on at least 7 half day blocks/week.
3. The RMED student works with a primary preceptor (rural family physician) at least 5 half day blocks/week and may work with other health care providers 2 half day blocks/week.
4. The collaborating hospital site coordinator and primary preceptor introduce the RMED student to key community leaders and social service and health care professionals to facilitate the community structure and COPC projects.
5. RMED students participate in the NRMP Match process. The RMED office maintains a file on family practice residency programs with rural training tracks or experiences in the Midwest. RMED faculty provide residency counseling. Students are encouraged to select a family practice residency program in Illinois or one of the surrounding states.

Method of Evaluation: The 16-week Rural Family Medicine Preceptorship (RMED IV) is a senior required clerkship for RMED students which is described and recorded on the College and site transcripts. Student appraisal is based on the successful completion of each preceptorship component; i.e., 60% clinical, 40% community structure project. Each component of the preceptorship will receive a grade of Outstanding, Advanced, Proficient, Needs Remediation or Incomplete.

1. The clinical performance is evaluated by the primary preceptor and the hospital site coordinator. In addition, the student evaluates the support and curricular materials, the preceptors, the hospital, and him/herself pre- and post-clerkship.
2. The Computerized Logbook provides a data set which facilitates monitoring and evaluation of the student's patient encounter experience

Student Conduct/Professional Expectations:

1. Students are expected to conduct themselves in a professional manner while in the rural community.
2. Arriving to clinical sites and curricular events on time and prepared to engage.
3. Students may be required to make alternative arrangements for pets or other responsibilities that may not be allowed to travel with them to their preceptor site.
4. Students should be careful not to discuss patient care issues in public spaces inside and out of the clinical site.
5. A white coat and name badge must be worn on service.

Required Reading: None

Additional Resources: None

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Rural Medicine Community Oriented Primary Care Research

Course Number: ELEC456

Program Directors: Dr. Michael Glasser, Dr. Hana Hinkle, or Rural Medicine Director

Departmental Contact Information: Rural Medicine Director

Location: UIC College of Medicine Rockford sites across Illinois

Length of Time: 2 credit hours. Must be taken concurrently with Rural Medicine Preceptorship in Family Medicine A or B. May only be taken one time.

Call: None

Available for Phase: Phase 3

Narrative Description: The Community Oriented Primary Care (COPC) research project requires the Rural Medicine student to formulate a question, plan how to answer the question, and analyze their findings as it applies to a specific rural cohort. This course builds on the longitudinal curriculum RMED students receive in Phases 1 and 2. In Phase 1 students learn about the relationships between medical practice and the health of rural community and in Phase 2 where they learn the foundational knowledge and skills of community oriented primary care model in order to conduct the community project during their 16-week immersion. This research course culminates in the presentation of the COPC project at Research Day or its equivalent experience.

Prerequisites: Completion of Phase 2 curriculum and enrollment in Rural Medicine Preceptorship in Family Medicine A or B.

Learning Objectives: By the conclusion of the preceptorship, the student will complete a COPC project which will assess a health care need in the community and provide further understanding of the problem and/or work on an intervention.

1. Demonstrate effort planning the overall question as it pertains to the rural community in which the student is doing their 16-week Family Medicine Immersion.
2. Discuss their findings with an open forum prior to graduation.
3. Present their project findings in poster format prior to graduation.

Learning Activities: During the course of the student's 16-week Family Medicine Preceptorship, the student will conduct their COPC project. They may use up to 3 half-day blocks/week during this time to accomplish this. Students must satisfactorily complete the community structure and COPC projects by the end of the preceptorship, having met intermediate assignment goals and deadlines. The student must create a poster of their COPC project to be presented at Research Day – Rockford, IL.

Method of Evaluation: The 16-week Rural Family Medicine Preceptorship (RMED IV) is a senior required clerkship for RMED students which is described and recorded on the College and site transcripts. During this preceptorship the student must complete their COPC project. The criteria for evaluation of the COPC project includes: planning effort, implementation, quality of final report and poster presentation, and student evaluation of the project.

Required Reading: None.

Additional Resources: None.

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DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

OB/GYN - Crusader

Phase 3 Course Number: ELEC848

Program Directors: Antoun Al Khabbaz, MD

Departmental Contact Information: Peggy Davenport; Telephone: (815) 490-1616

Location: Crusader Clinic

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 3 ONLY

Narrative Description: The M4 student will have the opportunity to improve on clinical and surgical skills in the field of Obstetrics and Gynecology

Pre-Requisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives: Learn general Obstetrics and Gynecology, in both ambulatory and inpatient settings

Learning Activities:

1. See obstetrical and gynecological patients in the clinic.
2. Round with attending physician on postsurgical patients.
3. Assist on C-sections and gynecological surgeries.

Method of Evaluation: Written evaluation based on direct observation.

Required Reading: To be assigned during the rotation.

Additional Resources: Other providers at Crusader Clinic.

Miscellaneous Information: No night call is required.

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DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Surgical OB/GYN

Phase 3 Course Number: ELEC854

Program Directors: Amanda Bush, MD

Departmental Contact Information: Jodi Pirrello (jlpirre2@uic.edu); Patricia Grimm (pgrimm@uic.edu)

Location: SwedishAmerican Hospital

Length of Time: 2-4 weeks

Call: Minimal night call is required.

Available for Phase: Phase 3

Narrative Description: The student will spend each working day with me making rounds in the hospital, scrubbing for surgery and seeing patients in the office. Teaching will be on a one-to-one basis with each individual student.

Pre-Requisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives:

1. Observe office gynecology private practice.
2. Gain clinical working concept in care of GYN patients both ambulatory and inpatient
3. Learn rudiments of pelvic exam. "Hands on" examination of anesthetized patient, occasionally office patient.
4. Increase knowledge of OB/GYN pathology, surgical and microscopic.
5. Attend GYN surgery.
6. Since I do not take OB call, the major emphasis will be gynecology and infertility. OB call experience should be arranged through the medical school.

Learning Activities:

Method of Evaluation: Direct observation of student. Tests administered during the rotation.

Required Reading:

Additional Resources:

Miscellaneous Information:

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DEPARTMENT OF PATHOLOGY

Pathology – Forensic

Phase 2 Course Number: ELEC410

Phase 3 Course Number: ELEC835

Program Directors: Mark Peters, MD

Departmental Contact Information: Dr. Mark Peters (mapeters476@gmail.com)

Location: Varies

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description:

Prerequisites: None

Learning Objectives:

The student will:

1. Become familiar with the death investigation activities of the coroner's office;
2. Learn what constitutes a "coroner's case";
3. Assist in the performance of medical legal autopsies and understand the importance of special procedures that are not part of the usual hospital autopsy;
4. Participate in the interpretation of toxicological data; and
5. Observe courtroom procedure regarding medical testimony.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance

Required Reading:

Reading assignments relevant to current cases or current issues in forensic pathology can be made from any suitable textbook of forensic pathology or medical journals found in the College of Medicine library.

Additional Resources: None

Miscellaneous Information:

The student will be required to travel out of town (transportation provided from my office and back or arranged by student) to various county seats including Rockford, Dixon, Woodstock, Sycamore, Oregon, Sterling, Belvidere and Freeport for autopsies and court.

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DEPARTMENT OF PEDIATRICS

Ambulatory Pediatrics

Phase 3 Course Number: ELEC784

Program Directors: Errol C. Baptist, MD; Jillian Kaskavage, MD

Departmental Contact Information: Jodi Pirrello (jlpirre2@uic.edu); Patricia Grimm (pgrimm@uic.edu)

Location: Pediatric Office; St. Anthony Medical Center; Mercyhealth Hospital; SwedishAmerican Hospital

Length of Time: 2 weeks

Call: Flexible and one weekend on-call

Available for Phase: Phase 3 only

Narrative Description: This is a two-week clinical elective. The student will be exposed to a variety of healthy and ill patients, in both inpatient and ambulatory settings. A comprehensive collection of journal articles will be given during this rotation for the student to summarize and discuss. Students are expected to evaluate all admitted patients, to do histories and physicals, write progress notes, and discuss all case histories with the attending. In ambulatory cases, progress notes are required on selected patients.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives: The student will:

1. Be proficient in examining healthy infants and children, with a focus on good basic clinical skills.
2. Gain knowledge in basic and advanced pediatric problems.
3. Understand developmental milestones in infants and children.
4. Discuss immunization issues.
5. Understand fluid balance and therapy.
6. Rationalize antibiotic usage.
7. Understand blood gas interpretation.

Learning Activities:

Method of Evaluation: Direct observation of student. Tests administered during the rotation

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF PEDIATRICS

Pediatric Cardiology

Phase 3 Course Number: ELEC739

Program Directors: Thomas Shula, M.D.

Departmental Contact Information: Peggy Piske (peggy.a.piske@osfhealthcare.org); Telephone: (815) 227-5600

Location: OSF

Length of Time: 2 to 4 weeks

Call:

Available for Phase: Phase 3

Narrative Description: The course will attempt to provide basic and for the proper student (with interest in a career in Pediatrics or Family Medicine especially) more advanced understanding of congenital heart disease and acquired heart disease in infants, children, adolescents, and adults.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives:

1. The student will acquire a basic understanding of the cardiac physical examination as it applies to children, adolescents, and adults.
2. The student will acquire an understanding of the basic diagnoses associated with pediatric cardiology such as murmurs, chest pain, palpitations, lightheadedness, and syncope.

Learning Activities: Observation of patient encounters and testing such as echocardiogram, electrocardiograms and stress tests followed by discussions and instruction concerning the principles involved.

Method of Evaluation: Program director's qualitative assessment.

Required Reading: A basic text in Pediatric Cardiology is provided for use during the course along with applicable journal articles.

Additional Resources: None

Miscellaneous Information: Students with all possible career objectives are welcomed as over the past 12 years we have had almost every choice of residency represented in students selecting this elective.

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DEPARTMENT OF PEDIATRICS

Pediatric Forensics (Medical Evaluation Response Initiative Team or MERIT)

Phase 3 Course Number: ELEC237

Program Directors: Ray Davis, MD (Participating Faculty: Shannon Krueger NP)

Departmental Contact Information: Shannon Krueger (815) 971-2726

Location: 2300 North Rockton Avenue, Rockford, Illinois, Telephone: (815) 971-5000 (After Hours)

Length of Time: 2 to 4 weeks

Call:

Available for Phase: Phase 3 ONLY

Narrative Description: Review male and female genital anatomy, including normal variants and positive findings in a child who is suspected of being sexually abused, comprehensive history taking with regards to injury presentation, introduction to role of the medical provider in a multidisciplinary forensic investigation, introduction to abusive head trauma, skull fractures, fractures from falls, bruising pathology, injuries in non-accidental trauma.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives: At the conclusion of this elective, the student will be able to:

1. Define and identify normal genital anatomical variants.
2. Define positive findings in a child who has been sexually abused.
3. Discuss the role of the medical provider in forensic investigation.
4. Explain when and how to refer a child for investigation when the child is suspected of being abused.
5. Explain abusive head trauma and how it presents.
6. Differentiate causative pathology for bruises, fractures, cuts and welts in child victims of abuse.
7. Discuss dynamics of non-accidental trauma.

Learning Activities: Discussion (2-4 hours); case studies (2-4 hours), online training for mandated reporting (1 hour).

Method of Evaluation: Online exam.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: Handouts, PowerPoints, photos & online activity.

Miscellaneous Information: None

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DEPARTMENT OF PEDIATRICS

Pediatric Gastroenterology

Phase 2 Course Number: ELEC416

Phase 3 Course Number: ELEC732

Program Directors: David Deutsch, MD; Glendon Burrell, MD; Eugene Vortia, MD; Katrina Nguyen, MD; Fateema Rose, MD

Departmental Contact Information: Jodi Pirrello (jpirre2@uic.edu); Patricia Grimm (pgrimm@uic.edu)

Location: Mercyhealth System, Javon Bea Riverside Hospital

Length of Time: 2 to 4 weeks

Call: No

Available for Phase: Phase 2 AND Phase 3

Narrative Description: The pediatric gastroenterology clerkship is a 2-4 week exposure to the various clinical problems encountered in pediatric gastroenterology. Students will spend approximately 40 hours per week in inpatient and outpatient settings. Student responsibilities include the complete evaluation of the patient, accurate presentation of the case including differential diagnoses, and participation in management plans and follow up. In addition, their ability to perform the above duties in a timely, yet efficient, manner will be evaluated.

Prerequisites: Successful completion of the Phase 2 Pediatrics clerkship.

Learning Objectives:

1. Acquisition of specialized skills necessary in the practice of pediatric gastroenterology including history-taking, physical exam, detailed differential diagnosis, and management of common GI problems.
2. Exposure to nutritional support of the pediatric patient including enteral and parental nutrition, and tube feedings.
3. Exposure to diagnostic and therapeutic skills in gastroenterology, including esophagogastroduodenoscopy, colonoscopy, and other procedures.
4. Exposure to gastrointestinal radiology and pathology.

Learning Activities:

1. Evaluation of patients in pediatric gastroenterology clinic.
2. Evaluation of hospitalized pediatric gastroenterology patients.
3. Participation in Pediatric GI/Pathology monthly rounds.
4. Progress notes on inpatients.
5. Presentation of research topic presented to the Pediatric GI attendings.

Method of Evaluation: Direct faculty evaluation of performance. Evaluations will be based on interaction with the attending and the daily demonstration of knowledge in the diagnosis and management of pediatric gastrointestinal diseases.

Required Reading: Suggested reading includes *Pediatric Practice Gastroenterology* by Dr. Warren Bishop, *Essential Pediatric Gastroenterology, Hepatology, and Nutrition*, by Dr. Stefano Guandalini, *Pediatric Gastroenterology: The Requisites in Pediatrics* by Dr. Chris Liacouras, and information from Gikids.org, representing a variety of clinical topics in pediatric gastroenterology. The textbooks can be accessed through the Crawford library. Students will be expected to discuss the material in this textbook on a daily basis.

Additional Resources: None.

Miscellaneous Information: None

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DEPARTMENT OF PEDIATRICS

Neonatology - NICU

Phase 3 Course Number: ELEC654

Program Directors: Pablo Morales, MD

Departmental Contact Information: Czaina Blackwell, Telephone: (815) 971-5760

Location: Mercyhealth NICU, Javon Bea Hospital, 8201 E. Riverside Blvd, Rockford, IL 61103

Length of Time: 2 weeks

Call: Yes

Available for Phase: Phase 3

Narrative Description:

Pre-Requisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives: To familiarize the student with the care of premature sick infants

Learning Activities:

1. Follow 3-5 patients in NICU. Attend high-risk deliveries or C-sections, go on transport.
2. Become familiar with assessment of gestational age and condition at birth.
3. Know how to resuscitate an infant.
4. Become familiar with diagnosis and differential diagnosis of common problems of newborns.
5. Be able to manage fluid, electrolyte and caloric intake.
6. Become familiar with principles of ventilator use.
7. Understand the multidisciplinary approach to the infant's care.

Evaluation: Direct observation and direct faculty evaluation of performance

Required Reading: None

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF PEDIATRICS

Pediatric Pulmonology

Phase 2 Course Number: ELEC405

Phase 3 Course Number: ELEC977

Program Directors: David Shoberg, M.D.

Departmental Contact Information: Jodi Pirrello (jlpirre2@uic.edu); Patricia Grimm (pgrimm@uic.edu)

Location: Mercyhealth Kleckner Clinic, 7144 Kleckner Road, Rockford, Illinois

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 AND Phase 3

Narrative Description:

This is a 2-week clinical elective. The student will be exposed to the most common aspects of Pediatric Pulmonology, including critical care, ventilator management and care of the chronically ill. The student will be working under the supervision of the pediatric pulmonologist and will follow inpatients, perform consults and see outpatients and emergencies as they arrive. The student will also be expected to assist in all minor surgical procedures such as bronchoscopies, thoracentesis, chest tubes, etc. Selected readings will be distributed at the onset of the rotation and the articles will be reviewed with the attending physician. The student will attend Pediatric Grand Rounds every Friday morning.

Prerequisites: Successful completion of Phase 2 Pediatrics clerkship and an interview.

Learning Objectives:

1. Basic competence interpreting pulmonary function tests.
2. Basic competence interpreting chest and airway x-rays.
3. Basic care of the patient with chronic lung disease including cystic fibrosis, bronchopulmonary dysplasia, chronic respiratory failure and muscular dystrophy.
4. Competence in the management of ventilators.
5. Knowledge of the most common pediatric pulmonary diseases.
6. Knowledge of the medications used to treat respiratory problems.
7. In-depth knowledge on the management of airway emergencies and stabilization of the critical care patient with respiratory problems.
8. Interpretation of arterial blood gases.

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF PSYCHIATRY

Adolescent Substance Abuse / Mental Health and Dual Diagnosis

Phase 3 Course Number: ELEC255

Program Directors: Thomas Wright, M.D.

Departmental Contact Information: Sarra Reichwald, MS Ed, Director of Staff Development and Education (SReichwald@rosecrance.org); Phone: (815) 387-2511; Fax: (815) 387-2590

Location: Rosecrance Mental Health Center, Griffin-Williamson Campus site

Length of Time: 2 weeks

Call: None

Available for Phase: Phase 3.

Narrative Description: The student will work with multiple psychiatrists at a variety of Rosecrance sites to learn about substance use, mental health and co-occurring disorders.. Students will participate in a number of activities including initial assessment, group treatment activities, 12-step treatment, psychiatric evaluations, medication monitoring, telepsychiatry, family programming, and emergency psychiatric services. They will have a chance to work in Rosecrance Outpatient as well as the residential and telepsychiatry settings.

Prerequisites: Successful completion of ALL Phase 2 clerkships; students must be interested in Psychiatry or Pediatrics as their specialty in order to take this elective.

Learning Objectives: By the end of this rotation, the student should:

1. Recognize and know the criteria for abuse and dependence in illicit substance abusing adolescents and adults.
2. Know the incidence of comorbid psychiatric and substance abuse problems in adolescents and adults.
3. Recognize how individuals with mental illness such as major depression, PTSD, ADHD, bipolar disorder and disruptive behavior disorders present with co-occurring substance abuse.
4. Understand all major aspects of inpatient substance abuse treatment programs, including family therapy, group therapy, and 12-step treatment models.
5. Present concisely a typical case.
6. Understand how wraparound community programming integrates with other treatment in child and adolescent mental illness.

Learning Activities:

1. Psychiatric evaluation at clinics with Dr. Wright and other psychiatrists
2. Assessment and evaluations with Rosecrance assessment teams;
3. Team meetings for Rosecrance adolescent teams;
4. Group therapy with Rosecrance adolescent groups;
5. 12-step meetings with adolescent groups;
6. "Family Weekend" participation; and

Method of Evaluation: Students will be evaluated based on their ability to demonstrate competence in the area of assessment and treatment consistent to the learning objectives. This will occur by observation by Dr. Wright and by feedback Dr. Wright receives from others involved with the experience

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF PSYCHIATRY

Adult Psychiatry and Addiction Medicine

Phase 3 Course Number: ELEC980

Program Directors: Raymond C. Garcia, M., FAPA, ABAM

Departmental Contact Information: Sarra Reichwald, MS Ed, Director of Staff Development and Education (SReichwald@rosecrance.org); Phone: (815) 387-2511; Fax: (815) 387-2590

Location: Rosecrance Harrison Campus

Length of Time: 2 weeks to 4 weeks

Call: No

Available for Phase: LIMITED AVAILABILITY for Phase 3 – students will be accepted on a case-by-by case basis depending on preceptor's availability.

Narrative Description: The student will work under the direct supervision of Dr. Garcia as he conducts the M3 Psychiatry Clerkship at Rosecrance Harrison Campus. The elective may include presentation of a journal review article on a topic chosen by the student or suggested by Dr. Garcia.

Pre-Requisites: Successful completion of ALL Phase 2 clerkships and an interest in residency training in Psychiatry.

Learning Objectives:

1. The student will further develop clinical skills in interviewing and working with psychiatric patients.
2. The student will further develop skills in presenting and writing up comprehensive psychiatric evaluations using the Biopsychosocial Model.
3. The student will be able to discuss and present thorough differential diagnoses and treatment plans for psychiatric patients.
4. The student will demonstrate skills relevant to life-long learning in *psychiatry and addiction medicine*.
5. The student will demonstrate leadership skills as an active member of the psychiatric treatment team.

Learning Activities:

Method of Evaluation: The student will be evaluated by Dr. Garcia based on direct observation of the student's clinical and leadership skills and on reports from other clinical staff at Rosecrance. The student is expected to be punctual, organized and responsible, performing in a capacity similar to a sub-intern in psychiatry.

Required Reading: *Desk Reference to the Diagnostic Criteria from DSM-5*

Additional Resources: The ASAM Principles of Addiction Medicine, Kaplan & Sadock's Comprehensive Textbook of Psychiatry or Kaplan & Sadock's Synopsis of Psychiatry, Stahl's Essential Psychopharmacology

Miscellaneous Information: None

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DEPARTMENT OF PSYCHIATRY

Career Exploration – Forensic Psychiatry Inpatient Rotation

Course Number: ELEC439

Program Directors: Dr. Tahseen Mohammed

Departmental Contact Information: (847) 742-1040 Ext. 3222; email tahseen.mohammed@illinois.gov; Sandra Akers, Sandra.Akers@illinois.gov; Linda Nidelkoff, Linda.Nidelkoff@illinois.gov; Mari Martinez, Mari.Martinez@illinois.gov; Jenks Wroten, Jenks.Wroten@illinois.gov

Location: 750 S. State St, Elgin, Illinois

Length of Time: 2 or 4 weeks

Call: No overnight call

Available for Phase: Phase 2 RMED only.
Phase 3 RMED preference. Registration with course director approval.

Narrative Description: Students will rotate on a 51-bed adult inpatient unit (Edith Hartman) and will be supervised by two attendings during their rotation. Majority of the patients are NGRI (Not guilty by reason of insanity) and are court ordered for treatment with a goal to stabilize them and step them down to a less restrictive setting. Patients have a wide range of chronic mental health issues, substance abuse and personality disorders. The unit is staffed with two psychiatrists, internist, psychologist, nurses, social workers and mental health technicians. Students will also have an opportunity to attend Mental health court on campus and other court hearings in various counties.

Prerequisites: Completion of Phase 2 Psychiatry clerkship

Learning Objectives:

1. Use the DSM-V criteria in the diagnostic process for major psychiatric disorders
2. Elicit and clearly record a complete psychiatric history, including the identifying data, chief complaint, history of present illness, past psychiatric history, general medical history, medications, substance abuse history, family history, and social history.
3. Elicit, describe, and precisely record the components of the mental status examination, including general appearance and behavior, motor activity, speech, mood, affect, thought process, thought content, cognition, judgment, and insight.
4. Formulate a biopsychosocial assessment, differential diagnosis, and treatment plan.

Learning Activities:

1. Participation in psychiatric evaluation process.
2. Participation in individual and group therapy process.
3. Participation in treatment staffing meetings
4. Participation in daily community meetings.
5. Participation in the 1-hour seclusion & restraint assessments.
6. Participation in family therapy processes as applicable.
7. Participation in discharge planning processes throughout the course of treatment.
8. Attend court hearings when court is in session.

Method of Evaluation:

1. The existing Elective Evaluation form will be used to provide feedback to the student about their performance. Grading method will be consistent with College policy.
2. Completion of mini-CEX requirement will be documented.

Required Reading:

Desk Reference to the Diagnostic Criteria from DSM-V
Kaplan and Sadock Synopsis of Psychiatry
Readings as assigned by preceptors

Additional Resources: None

Miscellaneous Information: Elgin MHC has a six-week notice precaution before rotations for paperwork, badges and required state training. All four people above will need to be in the loop for inquiring of student rotations.

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Required Process for Scheduling Surgery Electives

All students requesting to add or drop any Surgery Elective after schedules have been confirmed via the draft process need to follow the procedure given below to insure that their request will be considered. All requests will be considered and every effort will be made to work with the M4 student to fill his/her request. However, the Department of Surgery cannot guarantee that all requests will be able to be honored.

Procedure to Add or Drop a Surgery Elective

1. When beginning the process to add/drop a M4 Surgery Elective, first contact the Office of Student Affairs to confirm that the change will still fulfill your graduation requirements.
2. Because the faculty for the Department of Surgery teach at several different levels for the University of Illinois (M3, M4 and Residents), students are requested to not contact an individual faculty member regarding a possible rotation. Our faculty have requested that all M4 surgical elective requests come from the Department of Surgery Office.
3. If the requested elective or preceptor is not available during the time frame requested, the Department of Surgery office will contact the student to suggest other options.

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Advanced Surgery

Phase 3 Course Number: ELEC673

Program Directors: John Myers, MD

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Private offices and affiliated hospitals

Length of Time: 4 weeks

Call: Yes; weekends at the discretion of faculty

Available for Phase: Phase 3 ONLY

Sub-I Component Eligible

Narrative Description: This will be a four-week advanced level surgery clerkship. The student will be assigned to specific faculty for a specific period of time during the rotation. The areas of surgical fields will include trauma, peripheral vascular, complex general surgery, hepato-biliary-pancreatic surgery and intensive care. The student may participate in two to three of these fields. He/she will also have the flexibility to see, scrub in and follow patients with specific complex surgical problems. Mercyhealth Hospital, SwedishAmerican Hospital and OSF St. Anthony Hospital will be utilized for this clerkship rotation.

The M4 elective student will have a separate call schedule from M3 students, and it will be in conjunction with the faculty call schedule.

Prerequisites: Successful completion of ALL Phase 2 clerkships / Interest in or be in the process of application for residency in a surgical discipline.*

****M4 students going into non-surgical disciplines will also be considered, but surgical students will have preference.***

Learning Objectives:

1. The student will know how to perform a detailed clinical assessment of patients with complex surgical problems including multisystem trauma and critically ill surgical patients.
2. He/she will have developed clear understanding with respect to the ordering of appropriate laboratory, radiological and other diagnostic tests, be able to choose the right workup for the surgical problem and accurately interpret the results.
3. He/she will be able to develop management plans for complex surgical problems.
4. He/she will acquire the ability to evaluate and manage complex post-operative problems, complications and acquire basic understanding of critical care management of the surgical patient.
5. He/she will gain state of the art knowledge in surgical discipline by seeking information from the library, online, surgical journals and by one-on-one discussion with the faculty member.
6. He/she will become more experienced in performing surgical consultations and develop independent thinking with respect to developing treatment plans, writing patient care orders and assisting in complex surgical operations.

Learning Activities:

1. Daily independent and faculty-led rounds on complex surgery, trauma and ICU surgical patients.
2. Select and follow specific patients with surgical problems throughout the patient's course by becoming the primary student doctor in charge under the supervision of the faculty.
3. Write patient care and diagnostic test orders under the supervision of the faculty.
4. Participate in selected complex operative procedures under the supervision of the faculty preceptor.
5. Attend weekly surgical student conferences specifically organized for this clerkship and present topics and cases as assigned.
6. Meet with faculty coordinator bi-weekly to present and discuss complex cases and topics.
7. Have free time to perform independent online and other information seeking and learning activities.

Method of Evaluation: The student will be evaluated based upon the ACGME competencies

Required Reading: Advanced level surgical textbooks to include ACS Surgery, Sabiston, Greenfield or Brunicaudi editions of surgical texts, specialty textbooks on trauma, critical care, surgical and critical care journal articles and other current research papers.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Anesthesiology

Phase 3 Course Number: ELEC601

Program Directors: Stephen Cotton, MD; Lisa Solomon, DO

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Mercyhealth, OSF Saint Anthony, SwedishAmerican Hospital, Rockford Ambulatory Center

Length of Time: 2 or 4 weeks

Call: As specified by the preceptor

Available for Phase: Phase 3 ONLY

Narrative Description:

This elective is designed to provide a concentrated 2- or 4-week experience in the selection and conduct of anesthesia by assigning the student to one or more anesthesiology preceptors. This will best assure a broad exposure to the clinical problems unique to this specialty. Attention will be given to the preoperative evaluation of the patient, the actual conduct of the anesthetic procedure, and postanesthetic management of routine and complicated patients. Different types of anesthesia and their unique applications will be covered. There will be opportunities to improve competence in the performance of basic clinical skills. The pharmacologic and physiologic properties of commonly used anesthetic agents will be covered. Appropriate management of postoperative pain and the psychological aspects of undergoing anesthesia and surgery will also be addressed. Most of the elective experience will occur in the operating room suite and its environs, including the postanesthesia care area and the intensive care setting.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives:

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

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Cardiothoracic Surgery

Phase 3 Course Number: ELEC300

Program Directors: David Cable, MD

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: Private office and affiliated hospitals

Length of Time: 2 or 4 weeks

Call: At the discretion of the faculty

Available for Phase: Phase 3 ONLY

Sub-I Component Eligible

Narrative Description: Students will round on the service in a "sub-intern capacity". They will be involved in preoperative and postoperative care. They will learn Swan-Ganz catheter management and ventilatory management in the ICU. They would be expected to participate in the operating room daily. They will have reading assignments from standard surgical texts. They will also take call from home 24 hours, 5 days a week.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives:

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Career Exploration—Community-Based Surgery

Course Number: ELEC459

Program Directors: Joseph Kunzelman, MD, General Surgery, Robinson, Illinois; Preston Reilly, MD, General Surgery, Robinson, Illinois; Dr. Scott, DO, General Surgery, Robinson, Illinois

Departmental Contact Information: Renee Barr, rbarr@uic.edu; Telephone: (815) 395-5651

Location: Crawford Memorial Hospital, 1000 N. Allen St, Robinson, IL 62454

Length of Time: 2 weeks

Call: At the discretion of the local preceptor and depending on local community needs, some night duty may be assigned. If required, night call will not exceed 1 night in every 4. The UIC policy on duty hours will apply in this situation (appendix “UI duty hour rules out of town students”).

Available for Phase: Phase 2 students RMED only. Phase 3 RMED preference. Registration with course director approval.

Narrative Description: A 2-week rotation to allow a student to have an extended experience providing ambulatory and hospital care in a rural setting with fewer resources than the typical tertiary medical center where their prerequisite clerkship was completed.

Office based ambulatory experience, students to participate in care in the local hospital and operating room while under direct supervision. At no time will the student provide any patient care or entries to the medical record without their preceptor being directly present.

Preference is given to RMED students, but if available, other interested students may enroll.

Prerequisites: Must have successfully completed the Surgery Phase 2 clerkship

Learning Objectives:

1. Describe/discuss issues facing practitioners caring for individuals, families and communities distant from a comprehensive medical center.
2. Be able to evaluate patients and contribute to treatment planning for patients and families in small communities.
3. Describe common general surgical problems in rural areas.
4. Be able to demonstrate proficiency in clinical/procedural skills for treatment and management.
5. Describe strategies for health promotion and illness prevention.
6. Identify available resources in the host community.
7. Be able to determine when local treatment is appropriate, when to involve visiting subspecialties, and when to refer patients to higher levels of care. Explain why these decisions are appropriate.
8. Describe differences in the management approach for practitioners in community-based practices relative to a medical center location for the following surgical conditions:
 - Abdominal Masses
 - Undifferentiated Abdominal Pain
 - Abdominal Wall and Groin Masses
 - Breast Disease

GI Bleeding
Trauma
Bowel Obstruction
Peripheral Vascular Disease

Learning Activities:

1. The student will keep a journal, summarizing their daily activities, level of participation (observed, partial or full) and their personal observations & thoughts about the experience. (see appendix “Community Electives Log Procedures”)
2. Student will perform medical histories and physical exams as assigned by their preceptor, present their findings orally, and develop differential diagnoses and treatment plans appropriate to their experience level
3. The student will spend time with the office manager, nursing, and support staff, becoming familiar with their responsibilities.
4. Student will obtain feedback from their preceptor using the mini-CEX method as in regular required clerkships - one at the beginning of the clerkship and again at the end. Completion of this feedback and submission of the mini-CEX forms is required but the comments are formative only and will not be used for evaluation purposes.
5. In order to help with advising and scheduling of future students, each student must complete a narrative summary of their experience in each 2-week rotation and submit this to the Phase 2/3 Director in Rockford at the end of their rotation. Grades will not be posted until this is completed.

Method of Evaluation:

1. The existing Elective Evaluation form will be used to provide feedback to the student about their performance. Grading method will be consistent with College policy.
2. Student’s journal will be reviewed by supervising provider in the community for accuracy and completeness. (see appendix “Community Electives Log Procedures”)
3. Completion of mini-CEX requirement will be documented.

Required Reading: None required by the campus – readings as assigned by local preceptors. Students are expected to take advantage of the Medical Mobile Resources available from the UIC library (appendix “EBM- Medicine Mobile Resources for out of city students”). Given the variety of these resources at the students’ disposal, note that use of UpToDate as the only clinical resource is not acceptable.

Additional Resources: As determined by the local preceptor.

This clerkship will follow the College’s established absence reporting policy as well as all other policies relating to the student learning environment.

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Emergency Medicine

Phase 2 Course Number: ELEC393

Phase 3 Course Number: ELEC603

Program Directors: Jane Kotecki,MD

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Mercyhealth, OSF

Length of Time: 2 or 4 weeks

Call: Yes

Available for Phase: Phase 2 and Phase 3

Narrative Description:

This 2- or 4-week elective will involve M3 and M4 students in the practice of emergency medicine in a busy Emergency Department. Students will function as primary emergency physicians under the supervision of attending physicians, and will be responsible for patient evaluation, treatment and disposition, as well as any procedures. Students will gain experience in the examination and treatment of multiple patients at varying levels of acuity and complexity. Interpretation of x-rays, ECGs, and laboratory studies will be an integral part of the rotation. Training and experience in medical procedures is emphasized. Additionally, students will gain an appreciation of the unique aspects of emergency medicine through direct involvement, lectures and required reading. Reading materials are in the Required Reading Manual provided by the Department of Surgery, UICOM-R.

Prerequisites: Successful completion of one Phase 2 clinical rotation.

Learning Objectives:

1. To learn to rapidly assess and prioritize the patient's condition.
2. To improve technical skills. (*eg.* IV, ABG, sutures, *etc.*)
3. To participate in the care of critically ill patients (*eg.* code blue, acute MI, trauma, *etc.*).
4. To experience technical aspects of emergency care: a) Critical care, b) Toxicology, c) Trauma care

Learning Activities:

Method of Evaluation: Faculty evaluation of performance

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Neurosurgery

Phase 3 Course Number: ELEC694

Program Directors: Neshor Asner, MD

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: SwedishAmerican – Renaissance Pavilion at the Neuro & Headache Center

Length of Time: 2 weeks

Call:

Available for Phase: Phase 3 ONLY

Narrative Description: The Neurosurgery elective will provide the student with an outstanding clinical experience in a wide spectrum of disease entities not only involving the central and peripheral nervous systems but involving the cardiovascular, pulmonary, endocrine, GI, respiratory, and other systems. There will be intensive care unit experience that will utilize the student's basic knowledge of the basic sciences. Students will learn as much from this rotation as they are willing to contribute. This is a rotation for those who are interested in gaining a large experience in clinical medicine by being involved in an active clinical service and becoming an integral and participating member.

Prerequisites: Successful completion of ALL Phase 2 clerkships.

Learning Objectives:

1. Ability to perform an accurate neurological examination.
2. Ability to recognize and initiate management of neurological emergencies.
3. Understand the basic disease processes in neurosurgery and, to some degree, neurology.
4. Become familiar with a wide spectrum of systemic disease processes and be involved with their treatment.
5. Learn about critical care management of patients and related bedside techniques.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance.

Required Reading:

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Non-Operative Pediatric Musculoskeletal Medicine

Course Number: ELEC458

Program Directors: E. Pickvance, MD, FAAOS (815) 971-7400

Departmental Contact Information: Renee Barr rbarr@uic.edu; (815) 395-5952

Location: MercyHealth System

Length of Time: 4 weeks

Call: None

Available for Phase: Phase 3

Narrative Description: The goal of this course is to expose the medical student to the wide variety of musculoskeletal diseases, conditions and injuries seen in the pediatric population and understand which conditions should be referred to a pediatric orthopaedic surgeon and which conditions they should be able to manage as a primary care provider of children.

A significant percentage of chief complaints to a community-based pediatrician, are musculoskeletal in nature. Despite this, there is no mandatory musculoskeletal education in pediatric residencies. Recent data suggests that up to 47 - 64% of referrals to pediatric orthopaedic surgery were not consistent with the new American Academy of Pediatric Surgical Advisory Panel recommended guidelines for referrals. A significant number of these referrals revealed a lack of textbook knowledge regarding musculoskeletal disease, examination skills and appropriate diagnostic tools as shown by a high number of the definitive diagnoses actually being normal variants. Twenty-five percent (25%) of patients are sent to pediatric orthopaedic surgery without a referring diagnosis. Most pediatric residencies do not require musculoskeletal education from a pediatric orthopaedic surgeon or other musculoskeletal specialist. The Accreditation Council for Graduate Medical Education requires 140 hours of musculoskeletal training in family medicine residencies, exclusive of any training in sports medicine; however, none of this is required to include pediatric musculoskeletal care. (see citations).

During this four-week rotation, the student will have the opportunity to participate in outpatient clinic evaluations, in-patient hospital consults, present patients, develop differential diagnoses, recommend appropriate diagnostic studies and formulate evidence-based treatment plans. The student will interact with the patient, parents, pediatric therapists, nursing staff and attending staff to develop a treatment plan. During this rotation, the student will be expected to perform a history/physical examination, document in the play section of the EMR, and present the full case to the attending staff and have their documentation reviewed. The student is expected to perform at a level preparing themselves for their residency.

Prerequisites: Successful completion of all Phase 2 required clerkships and be in good standing. The student must have made a "proficient" or higher in their pediatric rotation.

Learning Objectives:

1. Describe the clinical presentation, diagnosis and treatment of common pediatric orthopedic conditions found in the newborn with an emphasis on dislocation of the hip and various foot deformities such as clubfoot and calcaneovalgus foot.

2. Understand the association of “packaging deformities” and the need to evaluate the hips of a neonate.
3. Explain the management of simple torus fractures.
4. Explain, in correct orthopaedic terminology, the radiographic findings of fractures, growth plate fractures and common hip (pelvis) abnormalities.
5. Evaluate necessary resources to help in managing orthopaedic issues in the pediatric patient such as physical therapy, occupational therapy, and school-based needs and resources.
6. Evaluate the pediatric ankle and learn the management of simple ankle sprains and small ankle fractures.
7. Participate in the application of clinic-applied braces and casts. Learn how to apply a simple short arm/short leg cast. Learn how to remove a cast using a cast saw in a safe manner.
8. Know and understand the anatomy leading to lower extremity rotational malalignment in a skeletally immature patient and how to discuss with the family that no intervention or referral is needed.
9. Know and understand the anatomy leading to non-traumatic, anterior knee pain with no effusion and its management by a primary care provider.
10. Evaluate the teenage patient for scoliosis and how to order the correct radiographic imaging and how to evaluate the radiologic images and when to refer to a pediatric orthopedic surgeon/spine surgeon.
11. Understand the fracture/injury patterns and warning signs of non-accidental injury, what steps need to be taken to assure the safety of the child and notify the correct authorities.
12. Understand the basic evaluation and possible diagnoses of “the limping child”; such as traumatic, inflammatory and neurological causes.
13. Understand the basic concepts and early clinical signs of cerebral palsy and the need for pediatric orthopedic referral and management.

Learning Activities: Students will be attending clinic with the pediatric orthopaedic surgeon. On the days where the surgeon is in the operating room, the student will attend either the pediatric physical therapy clinic at Javon Bea-MercyHealth-Riverside or the physical therapy clinic at the Walter-Lawson Home for Special Needs Children. During clinic time with the pediatric surgeon, they will learn how to take an appropriate history, perform a physical examination, review supportive studies, learn how to apply a cast, remove a cast and apply basic splints/braces. While working with the physical therapists, the students will learn the importance of therapy in the management of a musculoskeletal injury in a child, how to collaborate with therapists and which patients need therapy and for what conditions. While in orthopaedic clinic, the students will be able to present cases to the attending staff and summarize the important points in a manner preparing them for residency. All student-patient interactions will be supervised by the attending staff and all final decisions will be made by the attending staff. Reading assignments for the student will be provided and opportunities to review and discuss will be done. Students will also be required to round on in-patients, attend any consults the surgeon may get and see patients with the surgeon in the Emergency Department.

The average weekly time commitment will be (exclusive of on-call) approximately 40-50 hours per week.

Schedule

Day	Morning	Afternoon
Monday	Clinic-Pickvance	Clinic-Pickvance
Tuesday	Clinic-Pickvance	Clinic-Pickvance
Wednesday	Clinic-Pickvance	Clinic-Pickvance
Thursday (week 1&3)	Walter-Lawson Home	Walter-Lawson Home
Thursday (week2&4)	Pediatric PT/Riverside	Pediatric PT/Riverside
Friday	Clinic-Pickvance	Free Time

Call: One weekday when Dr. Pickvance is on-call. Call from home. Student will be called by Dr. Pickvance for any on-call patient need. Student will not be required to attend the OR.

Method of Evaluation: The students will be evaluated by the attending staff based on their ability to evaluate a patient appropriate for a fourth-year student level, be able to make presentations of cases appropriate for a fourth-year medical student. Input from physical therapist regarding willingness to learn and participate in physical therapy sessions will be added to the attending staff's comments. The forms to be completed by each of the attending staff are the same as used in the third-year clerkship rotations, University of Illinois College of Medicine Rockford SURGERY CLERKSHIP STUDENT EVALUATION FORM.

Concerns or questions will be addressed to Dr. Pickvance, MD. Any conflicts/issues will be evaluated by Dr. Pickvance. Letters of recommendation may be obtained from this attending staff.

Required Reading: (all textbooks are available for loan from attending staff):

Clinical Pediatric Orthopedics, The Art of Diagnosis and Principals of Management. Mihran O. Tachdijian.Appleton & Lange, 1997. *Postural and Congenital Deformities of the Foot and Ankle.*

Clinical Pediatric Orthopedics, The Art of Diagnosis and Principals of Management. Mihran O. Tachdijian.Appleton & Lange, 1997. *Rotational Malalignment of the Lower Leg.*

Clinical Pediatric Orthopedics, The Art of Diagnosis and Principals of Management. Mihran O. Tachdijian.Appleton & Lange, 1997. *Developmental Dysplasia of the Hip, Legg-Calve-Perthes Disease, Slipped Capital Femoral Epiphysis.*

Clinical Pediatric Orthopedics, The Art of Diagnosis and Principals of Management. Mihran O. Tachdijian.Appleton & Lange, 1997. *Delay in Motor Development*

Special Concerns for the Pediatric Patient (Chapter 24), Musculoskeletal Medicine, Editor, Joseph Bernstein, American Academy of Orthopedic Surgeons, 2003.

Citations:

Reeder, et.al. *Referral Pattern to Pediatric Orthopedic Clinic: implication for education and practice. Pediatrics.* 2004 Mar. 113 (3 pt 1); e163-7

Hsu, Ey, et.al. *How Many Referrals to a Pediatric Orthopedic Hospital Speciality Clinic are Primary Care Problems?* JPO 2012 Oct-Nov. 32 (7), 732-6
Practice Management Committee of the Pediatric Orthopedic Society of North America: *New Referrals often be Managed by Primary Care.*
Musculoskeletal Medicine in the USA: Education and Training of Family Physicians. Joseph P. Garry, MD. PrimaryCare, imedpub.com, March 2003.

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Ophthalmology

Phase 2 Course Number: ELEC414

Phase 3 Course Number: ELEC639

Program Directors: Mitul Vakharia, MD, at New Vision Rockford

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Private offices (New Vision Rockford and Miller Eye Center) and affiliated hospitals

Length of Time: 2 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: A basic experience in clinical ophthalmology in the office setting. Primary goal is to familiarize students with basic diagnostic techniques and instruments. Student's responsibility is not only to read, but be willing to discuss and ask questions. Specifics may be set up for our mutual convenience by calling my office prior to beginning the rotation. Students should bring their own ophthalmoscope for use in the office experience.

Prerequisites: Successful completion of one Phase 2 clinical rotation.

Learning Objectives:

1. Observation of office practice.
2. Improvement in skills of fundoscopy and general examination of the eye.
3. To learn about the management of common eye problems.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: Students are required to call their preceptor's office one week before the start of the rotation to discuss the specific activities and expectations of the elective.

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Orthopedic Surgery

Phase 2 Course Number: ELEC392

Phase 3 Course Number: ELEC640

Program Directors: Victor Antonacci, MD; All orthopedic surgeons on faculty in the Dept. of Surgery, UICOM-R

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: Private offices and affiliated hospitals

Length of Time: 2 or 4 weeks

Call: Yes and 1-2 weekends

Available for Phase: Phase 2 and Phase 3

Narrative Description: This elective is offered to students who wish to learn more about basic orthopedic examinations and the management of ambulatory orthopedic problems. Students will see patients in an office setting and will have exposure to the operating room by participating in orthopedic surgical procedures. Students will have increased responsibility in the care and management of orthopedic patients.

Prerequisites: Successful completion of the Phase 2 Surgery or OB/GYN clerkship.

Learning Objectives:

1. To learn basic principles of managing open and closed fractures, dislocations and subluxations.
2. To learn how to describe the clinical and radiological features of fractures.
3. To learn how to manage priorities in treating fractures.
4. To learn the basic principles of applying plaster and fiberglass casts, including cast removal.
5. To learn about vascular, neurological and musculoskeletal complications of fractures.
6. To learn the definitions of osteoporosis and osteomalacia and the etiologies of each.
7. To learn basic treatment of various arthritic conditions.
8. To learn how to conduct a thorough examination of joints and spine.
9. To review pertinent anatomy.
10. To have additional experience in participating in orthopedic surgical procedures.

Learning Activities:

Method of Evaluation: Direct faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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Otolaryngology

Phase 2 Course Number: ELEC415

Phase 3 Course Number: ELEC643

Program Directors: Margaret Provenza, MD; All otolaryngologists on faculty in the Dept. of Surgery, UICOM-R

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: Private offices and affiliated hospitals

Length of Time: 2 or 4 weeks

Call: No

Available for Phase: Phase 2 and Phase 3

Narrative Description: The student is encouraged to review the basic anatomy and physiology of the head and neck prior to starting the elective. The objectives will be accomplished primarily in the private office setting and in the surgical procedures operating room. There will be some exposure to hospital rounds and possibly emergency room exposure.

Prerequisites: Successful completion of the Phase 2 Surgery or OB/GYN clerkship.

Learning Objectives:

1. Improve the student's basic skill for examining the head and neck with particular attention to the ear exam;
2. We also expect the students to learn management of common ENT problems; and
3. Identify typical indications for ENT referral.

Learning Activities:

Method of Evaluation:

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Plastic/Reconstructive Surgery

Phase 2 Course Number: ELEC417

Phase 3 Course Number: ELEC679

Program Directors: Landon Pryor, MD, at Transformations Plastic Surgery; All plastic surgeons on faculty in the Department of Surgery, UICOM-R

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: Private office and affiliated hospitals

Length of Time: 2 or 4 weeks

Call: Optional

Available for Phase: Phase 2 and Phase 3

Narrative Description:

Prerequisites: Successful completion of the Phase 2 Surgery or OB/GYN clerkship.

Learning Objectives:

1. Principles of wound care and wound healing in general.
2. Skin grafting and burn treatment.
3. Basic suturing techniques and materials.
4. Management of lacerations and facial fractures.
5. Office surgery.
6. Dermatologic surgery, etc.
7. Hand surgery.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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Surgical Sports Medicine

Phase 3 Course Number: ELEC859

Program Directors: Orthollinois Faculty

Departmental Contact Information: Renee Barr (rbarr@uic.edu); Telephone: (815) 395-5952

Location: Orthollinois

Length of Time: 2 or 4 weeks

Call:

Available for Phase: Phase 3 ONLY

Narrative Description: Sports Medicine crosses the barriers of specific disciplines as athletes may suffer problems associated with the musculoskeletal system, nutrition, mental health and motivation, dental problems, or primary care issues. This sports medicine experience allows the student to participate in the care of athletes from an orthopedic perspective, physical medicine and rehabilitation perspective, nutrition perspective, radiology, and a psychology perspective.

Prerequisites: Successful completion of ALL Phase 2 clerkships and desire to go into this field.

Learning Objectives: The overall objective of the sports medicine program is to provide the medical student exposure to injuries and problems encountered by the athletic population. The rotation will introduce the student to the demands of being a team physician, caring for athletes, identifying specific sports-related injuries, and taking an active role as a member of a sports medicine team. Students will gain a fundamental knowledge of sports medicine, including: roles of the sports medicine team, the pre-participation physical examination, common sports injuries, emergent sports injuries, rehabilitation issues, sports psychology, sports nutrition, and medical issues in sports medicine.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance.

Required Reading: None

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Urology

Phase 2 Course Number: ELEC418

Phase 3 Course Number: ELEC683

Program Directors: Michael Fumo, MD

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Private offices and affiliated hospitals.

Length of Time: 2 weeks

Call: No and weekends are optional

Available for Phase: Phase 2 or Phase 3

Narrative Description: The objectives of this elective will be to familiarize the M4 student with diagnosis and management of urological problems in the ambulatory setting including the possibility of advanced study for students interested in pursuing residency in urology as a career.

Prerequisites: Successful completion of the Phase 2 Surgery or OB/GYN clerkship.

Learning Objectives:

1. Office evaluation and diagnosis of:
 - a. Infection of the genitourinary tract
 - b. Nephrolithiasis
 - c. Malignancy of the prostate, bladder, testes, and kidneys
 - d. Evaluation of hematuria
 - e. Voiding dysfunction including BPH, neurogenic bladder, and incontinence
 - f. Male infertility and erectile dysfunction
 - g. Use of PSA in evaluating for prostate cancer
2. Physical exam and anatomy and physiology of the genitourinary system.
3. Treatment of genitourinary diagnoses in 1.
4. Surgical treatment of urological conditions and understanding of relevant anatomy intraoperatively.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance.

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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DEPARTMENT OF SURGERY AND SURGICAL SPECIALTIES

Vascular Surgery

Phase 2 Course Number: ELEC419

Phase 3 Course Number: ELEC702

Program Directors: Michael Kikta, MD; Kendall Boone, MD; Sara Mijal, MD

Departmental Contact Information: Renee Barr (rlbarr@uic.edu); Telephone: (815) 395-5952

Location: Private office and affiliated hospitals

Length of Time: 2 or 4 weeks

Call: Infrequently and weekends occasionally

Available for Phase: Phase 2 or Phase 3

Narrative Description:

Prerequisites: Successful completion of the Phase 2 Surgery or OB/GYN clerkship.

Learning Objectives:

This elective is offered to students interested in learning more about management of peripheral vascular diseases.

The objectives include:

1. Learn basic principles of diagnosing and treating aortoiliac, femoral, popliteal, and various other vascular diseases.
2. Become aware of the various graft materials and what graft is appropriate for the surgical treatment of a variety of vascular diseases.
3. Become aware of the complications of arterial reconstruction.
4. Become aware of the incidence, location of disease, signs and symptoms, diagnosis, appropriate treatment and prognosis of common vascular disease.
5. Have the experience of participating in vascular surgery procedures both operative and endovascular.
6. Learn about diagnostic procedures performed in the vascular laboratory.

Learning Activities:

Method of Evaluation: Faculty evaluation of performance

Required Reading: Suggested reading(s) will be provided.

Additional Resources: None

Miscellaneous Information: None

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