

2024-2025 International Visiting Student Learning Opportunities

Corewell Health in Grand Rapids and Helen DeVos Children's Hospital are committed to providing highquality medical educational opportunities. Choosing a medical education program that best fits your interests and passion starts in West Michigan. We offer community-based medicine, hands-on learning environment, large and diverse patient base, special emphasis on primary care, opportunities in a variety of subspecialties, as well as state-of-the-art medical and educational institutions. We offer international visiting medical students an in-person four-week clinical rotation in West Michigan.

The program offers a dynamic experience through our dedication to fostering growth of medical knowledge and high-quality, safe health care. Corewell Health in West Michigan has over 1,500 faculty members and the community of West Michigan has been engaged in graduate medical education programs and clinical learning for over 50 years.

All rotations are scheduled through the Corewell Health Office of Medical Education. Clinical electives are available to **final year medical students** based on availability and approval of the residency program director or designated faculty. Rotations must be completed prior to students' graduation date and applications must be received at least 90 days prior to the rotation start date. Visiting medical students may apply for multiple electives, but approval is limited to one rotation per learner.

Applications packet must be complete to move forward in the review process.

- Corewell Health 2024-2025 Visiting International Student Application
- Personal statement of interest in the elective program and West Michigan
- Curriculum Vitae (CV) or resume
- Medical School Transcripts
- USMLE Step 1 and/or COMLEX Score Report (if taken)

For more information contact chwmedstudentscheduling@corewellhealth.org

| Corewell Health in West Michigan - 2024-2025 Block Schedule | | |
|---|--------------------------------|---------------------------------|
| Block 1 | Block 2 | Block 3 |
| July 1 - 26, 2024 | July 29 - August 23, 2024 | August 26 - September 20, 2024 |
| Block 4 | Block 5 | Block 6 |
| September 23 - October 18, 2024 | October 21 - November 15, 2024 | November 18 - December 13, 2024 |
| Block 7 | Block 8 | Block 9 |
| December 16 - January 10, 2025 | January 13 - February 7, 2025 | February 10 - March 7, 2025 |
| Block 10 | Block 11 | Block 12 |
| March 10 - April 4, 2025 | April 7 - May 2, 2025 | May 5 - May 30, 2025 |
| | Block 13 | |
| | June 2 - June 27, 2025 | |

EM 500 – Emergency Medicine

Location: Butterworth Hospital & Helen DeVos Children's Hospitals, Grand Rapids, Michigan **Prerequisites:** Completion of all required 3rd year clerkship rotations **Duration:** 4 Weeks

Description: Clinical exposure is provided during scheduled shifts in the emergency department during which students will have the opportunity to perform the initial evaluation of undifferentiated patients presenting for evaluation. Students will then present patients to a supervising attending or upper-level resident, followed by discussion of a management plan. Students will be asked to actively participate in following through on the components of the management plan.

Objectives: This elective introduces the principles, practice, and procedures of Emergency Medicine. Upon completion of this rotation, students will have acquired a basic approach to the undifferentiated patient, with an emphasis on identifying or excluding emergent and urgent conditions. They will have opportunities to increase their proficiency with many of the following procedures commonly carried out in the emergency department: starting peripheral IV lines, placing splints, suturing, I&D of soft tissue skin abscesses, pelvic examinations, placement of Foley catheters, and lumbar punctures; other procedures may be available on a less consistent basis. Guidance will be provided on how to perform a problem-focused history and physical, generate a differential diagnosis including urgent and emergent conditions, and then generate a management plan and follow through on this plan until appropriate final patient disposition has been made. Students will also gain an understanding of how the emergency department interacts with other departments and specialties. Student patient care will be supervised by Emergency physicians with a faculty appointment at Michigan State University College of Human Medicine.

Requirements: Students will have roughly 14 eight-hour shifts in the emergency department, split between Butterworth Adult Emergency Department and Helen DeVos Children's Emergency Department. All students will have at least one weekend off. Schedule requests are due at least one month prior to the start of the rotation. Additional requests and requests made after the deadline will be considered on an individual basis but are not guaranteed.

Conferences: Students will be expected to attend resident conference every Thursday morning. Specific details will be given to the students during the month of the rotation. Students will also be assigned selected reading from the CDEM web site, associated with SAEM. They will have additional conference time where they will review case scenarios associated with that reading. This will take place in small groups facilitated by an attending and upper level resident. Each session will be roughly two hours for a total of six hours during the month.

Orientation: The students' initial orientation to the emergency department will be scheduled on the first day of rotation. Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

Evaluation: Students will submit an evaluation from their institution at the beginning of the rotation that will be filled out at the end of the rotation by the clerkship director. It will be a composite of all evaluations of the student's performance during that month. Students will receive mid rotation feedback prior to completion of their official evaluation. A student letter of evaluation (SLoE) will also be completed by the clerkship director for use in residency applications. This will be completed within 7-10 days of completion of the rotation.

EM 550 – Emergency Medicine Ultrasound

Location: Butterworth Hospital, Grand Rapids, Michigan Department: Emergency Medicine Prerequisites: Completion of all 2nd year rotations Duration: 4 Weeks

Description: Emergency medicine ultrasound is widely used in both community and academic emergency departments. It is an essential skill for emergency physicians, allowing them to make life-saving decisions, improve patient safety, decrease length-of-stay, and guide invasive procedures.

In this elective, you will further develop your point-of-care ultrasound (POCUS) skills, receive didactic education, and technical skill mentoring from ultrasound fellowship-trained physicians, ultrasound fellow(s), and EM residents. You will receive hands-on department scanning with diverse exposure to patient populations and pathology, giving insight into how emergency physicians integrate this data to improve patient care.

To maximize this rotation, a four-week elective is recommended, but two-week requests will be considered. This rotation is available in August, September, October, November, January, and June with the possibility of accommodating other requests. Designed for 4th year medical students with a focus in emergency medicine, this rotation is open to individuals in other specialties seeking to enhance their ultrasound knowledge and skills.

Orientation: Prior to the start of the rotation you will receive an email with first day details, rotation schedule, required reading, and contact info for the ultrasound fellow(s) and faculty. The rotation will take place Monday through Friday with weekends off.

Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

Evaluation: Rotation evaluations can be submitted to the Ultrasound Clerkship Director for completion. A subspecialty SLOE can be requested for four-week rotations.

IR 500 – Interventional Radiology

Location: Butterworth Hospital, Grand Rapids, Michigan Specialty: Interventional Radiology-Integrated Prerequisites: USMLE Step 1 Score report required for both MD and DO candidates Duration: 4 Weeks

Description: The Interventional Radiology rotation at Corewell Health is a four-week rotation intended to give fourth year medical students broad exposure to Interventional Radiology. Medical students will gain an understanding of the scope of practice of IR as well as the appropriate indications, risks, benefits, and procedural skills associated with minimally invasive image-guided procedures. Medical students will be encouraged to participate in performing the breadth of procedures and given the opportunity to participate on our inpatient consult service.

Objectives:

- 1. Understanding vascular anatomy and pathophysiology.
- 2. Understanding the role of imaging guided intervention in patient care.
- 3. Understanding the indications, risks, benefits, and alternatives of the numerous interventional radiology procedures.
- 4. Learn the work up of inpatient consults and get involved in IR procedures.

Orientation: Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

RAD 500 – Diagnostic Radiology

Elective Location: Butterworth Hospital Specialty: Diagnostic Radiology-Prerequisites: *USMLE Step I is required for both DO and MD candidates. Duration: 4 Weeks

Description: The student will be exposed to all areas of diagnostic radiology including various types of special radiology procedures. The student will observe a variety of x-ray procedures to include: routine chest, extremities, skull, abdomen, barium enema, upper G.I., angiography, myelography, etc. Daily review and discussion of assigned teaching cases in radiology learning files. Rotation Schedule: The student will rotate through various departments including: general radiology, fluoroscopy, nuclear medicine, ultrasound, neuroradiology, emergency radiology (ER) and will report to a resident when available. When a resident is not available on the service, the student will report to an assigned attending. Each student will receive a schedule from the residency coordinator, one week prior to starting.

Conferences: Attendance is required at various radiology conferences. All conferences will be listed on the student's schedule. These usually occur on Tuesdays from 8 a.m. to 1 p.m. and Mondays, Wednesdays through Fridays from 12 p.m. to 1 p.m. There will be changes to accommodate Visiting Professors.

Objectives: The student will learn the proper use of diagnostic procedures in radiology. • The student will become familiar with the diagnostic radiology subspecialties. • The student will gain a broad knowledge of radiology literature. • The student will understand how the radiologist can help the clinician diagnose and treat disease. • The student will know the indications for various radiographic examination, their capabilities, and limitations. • The student will learn the indications for, and appropriate sequencing of, common radiological examinations. • The student will see how clinical information is used to choose the appropriate test, define how that test is performed and to interpret the results. • The student will learn what information is required on radiology request forms. • The student will learn some of the shortcomings (false positives and negatives) of diagnostic tests. • The student will learn the contraindications to certain radiological tests. • The student will learn appropriate patient preparation (bowel preps, hydrations, etc.) for certain tests. • The student will acquire a basic understanding of the methodology behind various imaging studies and how they are performed e.g. CT, GI series. • The student will see the role that image-guided biopsies and drainage procedure play in patient management. • The student will learn a standardized approach to reading plain chest and abdominal films. • The student will learn common presentations of common conditions on chest and abdominal plain films. • The student will see a variety of examples of disease presentations across imaging modalities. • The student will learn that radiology is best practiced as a "team approach" between radiologists and clinicians. • For students considering or planning to enter radiology, it is an opportunity to see what a career as a radiologist will be like.

Requirements: • "Quizzes for Students" at LearningRadiology.com • Weekly assigned readings from Squire's Fundamentals of Radiology (text supplied) with weekly quizzes • Completion of the Cost of Radiology & Radiation Safety Worksheets • Completion of the ACR Appropriateness Worksheet • Completion of supplied Procedure Checklist for Corewell Health • An interesting case presentation at the last Tuesday morning conference of the clerkship • Completion of the19 radiology cases on Aquifer (previously MedU)

Orientation: Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

Evaluation: Course is Pass/Fail. Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation. Faculty are encouraged to provide ongoing feedback throughout the elective rotations. Evaluations will also be based on attendance, completion of assignments, and case presentation.

NEURO 450 – Neurology

Location: Butterworth & Blodgett Hospitals and Outpatient Neurology Clinics at 25 MI & ICCB – Grand Rapids, MI Prerequisites: Required medicine clerkship *USMLE Step I is required for MD students. COMPLEX step 1 is required for DO students*

Duration: 4 Weeks

Description: The student will spend three weeks in the inpatient neurology setting under the direct supervision of faculty or neurology residents. The student will have the opportunity to work with the neurohospitalist service at Butterworth and Blodgett hospitals as well as the stroke service. If the student chooses, they may also spend 1 week with the neurocritical care service. The student will observe history taking and the neurological examination in this setting. The student will also have the opportunity to perform independent neurological histories and examinations under the supervision of the faculty or neurology resident. The student will participate in daily rounds on the patients on the neurology service. Imaging studies, cerebrospinal fluid analysis and other laboratory studies will be reviewed with the student as part of rounds. The student will spend 1 week in the outpatient neurology setting. The student will be assigned to a faculty neurologist of varying subspecialties including neuromuscular, movement disorders, behavioral neurology, headache, neuroimmunology, neurovascular and epilepsy. During this component of the elective, the student will observe history taking and examination techniques applicable to a variety of neurological diseases and conditions. The student will observe various neurodiagnostic tests which may include: neuropsychological evaluation, EMGs, and EEGs. CONFERENCES – The student will attend Morning Report during the inpatient portion of the rotation. The student will attend Neuroscience Grand Rounds as indicated on their calendar. The student will attend Thursday afternoon resident didactics.

Objectives:

- Recognize and perform the key components of a full neurological history
- Obtain a beginning proficiency in the basic neurological examination
- Apply knowledge of neuroanatomy to findings on the neurological examination.
- Communicate the neurological history and physical examination in an organized and meaningful manner, both orally and in the written form
- Become familiar with common neurological diseases and conditions and their diagnosis and management.
- Begin to formulate a differential diagnosis in patients with common neurological complaints.
- Understand the use of diagnostic imaging, laboratory tests and electrodiagnostic studies in common neurological diseases and conditions.
- Identify common neurological emergencies.
- Understand the multidisciplinary approach to inpatient and outpatient neurology services.
- Become familiar with how difficult news is communicated in a compassionate manner.

Requirements: During the entire rotation, the student will be expected to read about patients seen the previous day or in advance, as possible. Suggested resources for reading will be provided online or during the rotation. The student will perform at least one complete neurological examination under the supervision of a faculty neurologist or neurology resident. The student will receive constructive feedback on their examination skills. The student will make a history and physical examination presentation on at least one patient to the faculty neurologist. The presentation will be in both the oral and written formats. The student will receive constructive feedback on their communication skills. The student will make a short oral presentation on a neurological disease or condition that they observed during the rotation. This presentation will be made to the faculty neurologist and other members of the neurology team (residents, medical students, physician assistants, nurse practitioners).

Orientation: The student will receive a calendar with instructions, locations and contact information prior to the beginning of the rotation. Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

Evaluation: Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation. Faculty are encouraged to provide ongoing feedback throughout the elective rotations. Evaluations will include performance on the neurological examination, patient presentation skills and the oral presentation on a neurological disease or condition.

OB 500 – Obstetrics & Gynecology Sub-Internship

Elective Location: Butterworth Hospital, Grand Rapids, Michigan Prerequisites: Required OB/Gyn clerkship Additional Requirement: Academic Performance Letter of Recommendation Duration: 4 Weeks

Description: This is an internship-like clinical experience in Obstetrics and Gynecology and the student will function as an involved team member. It offers participation in the management of obstetrical and gynecological problems in the inpatient setting. Students have the opportunity to observe specialized OB/GYN procedures, to assist as assigned in labor and delivery and to follow the progress of their OB patients. Students will be involved with management of high risk OB patients. Students will also have the opportunity to assist in a variety of gynecological procedures, typically of their choosing and interest (when possible). These procedures will involve minor procedures to minimally invasive laparoscopic cases to more complex UroGyn and Oncology operations. The student is encouraged to attend weekly OB/GYN lectures and seminars. The rotation consists of one week of Obstetrics, one week of Night Float, one week of Gynecology and one week of either MFM or Oncology.

Schedule: The student is expected to round or see patients before morning report each day (begins at 6:45am) and then attend sign out (at 5:30pm). Each student will be required to take 5 nights (as part of the Night Float system) and 1 weekend call over the course of the rotation. All students will attend Wednesday conferences and participate in daily educational discussions at AM signout. A schedule of these activities (with a Google link) will be emailed to the student ahead of time.

Objectives:

- The student will gain in-depth experience in the management of obstetrical and gynecologic patients in a community hospital and clinic setting.
- The student will learn to recognize high risk and complex obstetrical patients.
- The student will have frequent exposure to common obstetrical and gynecological problems.
- The student will gain experience in the total care of postpartum patients.
- The student will take part in minor and complex GYN procedures, including Minimally Invasive, Oncology or UroGyn procedures.
- The student may also be exposed to High Risk Obstetrical Procedures through our MFM service.

Requirements: All Ob/Gyn electives require a power point presentation on a topic agreed upon between the student and supervising physician. This presentation should be approximately 15 minutes and will be given as part of Morning Educational Rounds during the last week of the rotation.

Orientation: The first day will serve as the student's orientation day. Each student will meet with the Clerkship Director, Dr. Lindsay Snyder and the Chief Ob and Gyn Residents. This will include a general orientation to our core services, expectations and introduction to our EMR, Epic. The exact time and location for each meeting will be given to the student the week prior to the start of the rotation. Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.

Evaluation: Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation based upon clinical performance. Faculty are encouraged to provide ongoing feedback throughout elective rotations.

Internal Medicine Department

- IM Elective Duration: 4 Weeks
- IM Prerequisites:
 - Required medicine clerkship. * Students who have not taken USMLE Step I are not eligible for IM electives. *
- IM Orientation:
 - Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.
- IM Evaluation:
 - Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation based upon clinical performance, completion of assigned/recommended reading assignments, and active involvement on the rotation. Faculty are encouraged to provide ongoing feedback throughout elective rotations.

IM 400 – Gastroenterology

Location: Butterworth Hospital, Grand Rapids, Michigan

Description: This elective will provide the student with experience and interpretation of G.I. radiographic procedures and performance of sigmoidoscopy. The student will have the opportunity to observe numerous diagnostic procedures. The student will be assigned patients with G.I. problems on whom they will perform clinical history and physical examination and develop diagnostic and treatment plans. These will be discussed with faculty members. Special emphasis will be given to history taking and knowledge of diagnostic procedures necessary to solve patient problems. Important diagnostic and therapeutic approaches to G.I. disease, including various physiologic study methods, will be discussed. The student is expected to read about G.I. physiology and pathophysiology from suggested sources.

Objectives: The student will develop basic clinical skills which are important for dealing with G.I. disease. Students will develop a greater knowledge for the use of special G.I. diagnostic procedures. Students will learn basic diagnostic and therapeutic approaches to common G.I. problems. The student will gain a better understanding of the pathophysiology of G.I. disease.

IM 425 – Infectious Disease

Location: Butterworth Hospital, Grand Rapids, Michigan

Description: The student will actively participate in the evaluation and management of patients with infectious disease problems. Emphasis will be placed on learning through active participation in infectious disease consultation and follow-up.

Objectives: 1.) The student will be exposed to the diagnostic and therapeutic approach to patients with presumed or actual infectious diseases. 2.) The student will know the commonly used antibiotics, including their pharmacology, Corewell, side effects, indications, and contraindications. 3.) Basic management principles of diagnosis and treatment of HIV.

IM 450 – Pulmonary Medicine

Location: Butterworth Hospital, Grand Rapids, Michigan **Subspecialty:** Pulmonary Disease

Description: This elective will provide the student an experience in the diagnosis and management of all types of pulmonary diseases, both acute and chronic areas. The major areas of study include respiratory failure, pulmonary physiology, diagnosis, and treatment of various chest diseases including chest trauma, obstructive airway disease and pneumonia. The student is expected to attend weekly medical chest conferences in addition to inpatient and outpatient experiences. This is an active service where the student has a wide variety of opportunities to be involved.

Objectives: • The student will learn to diagnose and treat common pulmonary diseases. • The student will be able to identify patients who may profit from seeking consultative assistance or special evaluations such as bronchoscopy or pulmonary function testing and will watch supervised treatment utilizing skilled personnel or equipment such as mechanical ventilators. • The student will have the opportunity to observe all common thoracic procedures and participate in a select group of these procedures. • The student will have the opportunity throughout the elective experience to see how the major pulmonary diseases are handled and managed

IM 475 – Inpatient Cardiology

Location: Butterworth Hospital, Grand Rapids, Michigan Subspecialty: Cardiovascular Disease

Description: This elective will offer students the opportunity to assist and observe in the care and management of cardiac patients. When possible, they will have the opportunity to watch swan ganz catheterization and, when available, cardiac catheterization. They will also observe and participate in noninvasive procedures done by staff cardiologists. Students will learn to perform a complete clinical evaluation and be able to discuss findings in detail with the faculty. Students will follow patients regularly in both inpatient and outpatient settings, will attend weekly conferences, and will do workups on a referral basis. The major emphasis will be on clinical skills of history taking and physical examination, management of patients with heart disease, and an understanding of normal and abnormal cardiac hemodynamics. Upon completion of the elective, the student should be able to differentiate normal and abnormal electrocardiograms.

Objectives: The student should be able to take a detailed cardiovascular history and perform a good cardiovascular physical examination. The student will be able to detect symptoms and physical findings of congestive heart failure, hypertensive ischemic and valvular heart disease, as well as cardiomyopathies The student will be introduced to concepts of cardiac hemodynamics as they are assessed in the coronary care unit and in the catheterization laboratory and should be able to correlate these findings with cardiac symptoms, physical findings and electrocardiograms. The student should be able to recognize enlargement of great vessels and heart chambers, and signs of pulmonary venous congestion. The student should be able to recognize the major electrocardiography abnormalities.

IM 500 – Internal Medicine Sub-Internship: Inpatient Wards

Location: Butterworth Hospital, Grand Rapids, Michigan

Description: The student will have the opportunity to participate in an intern-like role on one of the general medicine services. The student's responsibility will be similar to that of the first-year resident, except those orders must be countersigned by a senior resident. The student will work up patients, initiate their management, relate directly to admitting physicians and consultants, participate in rounds and conferences, and take call with the senior resident.

Objectives: • The student will increase his/her knowledge of Internal Medicine. • The student will be given the opportunity to have direct responsibility for patients (under supervision). • The student will develop skills in the accurate assessment of medical problems and patient management.

IM 550 – Internal Medicine ICU Sub-Internship

Location: Butterworth Hospital, Grand Rapids, Michigan **Subspecialty**: Critical Care Medicine

Description: The Medical Critical Care rotation for the medical student is an excellent opportunity to see, examine, discuss, and treat severely ill patients. The degree of knowledge and experience gained at the end of the rotation is directly related to the amount of effort the student puts into the rotation. Being available in the unit, working closely with the medical house staff, being willing to accept patients for evaluation and workup, looking up references regarding sicknesses their patients may have, attending the didactic lectures, staying after hours with the medical house staff, acquiring expert skills and diagnosis, and performing the procedures can be achieved with this rotation.

The student will attain competence at managing complicated general internal medicine patients in the inpatient setting. The student will attain the skills of an intern during this experience. Students function as an intern-equivalent on a critical care team and can perform procedures common to the critical care unit.

The Medical Critical Care rotation at Corewell Butterworth is a unique arrangement utilizing a team approach. Each month, a rotating team consisting of a pulmonologist and a cardiologist round together in the Intensive Care Unit with the assigned house staff and medical students. Patients may be under the direct control of this critical care team or may be seen on a consultation basis only. Special effort has been taken that the house staff rotating on a critical care service have primary responsibility for patient care procedures and record keeping, including patients' daily order writing. Other sub specialists who are available and are consulted frequently evaluate complicated medical problems outside the fields of Pulmonology and Cardiology. This core attending team is available at all times, 24 hours a day, and weekends.

Objectives: 1. Become proficient in the comprehensive evaluation/physical exam skills for critically ill hospitalized patients. 2. Be familiar with the interpretation of laboratory, procedural and diagnostic data as it relates to critically ill patients.

Requirements: Call is strongly suggested. Some evening and night shifts will most likely be required.

Pediatric Department

- **PED Elective Duration:** 4 Weeks
- **PED Elective Location:** Helen DeVos Children's Hospital, Grand Rapids, Michigan
- **PED Prerequisites:** Required Pediatric Clerkship
- PED Orientation:
 - Students will receive instructions from the Corewell Health Office of Medical Education to complete required hospital orientation online. They will receive Corewell Health network access as well as badge and parking details and rotation contact information approximately 2-3 weeks prior to the scheduled start date.
- PED Evaluation:
 - Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation based upon clinical performance, completion of assigned/recommended reading assignments, and active involvement on the rotation. Faculty are encouraged to provide ongoing feedback throughout elective rotations.

PED 425 – Pediatric Genetics

Specialty: Pediatrics/Medical Genetics

Description: 2–4-week outpatient and inpatient experience that will include opportunities to evaluate patients with known or suspected genetic conditions throughout a healthcare system. Genetics clinics occur throughout the week in a variety of locations throughout the Corewell Health campus in Grand Rapids. The student will typically be assigned to five half day clinics during the week. The student will have time for assigned reading, clinic preparation, patient care conferences, didactic sessions, independent learning projects, in addition to inpatient consultations. A schedule will be prepared in advance with customization, when possible, based on the student's career plans.

Objectives: • Recognize indications for outpatient and inpatient genetic evaluation, testing and counseling • Collect family histories, construct pedigrees and recognize patterns of inheritance • Identify key findings and differential diagnosis of common genetic conditions • Locate and utilize appropriate internet based genetic databases to facilitate self-learning and to improve patient care • Formulate genetic counseling plan for family • Interpret genetic test results

Evaluation: Written evaluation form will be completed by the preceptors at the end of the rotation. Ongoing feedback will be provided during the rotation. Evaluation will be based upon clinical performance, attendance and participation in all Pediatric Genetics clinical inpatient and outpatient activities.

PED 475 – Pediatric Infectious Disease

Description: The rotation is designed to provide the student experience in the assessment of a wide array of patients with infectious diseases issues. Patient care experience will occur primarily in the inpatient setting, including intensive care units, bone marrow transplant units, and inpatient floor with possible exposure to outpatient clinic including HIV clinic. Students will learn to succinctly write on infectious disease consults incorporating information about etiology, diagnosis and treatment. Major topics include Meningitis, Fever workup in immunocompromised patients and immunocompetent patients, Pneumonia, Pediatric HIV infections, Neonatal sepsis, Tuberculosis, Recurrent infections, and Bronchiolitis.

Course Materials: Infectious Disease, Travel Medicine, and Immunology textbooks are available in the ID office. Orientation materials will be available prior to the start of the rotation.

Evaluation: Written evaluation at the conclusion of the rotation as provided by the preceptor will be based upon quality of consultation notes, follow-up notes, case presentations, clinical performance, and understanding of the subject matter as demonstrated during rounds and discussion. Informal feedback will be given throughout the rotation. Students will also be provided an opportunity to evaluate the rotation at the conclusion. Informal feedback during the rotation is welcome.

PED 480 – Neonatology (NICU)

Sub-Specialty: Neonatal-Perinatal Medicine

Description: In this rotation the student will develop skills, shape attitudes and add to his/her knowledge of how to care for high risk infants. The student will have the opportunity for primary responsibility in the care and evaluation of infants admitted to intensive care. He or she will attend high risk deliveries and will perform physical exams on new admissions, make rounds with neonatologists, follow infants with special problems, etc. The student will receive teaching in basic physiological and pathological concepts necessary to develop an understanding of neonatal medicine.

Objectives: • The student will be able to assess a normal and a sick newborn. • The student will be able to interpret the difference between normal and abnormal diagnostic tests and determine the probable pathological significance of abnormal tests. • The student will note the principles of infant management and be able to write appropriate orders including feeding for the normal premature infant, for the infant who has problems of fluid and electrolyte balance, and the infant with respiratory problems, anemia, jaundice or bleeding. • The student will develop practical skills of managing high risk infants.

Evaluation: Preceptor(s) will be asked to submit a written evaluation at the conclusion of the rotation.

PED 490 – Pediatric ICU / Critical Care

Description: Acquire a working familiarity & knowledge of the pathophysiologic processes which lead to critical illnesses in pediatric age patients and the physiological basis of the treatment of these disease processes through clinical case experience and outside readings. Inpatient: 100% Responsibilities will include: • Daily teaching and work rounds with the multidisciplinary team: attending, fellow, Advanced APPs, residents, pharmacist, nutritionist, & other subspecialists • Initial evaluation of new inpatient consultations with development of a differential diagnosis and plan for evaluation and therapy staffed promptly with the resident/APP/fellow/attending • Taking responsibility for all aspects of their patients' care: review vital sign trends/labs/imaging, perform frequent patient assessments, and formula assessment and management plans • Complete daily progress notes for each patient • Participation with the residents and APPs in sign-out rounds • Attendance & participation in weekly pediatric Grand Rounds, didactic lectures, and Critical Care lectures • Reading on topics applicable to patients in PICU as well as general reading in pediatric critical care and physiology • Brief presentations on topics on a weekly basis which will be reviewed with the pediatric intensivist/fellow who is attending in the unit at that time

Objectives: • Participate in all aspects of intensive pediatric care including assessment, diagnosis, monitoring and intensive management of life-threatening illness. • Observe and assist when appropriate in support procedures: peripheral vascular access, arterial lines, central lines, intubation, chest tubes... • Learn how to present complex patients in an organized fashion (full system-based assessment) and begin to learn to synthesize a care plan from the available data.

Evaluation: Preceptors will give formative feedback during the rotation & submit evaluations upon completion. Students will be evaluated on quality of presentations, clinical performance, application of knowledge & display of interest in learning. Mid-rotation comments will be provided, and a written evaluation will be completed at the conclusion of the rotation.

PED 500 – Pediatric Sub-Internship

Description: Students taking this elective will function as intern equivalents, in terms of patient assignments and on call responsibilities. Supervision will be provided by supervising pediatric residents and attendings assigned to the inpatient service. The general pediatric elective provides exposure to the general pediatric inpatient unit, a wide variety of patient conditions/diagnoses, complex care patients, and post-operative management. Students will rotate with the house staff and have responsibility for initial data gathering, formulation of plans and ordering of laboratory tests, planning of therapy, and carrying out of inpatient medical procedures.

Objectives: The student will become familiar with: • The approach to diagnosis and management of an acutely ill and hospitalized child, with greater responsibility for critical thinking about the evaluation and management plan. • Appropriate use of laboratory, radiology, and other ancillary services. • Being responsible for ongoing updating of management plans for individual patients' critical review of the pediatric literature as it relates to patients assigned to you.

Evaluation: Preceptors will give formative feedback during the rotation & submit evaluations upon completion. Students will be evaluated on quality of presentations, clinical performance, application of knowledge, and display of interest in learning. Mid-rotation comments will be provided and a written evaluation at the conclusion of the Sub-I.