

# PEDIATRICS (PED)

## **PED 0104 - Neonatology**

### **Credit(s): 3-6 Credits**

M1 STUDENT The student will participate in Family Centered Bedside Rounds and teaching with physicians, nurses and family members. Pertinent issues of physiology, anatomy, pathology, biochemistry, psychology, clinical evaluation and clinical decision making will be discussed and demonstrated. Formal case conferences, mortality and morbidity conferences and journal club sessions will be available to the student from noon to 1pm each Monday M2 STUDENT The focus of the elective will be the function of a NICU team meeting the neonatal care support needs of high risk obstetric population. The student will attend high risk deliveries, perinatal consultations and participate in Family Centered Bedside Rounds with the neonatal care team. Pertinent issues of physiology, biochemistry, genetics, public health, and clinical management are discussed.

## **PED 0108 - Acting Like a Doctor**

### **Credit(s): 3 Credits (Repeatable for credit)**

Medical students face the great challenge of learning and becoming fluent in the language of medicine while simultaneously becoming aware of and comfortable with their nascent role as physicians. Either of these tasks is daunting: Acquiring a new language involves not just vocabulary and grammar but context and culture. Where do I use this language? What does it mean to speak these words with authority? How am I perceived when I use these words? Meanwhile, students are taking on the mantle of doctor and trying to figure out how they will be recognized in the world. Will this affect my relationships? Will it set me apart, or above, my patients, my friends, my family? How will I be perceived as a physician? These intellectual and affective challenges are remarkably like those faced by actors taking on a challenging role. The actor has to learn a script, understand its meaning, and appreciate how he or she will be perceived. They need to be aware of how they present themselves, not just to fellow actors, but to the wider public of paying audiences and critics. Actors also learn the crucial task of how to let go of a role once the play is over. Through readings, films, and interactive class exercises, Dr. Haller and Fr. Seibert will use techniques well known to actors to help prepare medical students for their role as doctors. Students will examine how physicians are viewed in popular culture, and they will be challenged to consider how they will create their persona as physicians. They will also be invited to explore techniques for how actors step out of roles when appropriate.

## **PED 0109 - Introduction to Developmental Disability Medicine**

### **Credit(s): 3 Credits (Repeatable for credit)**

The course will give medical students a better understanding of the clinician's role in and the interdisciplinary nature of diagnosing and providing care for children with developmental disabilities. The goal is to provide students with experiences that will prepare them for various careers in medicine and improve the care they provide for individuals with developmental disabilities. Students will have the opportunity to shadow multiple providers in the field, as well as gain personal experience with the patient population through both medical and non-medical activities.

## **PED 0111 - Phase Advocates (Promoting Health and Social Equity)**

### **Credit(s): 1-10 Credits (Repeatable for credit)**

PHASE Advocates will work with a team at the Danis Pediatrics Center at SSM Health Cardinal Glennon Children's Hospital to improve ways to effectively connect resource-insecure families to social resources. The advocates will work for one year providing resource need assessment, referrals to resources, and follow-up as needed. The health advocates will be trained on factors such as: social determinants of health, St. Louis resources, rapport building and shared-decision making to actively engage families. The goal of the health advocates is to empower families and enable Danis Pediatrics to further aid in the overall wellness of each child in a clinical setting. Students increased skill level will also help with quality improvement of the program for long-term sustainability.

## **PED 0112 - Research on Lysosomal Storage Diseases**

### **Credit(s): 1-20 Credits (Repeatable for credit)**

Study of lysosomal storage disorders (Mucopolysaccharidoses). Enzyme replacement therapy, stem cell therapy, study of phenotype (cardiomyopathy, bone disease, etc.)

## **PED 0113 - Modeling effects of inflammation during pregnancy**

### **Credit(s): 1-20 Credits (Repeatable for credit)**

Bench research projects include investigations into the effects of inflammation on pregnancy using a mouse model: the role of inflammation during pregnancy on development of heart disease in mothers and their babies using a mouse model; and effects of inflammation on hematopoiesis and innate immunity in cord blood cells.

## **PED 0114 - Effects of inflammation during pregnancy on mothers and babies**

### **Credit(s): 1-20 Credits (Repeatable for credit)**

Effects of inflammation in mother-infant pairs is studied through analysis of chorioamniotic membrane samples for inflammatory proteins, and enumeration of neutrophils and Th17 by flow cytometry.

## **PED 0115 - Basic science research opportunities in Pediatrics / Neonatology**

### **Credit(s): 1-20 Credits (Repeatable for credit)**

Dr. Koenig will match your basic science research interests with a professor in the Pediatrics Department.

## **PED 0116 - Clinical Research Opportunities in Pediatrics / Neonatology**

### **Credit(s): 1-20 Credits (Repeatable for credit)**

Dr. Koenig will match your clinical research interests with a professor in the Pediatrics Department.

## **PED 0301 - Pediatric Clerkship**

### **Credit(s): 6-8 Credits (Repeatable for credit)**

## **PED 0302 - Pediatrics Career Exploration**

### **Credit(s): 1-2 Credits (Repeatable for credit)**

This course may be used to register for Pediatrics career exploration The location of the experience may be at a SLU SOM affiliate or at another health care institution.

## **PED 0303 - Pediatrics self-designed Career Exploration**

### **Credit(s): 1-2 Credits (Repeatable for credit)**

This course may be used to register for Pediatrics career exploration The location of the experience may be at a SLU SOM affiliate or at another health care institution.

**PED 0304 - Introduction to Pediatric Emergency Medicine****Credit(s): 2-12 Credits** (Repeatable for credit)

This course will provide an introduction to and experience with the discipline of Emergency Medicine. Students will perform patient care under the supervision of attending and resident physicians in the context of the Emergency Department. They will work eight shifts in a variety of days, nights, and weekends. They will participate in initial evaluation, management, and disposition of a wide range of emergency conditions, and will learn procedural skills relevant to that management. We will try to honor 1 request for a day off, based on priorities. One or more of your shifts may be at one of our community hospital partners. You will be required to participate in didactics, classroom, simulation and online learning materials as scheduled. You are welcome to participate in journal club and other activities that the division may be involved in, but these are not required. (See student responsibilities and evaluation).

**PED 0305 - Pediatrics - Dermatology @ Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits****PED 0306 - Pediatrics - Developmental @ Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits****PED 0307 - Pediatrics - Emergency Medicine @ Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits****PED 0308 - Pediatrics - Sleep Medicine @ Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits****PED 0309 - Mercy Clinic Pediatrics****Credit(s): 1-4 Credits****PED 0404 - Neonatology III****Credit(s): 2-12 Credits**

An initial discussion with the course Director, Dr. Koenig, will assist in determining an appropriate pairing between student and mentor; the student will be assigned to an investigator in the Division of Neonatal Perinatal Medicine based on availability and with his/her approval. The student will work directly under the supervision of the investigator on a project chosen by the investigator and that is appropriate for the 4-6 week period of the elective. This elective will provide the student with the opportunity to be exposed to hypothesis formation and testing as well as to a variety of investigative approaches and techniques. The interested student must contact the course director and obtain prior approval before she/he may sign up for this elective. The student can contact Dr. Koenig at her office number or by email.

**PED 0405 - Pediatric Cardiology****Credit(s): 2-12 Credits**

The Elective involves active participation in outpatient clinics and inpatient rounds with ample supervision and teaching. Initial exposure to the interpretation of electrocardiograms and other noninvasive cardiac techniques such as Holter monitoring, exercise testing and echocardiograms exists. Opportunities to observe cardiac catheterization and interventional pediatric cardiology procedures are provided. The program can be tailored to the needs of the student by contacting the elective director two to three weeks prior to the elective period.

**PED 0406 - Pediatric Infectious Disease****Credit(s): 2-12 Credits**

The student physicians will help care for patients with a variety of infectious diseases in both the inpatient and outpatient setting.

**PED 0407 - Pediatric Endocrinology****Credit(s): 2-12 Credits**

This elective is designed to include broad clinical experience in pediatric endocrinology and diabetes. The student will have an opportunity to evaluate both patients admitted to Cardinal Glennon Children's Hospital and patients referred for consultation in the outpatient clinics. A conference to review referred patients, Endocrine and Diabetes team meetings, and a joint conference with the adult Endocrinology Division are held regularly.

**PED 0408 - Pediatric Hematology-Oncology****Credit(s): 2-12 Credits**

This elective emphasizes the inpatient and outpatient care of children with malignant disease and those with hematologic abnormalities. Included with patient care opportunities will be laboratory experience in interpretation of bone marrows and peripheral blood smears.

**PED 0409 - Pediatric Gastroenterology, Hepatology, and Nutrition****Credit(s): 2-12 Credits**

This elective emphasizes the evaluation and treatment of gastrointestinal and liver diseases in children and adolescents. Students will attend inpatient rounds daily, perform initial inpatient consults, and see outpatients in our clinic. Students will be exposed to aspects of nutrition including our Weekly Nutrition Support Rounds for all patients in parenteral nutrition. Students will be exposed to our Liver Transplant Program and multiple GI procedures including endoscopies, colonoscopies, and liver biopsies. The emphasis will be "hands-on" patient care and didactic teaching oriented towards patient care.

**PED 0410 - Developmental Behavioral Pediatrics****Credit(s): 2-12 Credits**

The student will participate in the pediatric screening and evaluation of children with developmental disabilities (developmental delay, intellectual disability, cerebral palsy, learning disabilities, attention deficit/hyperactivity disorder, autism, and communication disorders). Neurodevelopmental assessment, counseling/communication skills, and family dynamics are stressed.

**PED 0411 - Pediatric Nephrology****Credit(s): 2-12 Credits**

The goal of this elective will be to acquaint students with a variety of congenital and acquired renal diseases and their management. The student will be involved in the consultative management of all patients seen by the service in the hospital and pediatric patients receiving hemodialysis at SSM Cardinal Glennon Children's Hospital.

**PED 0412 - Pediatric Pulmonary Medicine****Credit(s): 2-12 Credits**

This elective for Year 4 medical students is effectively a sub-internship in Pediatric Pulmonary Medicine. The student will attend all rounds, conferences, and clinics in the division and will provide consultations and daily evaluations of inpatients on the Pulmonary Medicine service. The student will also have the opportunity to work in the pulmonary function laboratory and become familiar with this type of testing, and will attend bronchoscopies and learn the basics of bronchoscopy and airway anatomy.

**PED 0413 - Pediatric Emergency Medicine****Credit(s): 2-12 Credits**

Each student should receive reading which include concise and practical articles relating to frequent diagnostic problems seen in the ER at the beginning of the rotation. The student will receive a login and password and personal instructions on the use of EPIC. The year 4 medical student will be assigned appropriate patients to do initial assessment, develop a plan, follow through on management and necessary procedures (if felt appropriate for year 4 medical student) with on-site supervision, implementation of plans, etc., will only occur after presentation to a Pediatric Emergency Room attending, fellow, or senior pediatric resident. All patients will be seen/examined by an ER attending/Fellow. The attending physicians/Fellows who have supervised the students through the month will participate in a joint written evaluation. In addition, the student will take a closed book, examination at the end of the rotation. All questions will be from the literature contained in the material received at the beginning of the elective.

**PED 0414 - Ambulatory Pediatrics****Credit(s): 2-12 Credits**

Students evaluate and treat patients in the Danis Pediatrics primary care office at Cardinal Glennon Children's Medical Center. Students will have the option to schedule time in several additional areas including the Knights of Columbus Developmental Center, FACES - the Foreign Adoption Clinic and Educational Services Clinic, Weight Management Clinic, Fostering Healthy Children - a clinic focused on care for children entering foster care, and the normal newborn nursery at St. Mary's Health Center. Students may also schedule a visit to a community agency in conjunction with the CARE (Community Advocacy through Resident Education) program. The General Academic Pediatric faculty provide patient care supervision and one-on-one student education.

**PED 0415 - Clinical Medical Genetics****Credit(s): 2-12 Credits**

During your rotation, you will see patients both in the inpatient and outpatient settings. Our patients range in age from infants to adults. We see a wide variety of patients, including those with developmental delays, dysmorphic features, metabolic disorders, and known genetic conditions. You will learn to perform a dysmorphology examination. Additionally, you will learn to obtain a complete 3-4 generation pedigree and analyze it for genetic risk assessment. We will discuss a variety of genetic testing modalities and when each should be ordered. It is my hope that by the end of your rotation with genetics, you will have a better understanding of which patients should be referred to genetics.

**PED 0416 - Pediatric Primary Care Sports Medicine****Credit(s): 1 Credit**

The student will get experience in multiple sports medicine clinics staffed by primary care and orthopedic sports medicine specialists. There will be one day per week of didactic sessions and usually 2 half days per week for reading time with a core reading list published. There may be the opportunity to follow patients to the operating room to see their surgical repairs and to accompany faculty on sidelines for sporting events. Satisfactory completion of this elective may stimulate or confirm an interest in sports medicine in the student and be listed in the CV if eventual application for fellowship training is pursued.

**PED 0417 - Pediatric Dermatology****Credit(s): 1-12 Credits**

During the three week elective in Pediatric Dermatology, students will actively participate in the evaluation and management of patients with a wide range of cutaneous disease. Students are required to attend all scheduled clinics, conference and didactic sessions during the month and are required to prepare a written case report suitable to submit for publication.

**PED 0419 - Acting Like a Doctor****Credit(s): 3 Credits (Repeatable for credit)****PED 0420 - Primary Care Research****Credit(s): 3 Credits (Repeatable for credit)****PED 0423 - Pediatric Rheumatology****Credit(s): 1-12 Credits (Repeatable for credit)**

The student will have the opportunity to work with a pediatric rheumatologist and 3 medical/pediatric rheumatologists. The student will participate in the evaluation of children presenting primarily with musculoskeletal complaints, abnormal lab tests, and recurrent fevers. Time will mostly be spent in the outpatient setting with some exposure to inpatient consultations.

**PED 0424 - Pediatric International Health Care****Credit(s): 1-12 Credits (Repeatable for credit)**

Students will have the opportunity to rotate in the FACES clinic, a comprehensive, culturally and linguistically sensitive clinic dedicated to addressing the physical, developmental, and emotional health care needs of newly-arrived refugee children, first generation refugee children and international adoptees and participate in home visitation program.

**PED 0425 - Ambulatory Pediatrics with a Bioethics Concentration****Credit(s): 1-12 Credits (Repeatable for credit)**

This course will build on the ethics lessons already built into the medical student curriculum, assuming that students will already be familiar with the basic principles of healthcare ethics. This course will add an opportunity for students interested in bioethics to take those often didactic lessons and apply them in a clinical setting. The vast majority of hospital ethics providers are providers of medical and pastoral care in the hospital, using their clinical expertise to apply to ethics questions. Like most hospital ethicists, in this rotation, students will be involved in the day-to-day clinical work of the hospital provider, with the added emphasis on ethical reflection. The clinical practice of healthcare ethics requires the ability to do thoughtful literature review, perform an ethics consult, reflect on the ethical practice of medicine and participate in multidisciplinary discussions with others in the hospital. The goal of this course is to give medical students the opportunity to practice all of these different disciplines.

**PED 0426 - Pediatric and Adult Toxicology****Credit(s): 1-4 Credits** (Repeatable for credit)

The Medical Toxicology clinical service at Saint Louis University provides bedside consultation to both adults and children at SSM Health Saint Louis University Hospital and SSM Health Cardinal Glennon Children's Hospital. The rotation which can vary from a full month to self-designed electives varying in duration also includes 5 to 7 didactic lectures given by Dr. Scalzo, 4 to 5 educational field trips (Missouri Poison Center for poisoning intake calls; SLU Forensic & Environmental Toxicology Laboratory including a mini-lecture; Saint Louis Zoo Herpetarium tour including discussion of antivenoms and venomous snakes; the Hyperbaric Medicine Unit at St. Luke's Hospital and a tour of Monsanto's Agricultural Health Research Facility in Chesterfield, MO). Students round daily with Dr. Scalzo including voluntarily on weekends on all inpatient toxicology consultation patients in the intensive care units, floors and EDs as well as outpatients in the ambulatory care centers (SLUCare DOB or Glennon ACC) on rare occasions. The rotation includes a wide variety of toxic exposures and overdoses as well as forensic cases during the elective period. There were 21 new bedside toxicology consults during a recent 3 week elective period offering all the students adequate opportunity for clinical instruction and learning. Dr. Scalzo is on call 24/7/365 for medical toxicology consults but for after-hours calls, he will text students in the morning to alert them to new consults. The students are also included in the Toxicology Fellowship Didactics at Washington University (WU) School of Medicine and Barnes Hospital once a week for 4 hours on Thursdays with Dr. Scalzo who is adjunct faculty from SLU SOM for the WU Fellowship. Students also attend weekly Pediatric Emergency Medicine Fellows/Attending conferences with Dr. Scalzo every Tuesday from 1 to 3 PM. At this conference, students are encouraged to develop a toxicology topic of interest to them to present at the end of their elective rotation in the form of a 10 to 15 minute mini-lecture. This affords them the opportunity to participate in subspecialty education and learn a topic in greater depth. Dr. Scalzo closely mentors students on this lecture preparation.

**PED 0427 - Pediatric Family-Physician Conversations****Credit(s): 1-4 Credits** (Repeatable for credit)

The course is designed as a 2-week, online elective on Google Classroom, which incorporates students' prior clinical experiences, an introduction to motivational interviewing, and simulation opportunities to practice effective communication techniques so parents, guardians, patients and physicians can make informed decisions about a child's health.

**PED 0428 - Adolescent Medicine****Credit(s): 1-10 Credits** (Repeatable for credit)

Students will perform the initial consult and (if applicable) continue following adolescent patients hospitalized at Cardinal Glennon for whom adolescent medicine consult/co-management had been requested by the primary team. They will also participate in weekly multidisciplinary eating disorders rounds, as well as the weekly Eating Disorder Team meeting. Students will also see patients in the adolescent medicine clinic, as well (if schedule allows) the juvenile justice system, sports medicine clinic, university health center, substance abuse clinic, concussion clinic, GU clinic, weight management clinic, and Eating Disorder programs..

**PED 0499 - Pediatric Student Chief****Credit(s): 1-12 Credits**

Students selected to take this elective will serve as "Student Chiefs" at the beginning of the required clerkships. Week 1: The first week of the elective overlaps with the required, one-week orientation for students beginning their clerkships. During this week you would receive instruction in how to teach and provide feedback in the clinical setting. You will also be expected to help with general third year orientation week. Week 2: The following week, you will help the new third-year students make the transition from classroom to clinic. The clerkship director and the education coordinator for the clerkship will provide you with guidance in this area. For example, you may be asked to observe and provide feedback when students perform histories and physical exams, to provide guidance on written and oral case presentations, and other clerkship tasks. In general, your job is to help facilitate each student's successful entry into the clerkship. The clerkship director, will invite students to apply for participation in this elective.

**PED 0501 - Subinternship:General Floor Service at Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits** (Repeatable for credit)

The student functions as closely as possible to a true intern. This rotation helps students confirm specialty choices in many cases and serves as a "proving ground" to confirm they will be able to succeed in a housestaff position. The setting is a fully equipped and staffed children's hospital, also housing a pediatric residency and full-time medical school faculty. The student will be expected to do workups on new patients and subsequent following of these patients will usually result in a case load of 6-7 patients at a time. Patient selection will be coordinated by the senior resident on the inpatient team targeting common and representative general pediatric problems. By participating in attending rounds, the student will be exposed to the care of all patients on the team even though they are not directly responsible for their case. This will further assure their exposure in a four week period to many major and common pediatric problems.

**PED 0502 - Subinternship:Neonatology I at Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits** (Repeatable for credit)

The Student will function as a sub-intern, assuming the primary care of a limited number of high-risk neonatal patients under the direct supervision of a senior resident and neonatologist. Formal and informal discussions are incorporated into this course. This experience will afford the student an opportunity to learn the pathophysiology and basic approaches to the evaluation and management of certain diseases affecting neonates. A large number of critical medical and surgical issues will be encountered during this rotation. Communication skills with peers, attending physicians, and stressed families are of high priority. The educational setting is a 60 bed NICU. The student will keep a log of patients cared for during the rotation to make sure they are getting a comprehensive experience consistent with the stated objectives. Patient selection will be coordinated by the fellow and attending neonatologist on the inpatient team targeting the student's goals for this rotation. By participating in attending rounds, the student will be exposed to the care of all patients on the team and help develop their skills in team management.

**PED 0503 - Subinternship:Neonatology II at St. Mary's Health Center****Credit(s): 1-4 Credits** (Repeatable for credit)

The Student will function as a sub-intern, assuming the primary care of a limited number of high-risk and convalescing neonatal patients under the direct supervision of a senior resident and neonatologist. This experience will afford the student an opportunity to learn the pathophysiology and basic approaches to the evaluation and management of disease states affecting neonatal patients. General medical issues of critically ill patients; delivery room management, and the care of the normal newborn will be addressed. The transitional state of the normal newborn is emphasized. Communication skills with families with a sick newborn are stressed. Night call will be four times in three weeks. The educational setting is a 30 bed NICU, the Newborn Nursery and high-risk maternity service. These student will keep a log of patients cared for during the rotation to promote a comprehensive experience consistent with the stated objectives. The students will be evaluated by the attending neonatologist who is familiar with the goals and objectives of the subinternship. Patient care responsibilities will be coordinated by the senior resident on the inpatient team targeting the student's goals for this rotation. Participate in attending rounds, the student will learn about all patients on the team and help develop their skills in team management. Health Center First day of the rotation: Students should report to the NICU at St. Mary's Health Center at 7:30 am.

**PED 0504 - Subinternship:Pediatric ICU at Cardinal Glennon Children's Hospital****Credit(s): 1-4 Credits** (Repeatable for credit)

The M4 student will have evaluation and presentation responsibility for at least 1 and not more than 3 PICU patients at all times. For these patients, the M4 will collect and monitor data, evaluate patient condition, and present the patient on rounds in common with the assigned resident and attending physicians. Students will not be allowed to write or sign orders. Students will take call on a schedule to average one night in four. Students are encouraged to utilize call for educational experience and therefore may elect to modify their call schedule and remain "on call" on nights when activity in the PICU is particularly challenging. Note: Attending physicians are responsible for the care of critically-ill children. They are present in the PICU or immediately available 24 hours per day. Students and resident physicians participate in the care of patients at a level of responsibility individualized for particular patients and students/residents. Attending physicians are responsible for critical decision, evaluations and procedures. The M4 student will be assigned 1-2 patients per week, maintaining responsibility (with the attending and resident physicians) for 1-3 patients. The M4 will work closely with the assigned resident physician in the evaluation, management, and documentation of each patient's course. Patient selection will be targeted for common and representative ICU problems. Observation and understanding (not performance) of critical care procedures are appropriate goals. All members of the PICU Critical Care Service, including the M4, must be familiar with all patients in the PICU. All patients, therefore, serve as educational experience for the M4 who is considered intellectually involved and responsible for aspects of their care.

**PED 0901 - Pediatric Direct Patient Care****Credit(s): 1-12 Credits** (Repeatable for credit)

This course may be used to register for a Pediatrics elective. The elective experience must fulfill the requirements for a direct-patient care elective. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

**PED 0902 - Pediatric Non-Direct Patient Care****Credit(s): 1-12 Credits** (Repeatable for credit)**PED 0903 - Pediatric Research****Credit(s): 1-12 Credits** (Repeatable for credit)

This course may be used to register for a Pediatrics elective. The elective experience must fulfill the requirements for a research elective. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

**PED 0904 - Pediatric Senior Inquiry****Credit(s): 1-12 Credits** (Repeatable for credit)**PED 0905 - Pediatrics Teaching****Credit(s): 1-12 Credits** (Repeatable for credit)