

PEDIATRICS

Contact the Pediatrics CST Coordinator (<https://catalog.unmc.edu/medicine/curriculum/phase3/career-specialty-tracks/>) with scheduling questions unless a course administrator is specified for a course in the course description.

PEDS 710 PEDIATRIC PALLIATIVE CARE 4 Credit Hours

CLINICAL

Palliative care is an approach to care that improves the quality of life of pediatric patients and their families facing the challenges associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of distressing symptoms to include pain (inclusive of physical, psychosocial and spiritual). The learner will be exposed to the evidence-base of palliative care to include goals of care conversations, shared decision-making models, and advanced care planning; integrative and complementary medicine modalities; caregiver support; bereavement and staff debriefings; and end of life symptom management within an interdisciplinary team approach. This four-week rotation provides learners with a team-based, inclusive pediatric palliative care experience with attentiveness to individualizing the patient care and research/academic learning based on the learner's skills and interests (for example-medical students primarily interested in adult medicine are still warmly welcomed and the team will foster translating the learning into adult-health-models). Activities: Literature searches, readings, patient interaction, and journal club presentation. Rotations Offered: June, September, and December.

Prerequisite: Submission of a paragraph stating your interest in palliative medicine. Not open to visiting students.

Instructor: Dr. Patrick Lloyd

Typically Offered: FALL/SPR

Capacity: 1

PEDS 711 OUTPATIENT PEDIATRICS 4 Credit Hours

SUB-INTERN

This senior pediatric elective is an opportunity for medical students to receive hands-on experience in a wide variety of outpatient pediatric patients. Students will function as a sub-intern, evaluating and managing common outpatient pediatric diagnosis, conducting well-child visits, and educating patients and their caregivers. Rotations Offered: Each 4 weeks.

Prerequisite: By invitation only and matching in Pediatrics or Medicine Pediatrics. Not open to visiting students.

Instructor: Dr. Tina Scott Mordhorst, Dr. Hannah Donaldson, Dr. Natalie Fleming, and Dr. Shannon Godsil

Typically Offered: FALL/SPR

Capacity: 1

PEDS 713 COMMUNITY ENGAGEMENT IN PEDIATRIC MEDICINE ELECTIVE 4 Credit Hours

CLINICAL

The Community Engagement in Pediatric Medicine Elective is designed to provide senior medical students the opportunity to partner with pediatric faculty at UNMC, while also allowing exploration of clinical pediatric experiences at the University of Nebraska Medical Center and Children's Nebraska. This new course pairs experiences in traditional "phase 3" electives with structured mentorship, self-reflection, and exploration of community organizations serving underrepresented populations in the Omaha metropolitan area. Student's time will be divided between 4 primary activities: 1. The foundation of the course will be clinical experiences in traditional senior medical student Pediatrics rotations. Students will choose among: Inpatient sub-internship, PICU, NICU, pulmonology, cardiology, nephrology, neurology, gastroenterology, hematology/oncology, genetics metabolism, endocrinology and infectious disease. Approximately 60% of students' time will be in the traditional clinical setting. 2. Students will engage in structured mentorship with department faculty focused on career development, identifying areas of clinical and academic interest, and self-reflection. (Approximately 10% of students' time) 3. Traditional didactic teaching (approximately 10% of student's time) 4. Directed study-students will engage with community organizations that focus on health equity and underserved populations. Work will be largely independent study and reflective writing (Approximately 20% of students' time). Learning Objectives: 1. Define and complete an individualized learning plan in conjunction with their assigned program mentor. 2. Evaluate the impact of health disparities among pediatric patients from diverse backgrounds. 3. Reflect on the role of community organizations in supporting the needs of underserved and underrepresented populations. 4. Demonstrate successful completion of the specific objectives of their assigned clinical rotation. 5. Present a scholarly work product based on your clinical and non-clinical experiences at the completion of your rotation. Rotations Offered: August, September, October, November, and December.

Instructor: Dr. Nathan Gollehon

Typically Offered: FALL

Capacity: 1 per month (5 /year)

PEDS 714 STUDENTS AS EDUCATORS 4 Credit Hours

NON-CLINIC

Welcome to the Educators course at UNMC! This one-month elective course will help you understand the foundational elements of education theory, develop learner outcomes and assessment methods, refine your approach to common teaching practices, improve your ability to give feedback, and provide structure to explore a medical education topic of your choice. Sessions will predominantly be asynchronous with the exception of three live presentations. Assessment will be multifactorial including online discussion posts/replies, self-evaluation, peer-evaluation, and faculty evaluation with the focus on formative feedback and growth. Our goal is for learners to finish this course with new knowledge and skills as well as to form strong peer relationships with fellow educators!

Rotation Offered: March

Prerequisite: Not open to visiting students.

Instructor: Dr. Jason Burrows

Typically Offered: SPRING

Capacity: 10

PEDS 721 PEDIATRIC SPORTS MEDICINE 4 Credit Hours**CLINICAL**

This elective will include active involvement in the pediatric sports medicine clinic coupled with didactic conferences and independent learning for students to expand their musculoskeletal physical exam skills while learning about common pathologies in pediatrics that can impact sports participation. Rotations Offered: November and January. Rotation available upon request: August (even years only). Site: CHMC Sport's Medicine Clinic.

Prerequisite: Not open to visiting students.

Instructor: Dr. Natalie Ronshaugen

Typically Offered: FALL/SPR

Capacity: 1

PEDS 722 PEDIATRIC CARDIOLOGY AND CARDIOVASCULAR DISEASE 4 Credit Hours**CLINICAL**

This elective is intended for students desiring to further their knowledge of congenital heart disease. It should be especially useful for those who will practice pediatrics, family medicine, thoracic surgery or internal medicine. The student on Pediatric Cardiology spends time in the pediatric outpatient clinic with each of the several pediatric cardiologists on faculty. The average number of residents on the elective is two per month. There are over 1,200 outpatient visits to the pediatric cardiology clinic yearly, of which 480 patients are new. There is an average of 5 or 6 outpatient sessions per week with approximately 8 patients per session. The student sees the patient simultaneously with the staff cardiologist. The student on the elective will be required to research a cardiology topic in-depth and deliver a 20-minute oral presentation to the cardiology staff. Course Administrator: Priscilla Phillips, 402-955-4321, pphillips@childrensomaha.org. Rotations Offered: Each 4 weeks. Site: Cardiology Offices - 4th Floor Pavilion, Children's Hospital and Medical Center.

Prerequisite: Not open to visiting students.

Instructor: Dr. Jeff Robinson

Typically Offered: FALL/SPR

Capacity: 1

PEDS 723 PEDIATRIC PLASTIC SURGERY 4 Credit Hours**CLINICAL**

The purpose of this elective is to provide students with an overview of the breadth of pediatric plastic surgery. Many principles overlap with general plastic surgery education, but many are specific to age and congenital problems. Under the guidance of board-certified plastic surgeons, the student will see a broad spectrum of patient problems ranging in age from infant to young adulthood. Students will be expected to present to the team on a topic of their interest the last week of the rotation. Rotations Offered: Each 4 weeks.

Rotations Offered: Each 4 weeks.

Instructor: Dr. James Vargo

Typically Offered: FALL/SPR

Capacity: 1

PEDS 724 PEDIATRIC EMERGENCY MEDICINE SUB-I AMBULATORY 4 Credit Hours**SUB-INTERN**

This four-week elective will provide you with opportunities to assess, evaluate, and support patients and families in a pediatric emergency room or pediatric urgent care setting. Students will work with attending physicians to evaluate patients in the emergency room and urgent care centers. Students will be responsible for documentation and order entry. They will communicate to patients and families diagnostic findings and various treatment options that fit within their social and cultural context. Learning topics will be explored through assigned readings and teaching sessions. Course Administrator: Dr. Christian Oarhe, coarhe@childrensomaha.org. Rotations Offered: Each 4 weeks. Site: Pediatric Emergency Department/Urgent Care at Children's Hospital. Instructor: Dr. Christian Oarhe

Typically Offered: FALL/SPR

Capacity: 2

PEDS 725 PEDIATRIC CRITICAL CARE SUB-INTERNSHIP 4 Credit Hours**SUB-INTERN**

Senior pediatric elective is an opportunity for medical students to receive hand-on experience functioning as a sub-intern in the care of critically ill pediatric patients at Children's Hospital. This will be done under the guidance and supervision of the senior pediatric residents and attending physician. The student will be expected to take in-house night call. Weekly didactic sessions occur on Wednesday afternoons. Rotations Offered: Each 4 weeks.

Prerequisite: Not open to visiting students.

Instructor: Dr. Lindsay Blick

Typically Offered: FALL/SPR

Capacity: 1

PEDS 726 PEDIATRIC HEMATOLOGY ONCOLOGY AND BONE MARROW TRANSPLANTATION 4 Credit Hours**CLINICAL**

This elective in Pediatric Hematology/Oncology and Bone Marrow Transplantation will encompass the activities of the program at both the University of Nebraska Medical Center and at Children's Memorial Hospital and Medical Center-Omaha. One half of the month is spent at each location. During the UNMC/NM block you will round on BMT patients, see new Hematology/Oncology consults and participate in the Hem/Onc and BMT clinics. The block spent at CHMC is in the outpatient clinic. You will be asked to see new consults and to participate in outpatient activities. Students desiring to spend additional time can have the opportunity to participate in clinical and laboratory research or have in-depth involvement in the transplantation program. Rotations Offered: Each 4 weeks.

Prerequisite: Pre-arrangement with Dr. Josh Bies, jbies@childrensomaha.org.

Instructor: Dr. Josh Bies

Typically Offered: FALL/SPR

Capacity: 1

PEDS 728 NICU SUB-I 4 Credit Hours**SUB-INTERN**

At Nebraska medicine students will attend high risk deliveries complicated by prematurity, multiple gestation, meconium staining, congenital anomalies, and perinatal depression as well as routine cesarean sections. The goal is to provide students with exposure to neonatal resuscitation as outlined by the AAP and AHA. Students are expected to check out the NRP Guidelines and know the sequence of events that take place during resuscitation. Children's NICO will not include delivery attendance but will include managing all of the above issues. Students are expected to perform complete history and physicals including evaluation of the maternal obstetrical/medical history with subsequent development of a differential diagnosis, evaluation and treatment plan. Students will be involved in the daily evaluation, care and formulation of treatment plans of neonates in the NICU. This includes "work" rounds as well as formal rounds with the staff Neonatologist, House staff, and nursing staff during the week and weekends. The student will be exposed to many of the neonatal problems requiring NICU care, i.e., prematurity, respiratory distress, congenital anomalies, perinatal depression, anemia, significant hyperbilirubinemia, hypoglycemia, sepsis, etc. The student will also be exposed to some of the outcomes of neonatal intensive care. It is not recommended to take the advanced cardiac life support (ACLS) course during this sub-I. Rotations Offered: Each 4 weeks. Site: Neonatal ICU-Nebraska Medicine or Children's Hospital NICU.

Prerequisite: Not open to visiting students.

Instructor: Dr. Ann Anderson-Berry

Typically Offered: FALL/SPR

Capacity: 2

PEDS 729 PEDIATRIC ENDOCRINOLOGY 4 Credit Hours**CLINICAL**

This elective provides the student with experience in diagnostic problems of growth, pubertal development, thyroid dysfunction and adrenal disorders in both inpatient and outpatient settings. Further experiences can be gained in disturbances of carbohydrate metabolism. The student will be responsible for the daily care of inpatients, endocrine consultations, and implementation of tolerance tests with the supervision of the staff. Rotations Offered: Each 4 weeks. Site: Pediatric Endocrinology Clinic.

Prerequisite: Not open to visiting students.

Instructor: Dr. Monica Cabrera

Typically Offered: FALL/SPR

Capacity: 1

PEDS 730 PEDIATRIC GASTROENTEROLOGY 4 Credit Hours**CLINICAL**

The student will become broadly familiar with gastrointestinal pathophysiology in infants, children and adolescents; assist in evaluation of patients with gastrointestinal, hepatobiliary and nutritional disorder; participate in gastrointestinal procedures; and gain some expertise in interpretation of gastrointestinal histopathology. Students will learn to evaluate pediatric patients with chronic and infectious diarrhea, abdominal pain, constipation, malabsorption, inflammatory bowel disease, gastrointestinal infections, Hirschsprung's disease, neonatal cholestasis, growth failure, chronic vomiting and liver disease. Students will develop an understanding of gastrointestinal physiology and development. Basic principles of enteral and parenteral nutrition in Pediatrics will be reviewed. The student will participate in the care of both hospitalized and ambulatory patients at Children's Hospital and Outreach Clinics. The student may choose to emphasize inpatient and outpatient activities based upon his/her experiences and individual career goals and needs. Teaching rounds are performed on a daily basis. The medical student would work closely with pediatric house officers as well as the attending. No night call will be taken by the student. Rotations Offered: Each 4 weeks. Site: Children's GI Clinic-Jessie Coyer, jessie.coyer@unmc.edu.

Prerequisite: Not open to visiting students.

Instructor: Dr. Ruben Quiros

Typically Offered: FALL/SPR

Capacity: 1

PEDS 731 GENETICS AND METABOLIC DISEASE 4 Credit Hours**CLINICAL**

The student will be helped to develop skills in diagnosing, managing and counseling patients with inherited and acquired disorders of metabolism, genetic defects and congenital malformations. At the end of the rotation, the student should: be able to identify the more common pediatric syndromes and associations; be familiar with major etiologic categories of congenital anomalies; be adept at obtaining a family history (3rd generation pedigree); be familiar with the unique features of a dysmorphologic examination; understand the nature of non-directive counseling; know the major psychosocial, ethical, and legal implications of genetic testing and counseling; and present a short (10 minute) report and discussion of a genetic disorder, metabolic condition or congenital anomaly. Rotations Offered: Each 4 weeks.

Instructor: Dr. Lois Starr

Typically Offered: FALL/SPR

Capacity: 1

PEDS 732 PEDIATRIC PULMONOLOGY 4 Credit Hours**CLINICAL**

The Pediatric Pulmonology elective consists of four one-week blocks including inpatient care, outpatient care, procedures and a custom week. The student will work directly with the inpatient team to provide care and consults to patients with a variety of respiratory issues from asthma to CLD requiring trach/vent support to complicated pneumonia to cystic fibrosis. While in the clinic the student will work directly with the attending pulmonologist to evaluate and manage a variety of issues. The procedure week allows the student to participate in bronchoscopy in the OR, interpretation PFTs, sleep studies, ventilator manipulation and airway clearance techniques. During the custom week the student is allowed to design his/her own learning opportunity. Rotations Offered: Each 4 weeks.

Prerequisite: Pre-arrangement with Dr. Heather Thomas, hthomas@childrensomaha.org.
 Instructor: Dr. Heather Thomas
 Typically Offered: FALL/SPR
 Capacity: 1

PEDS 733 ALLERGY/IMMUNOLOGY 4 Credit Hours**CLINICAL**

This elective will include active involvement in patient care in the allergy/immunology clinic and inpatient setting (70%), lecture and didactics (15%), learning about diagnostic techniques in the Clinical Flow Cytometry Laboratory (10%), and independent learning (5%). Methods will include textbooks, journal articles and computer modules. Rotations Offered: Each 4 weeks.

Prerequisite: Pre-arrangement with Dr. Hana Niebur, hana.niebur@unmc.edu. Not open to visiting students.
 Instructor: Dr. Hana Niebur, Dr. Russell Hopp, and Dr. Joel Van De Graaff
 Typically Offered: FALL/SPR
 Capacity: 1

PEDS 734 CLINICAL PEDIATRIC NEUROLOGY 4 Credit Hours**CLINICAL**

This course offers students clinical pediatric neurology experience with specific focus on evaluation, diagnosis and treatment of the neurological diseases in children from conception to the adult state under close supervision of the faculty. The goal of this four-week elective is to provide the student with the clinical experience of evaluating children with neurological disorders and thereby acquire skills necessary to perform the pediatric neurologic exam and to develop a diagnostic and therapeutic approach to common neurologic problems in children. Rotations Offered: Each 4 weeks.

Instructor: Dr. Sookyong Koh
 Typically Offered: FALL/SPR
 Capacity: 1

PEDS 735 INFECTIOUS DISEASE SUB-I 4 Credit Hours**SUB-INTERN**

This elective provides the student with an opportunity for in-depth study of clinical and laboratory aspects of infections in children. Students will be expected to read a course syllabus and will be asked to compose a 10-15-minute PowerPoint presentation of a patient case and brief review of the literature that will be presented to ID staff at the end of the rotation. A rotating lecture series from different members of the staff of the division on high-yield infectious diseases topics is provided throughout the rotation. Students will learn to evaluate neonates, infants and children with a wide range of infectious diseases. This is primarily an inpatient experience with about 10% of patients seen in the outpatient clinic. Students are required to see all new consults initially with residents or fellows as available. The students perform a complete workup and assessment, then present their findings and recommendations to the attending physician on daily rounds. Students are responsible for monitoring all ongoing microbiology test/results. Students are required to do considerable outside reading on their patients' illnesses. A selected reading list is provided to all students in Canvas at the beginning of the rotation and students are responsible for all the material therein. Rotations Offered: Each 4 weeks.

Site: IHE - southeast corner of 2nd floor; contact LaTryce Anderson, laanderson@childrensomaha.org 1-week prior to rotation.

Instructor: Dr. Kari Neemann
 Typically Offered: FALL/SPR
 Capacity: 2

PEDS 737 PEDIATRIC RHEUMATOLOGY 4 Credit Hours**CLINICAL**

The purpose of this elective is to provide students with practical experience in pediatric rheumatology. The experience gained through this elective will enable the student to diagnose and manage pediatric patients with rheumatologic disorders in primarily an outpatient setting although students will be involved in select inpatient consults. Under the guidance of a board-certified rheumatologist, the student will see a broad spectrum of patient problems ranging in age from toddler to young adulthood. Students will be expected to present a topic of their interest once during the rotation to promote independent learning and discussion with the pediatric rheumatology team. Rotations Offered: Each 4 weeks.

Prerequisite: Not open to visiting students.
 Instructor: Adam Reinhardt, MD and Daniel Reiff, MD
 Typically Offered: FALL/SPR
 Capacity: 1

PEDS 741 PEDIATRIC GLOBAL HEALTH CLINICAL ELECTIVE 4 Credit Hours**CLINICAL**

The UNMC Pediatric Global Health Clinical Elective provides medical students the opportunity to gain insight into pediatric healthcare delivery during a 4-week rotation in a low- and middle-income country. Course objectives may vary according to sites where students travel to, however, all rotations will explore the relationship between health and the social determinants of health, major causes of morbidity and mortality in the areas students are working as well as an exploration of the healthcare delivery strategies in that setting. Rotations Offered: Each 4 weeks.

Prerequisite: Pre-arrangement with Dr. Shirley Delair and Sarah Pirtle (Office of Global Engagement), and an approved Away Rotation Application. Not open to visiting students.
 Instructor: Dr. Shirley Delair
 Typically Offered: FALL/SPR
 Capacity: Variable

PEDS 742 PEDIATRIC NEPHROLOGY 4 Credit Hours**CLINICAL**

The student will become familiar with pediatric aspects of genito-urinary tract disease; specifically: medical management of congenital renal or G-U anomalies; acute and chronic urinary tract infections; evaluation of asymptomatic proteinuria and hematuria including urine sediment examination; evaluation and therapy of hypertension; medical management of acute or chronic renal failure including dialysis; and management of acute or chronic glomerulonephritis. The medical student will receive journal articles regarding common pediatric nephrology problems. Reading of pertinent sections of current pediatric textbooks is also recommended. Independent research and reading regarding nephrology patient problems will be expected. Rotations Offered: Each 4 weeks.

Instructor: Dr. Veronica Taylor

Typically Offered: FALL/SPR

Capacity: 1

PEDS 743 CARE OF THE MEDICALLY COMPLEX PEDIATRIC PATIENT 4 Credit Hours**SUB-INTERN**

The pediatric complex care sub-internship is an opportunity for medical students to receive training in the care for pediatric patients with complex care needs across the care spectrum from inpatient rehabilitation, to long term care, clinic, and community engagement. Students will function as a sub-intern, evaluating and managing common diagnoses in medically complex patients as well as common pediatric problems, and educating patients and their caregivers. Rotations Offered: Each 4 weeks. Sites: Madonna and Ambassador.

Instructor: Dr. Chelsea Bloom

Typically Offered: FALL/SPR

Capacity: 1

PEDS 750 HONORS PEDIATRICS 4 Credit Hours**NON-CLINIC**

The purpose of this rotation is to engage the student interested in pediatric medicine in a variety of activities that will improve the student's ability to evaluate pediatric problems and formulate a thorough problem list, differential diagnosis for each problem, and a logical management plan. The student will gain experience that will prepare them for a pediatric residency. This rotation is geared toward self-learning and improving one's ability to think critically. Activities will include small group case-based learning as well as individual assignments including a short group presentation and reflection paper. Rotations Offered: November and March.

Prerequisite: Reserved for students who are planning to Match in Pediatrics or Medicine/Pediatrics. Not open to visiting students.

Instructor: Dr. Matt Authenment

Typically Offered: FALL/SPR

Capacity: 4

PEDS 751 PEDIATRICS SUB-INTERNSHIP (WARDS) 4 Credit Hours**SUB-INTERN**

This senior pediatric elective is an opportunity for medical students to receive hands-on experience in a wide variety of hospitalized pediatric patients. The student will learn how to assess, diagnosis, and create a management plan for acutely ill children, managing day-to-day advancements in care, and safely discharging hospitalized patients. This includes working with a multidisciplinary team to deliver high quality care. Students are expected to develop skills in communication and triage as the primary contact for nursing staff, consultants, or other medical team members as well as present patients on rounds or admission, document notes as part of the official medical record, place orders in the EMR, and safely hand off patients to the incoming medical team. The sub-intern may have the opportunity to supervise junior clerks on the wards. Curriculum will support students in developing individual learning goals and plans to foster success during this rotation and build skills to support being a life-long learner. Rotations Offered: Each 4 weeks.

Prerequisite: By invitation only and matching in Pediatrics or Medicine/Pediatrics. Not open to visiting students.

Instructor: Dr. Katherine Mackrell (UNMC) and Dr. Jason Burrows (CHMC)

Typically Offered: FALL/SPR

Capacity: 3

PEDS 760 PEDIATRICS AWAY CLINICAL 4 Credit Hours**SUB-INTERN**

A rotation at another educational institution requiring entry through third-party application platforms (e.g., VSLO), often associated with an outside academic institution or residency program. Rotations Offered: Each 4 weeks.

Prerequisite: An approved Away Rotation Application. Not open to visiting students.

Typically Offered: FALL/SPR

Capacity: Variable

PEDS 761 PEDIATRICS AWAY NON-CLINICAL 4 Credit Hours**NON-CLINIC**

A rotation at another educational institution requiring entry through third-party application platforms (e.g., VSLO), often associated with an outside academic institution or residency program. Rotations Offered: Each 4 weeks.

Prerequisite: An approved Away Rotation Application. Not open to visiting students.

Typically Offered: FALL/SPR

Capacity: Variable

PEDS 764 PEDIATRICS OFF-CAMPUS PRECEPTORSHIP 4 Credit Hours**SUB-INTERN**

A pre-arranged rotation occurring under the supervision of volunteer faculty not accessed through a third-party application platform, usually at a regional private clinic within the state of Nebraska. Rotations Offered: Each 4 weeks.

Prerequisite: An approved Off-Campus Preceptorship Application. Student's must receive approval from preceptor themselves before signing up for rotation. Preceptors must agree to become volunteer faculty.

Typically Offered: FALL/SPR

Capacity: Variable

PEDS 796 PEDIATRIC RESEARCH 4 Credit Hours

NON-CLINIC

A student interested in participating in an ongoing active research area within the Department of Pediatrics may arrange with the appropriate faculty to devote an elective month to laboratory investigation. By registering for the Pediatric Research elective and a related clinical subspecialty elective in consecutive months, the student could arrange a flexible program permitting simultaneously enrolling for a graduate level course in a related basic science subject. Rotations Offered: Each 4 weeks.

Prerequisite: Not open to visiting students. Students must have documentation of an identified mentor prior to signing up (email from mentor is fine).

Typically Offered: FALL/SPR

Capacity: Variable