Pediatric News
An electronic newsletter from the Department of Pediatrics

May 2015

Research in Pediatrics

Faculty in the Department of Pediatrics perform a wide range of research activities to advance our knowledge about childhood diseases. The research includes basic laboratory studies; disease discovery; characterizing the complications, variation and natural history of diseases; developing new approaches to diagnose genetic and developmental disorders; testing new therapeutic drugs and investigating innovative methods to teach pediatrics to students and residents. These research efforts involve virtually all divisions in the Department and approximately 60 faculty members. In 2014, pediatric faculty helped advance pediatric medicine by publishing 91 papers, 43 abstracts and 7 book chapters.

Considering clinical research studies alone, the pace of research in pediatrics has increased 10-fold since 2008. Currently, we have more than 200 open IRB-approved clinical research protocols and expend almost $8 million on pediatric research. Much of the growth in pediatric research has been a direct result of the affiliation between UNMC and Children's Hospital & Medical Center, which consolidated pediatric research and clinical practice in the Department. UNMC provides key basic science core laboratories and investigators who support some of our most innovative clinical research programs. This collaboration between basic scientists and clinicians is critical for pushing the boundaries of pediatric medicine.

All studies involving children are reviewed for safety and ethical conduct before being approved by the Pediatric Institutional Review Board (IRB) headed by Dr. Bruce Gordon.

The Pediatric Research Committee advises the Department on research activities and offers seed money for internal grants to pediatric investigators. Since 2011, 25 Pediatric Research Grants have been awarded to our faculty and trainees for a total $460,000. Research results are presented at the annual Pediatric Research Forum in May.

Pediatric Research Office

In This Issue

Pediatric Research Office
Honors Capstone Presentations

Upcoming Events
May 14-15
Pediatric Research Forum
Children's Hospital & Medical Center

May 18 | 12:00 PM
Review of Pediatric Scholarship
University Tower 5151

May 28 | 7:00 AM
Pediatric Faculty Meeting
UNMC Private Dining Rm

Journal Club
May 13 | 12:00 PM
Dr. Emily Bendlin
University Tower 7412

Patient Mgmt Conf.
May 5 | 8:00 AM
Dr. Gwenn Skar
University Tower 7412

May 12 | 8:00 AM
Dr. Karisa Hajek
University Tower 7412

May 19 | 8:00 AM
Dr. Jon Kroenke
University Tower 7412

May 26 | 8:00 AM
Dr. Cody Heston
University Tower 7412
The tremendous growth in pediatric research was jumpstarted by the establishment of the Pediatric Research Office (PRO) in 2007, which facilitates clinical research involving children. Last year the PRO was involved at various levels with more than 150 protocols. The PRO is managed by Program Coordinator Melanie Schrack along with a cadre of research nurses and clinical coordinators. The PRO negotiates grant and contract budgets, executes clinical research studies and coordinates regulatory issues related to research.

Research Personnel in the PRO include:

- William B. Rizzo, MD, PRO Medical Director
- Melanie Schrack, Program Coordinator

PRO personnel include:

- Machelle Dawson, Research Nurse Coordinator (Critical Care, Pediatric Surgery, ID)
- Angela Boettner, Research Nurse Coordinator (Hematology, Oncology)
- Kym Abraham, Research Nurse Coordinator (ID, Rheumatology, GI, Ophthalmology)
- Carolyn Chamberlain, Research Nurse Coordinator (Ophthalmology, Cardiology, Hematology)
- Rachel Cooper, Research Coordinator (Metabolism)/Research Finance Specialist
- Jennifer Goodwin, Research Coordinator (Genetics, ID)
- Sara Jones, Research Coordinator (Metabolism, STAIR Consortium)
- Sara Warta, Research Nurse Coordinator (Cardiology)
- Nancy Ambrose, Support Staff

Research Coordinators focus in specific specialty areas allowing for continuity of services and knowledge. They also provide cross coverage for each other, supporting studies in all areas, to distribute the workload as needed. In 2014, PRO Coordinators supported special initiatives in Bone Metabolism and Ophthalmology. For Bone Metabolism, these efforts helped the Osteogenesis Imperfecta (OI) Clinic gain an OI Foundation site designation. In Ophthalmology, these efforts have supported participation in the Pediatric Eye Disease Investigators Group (PEDIG), a national, NIH funded consortium, offering multiple ongoing research protocols for pediatric eye disorders. Two PRO coordinators are PEDIG trained and certified. Additional major research efforts were directed at the study of infectious diseases in Nigeria; an NIH-funded Rare Disease Clinical Research Consortium to investigate diseases of sterol and isoprenoid metabolism; and our federally funded CityMatch program on population health.

Owing to the extensive growth in pediatric research in the Department, plans are shaping up to establish a Pediatric Research Institute with the aim to bring pediatric research in the department to a national level over the coming years. Stay tuned!
Pediatric Honors Students Present Projects

During the 2014-2015 academic year, a new program was started for students who expressed interest in pursuing a career in pediatrics or medicine/pediatrics. During their junior year, students applied to the program. As part of the initial cohort, 12 students were chosen. They had monthly sessions and were paired with a mentor to conduct a research project. These projects were presented on April 8, 2015.

The following students participated in the program this year. The title of their research and where they will be completing their residency are also listed.

- Jenna Allison matched into Pediatrics at UNMC/Children's Hospital/CUMC Program. She presented "Morphological differentiation of human neuroblastoma cells: An analysis and comparison of retinoic acid and carfilzomib".
- Whitney Bossert matched into Pediatrics at UNMC/Children's Hospital/CUMC Program. She presented "Enhancement of the pediatric clerkship inpatient rotation through tablet technology".
- Hayley Faber matched into Pediatrics at the Grand Rapids Medical Education Center, Grand Rapids, Michigan. She presented "Early Vitamin K deficiency bleeding in a neonate manifested as pulmonary hemorrhage".
- Katie Kenealy matched into Pediatrics at the University of Utah. Her talk was entitled "Exploration of literature in pediatrics: A book club curriculum".
- Katherine MacKrell matched into Pediatrics at St. Louis University. She presented "Pediatric congenital anomalies: Superstition, prejudice, and the evolution of treatment".
- Cameron Malone matched into Medicine/Pediatrics at the Medical College of Wisconsin. He presented "Effect of obesity on the 6 minute walk test".
- Sarah Marsicek matched into Pediatrics at All Childrens Hospital in St. Petersburg, Florida. She talked about "Long-term consequences of asparaginase treatment: A case report".
- Aleisha Menning matched into Pediatrics at UNMC/Children's Hospital/CUMC Program. She presented "An unusual presentation of leptomeningeal lipoma: Clinical, radiographic, and pathology correlation".
- Patrick Passarelli matched into Medicine/Pediatrics at the University of California San Diego. He presented "Panic attacks in 16-year-old HIV-infected girl with high Efavirenz serum concentration".
- Katheryn Paulsen matched into Pediatrics at the Virginia Commonwealth University in Richmond, Virginia. She presented "Investigation of surgical antimicrobial prophylaxis in hospitalized patients receiving antimicrobial therapy".
- Andrew Prososki matched into Family Medicine in the UNMC Kearney program. He presented "Long term HbA1c's on insulin pump therapy".
- David Synhorst matched into Pediatrics at the Grand Rapids Medical Education Center, Grand Rapids, Michigan.
The Department of Pediatrics would like to congratulate all of our honors participants again. A big thanks goes to all of the faculty mentors who worked so closely with these students.