TRAINING PROGRAMS IN PEDIATRIC CLINICAL PHARMACOLOGY:

INDIANA

Indiana University Department of Medicine
Division of Clinical Pharmacology
Pediatric Clinical Pharmacology Fellowship

There are three main components to the Indiana University Postdoctoral Research Training in Pediatric Clinical and Developmental Pharmacology Program: 1) completion of a two to three year formal didactic curriculum, at the end of which the trainee may receive a master's degree in clinical research; 2) organized pediatric participation in a personalized therapeutics seminar series and weekly journal club; and 3) active involvement in pediatric therapeutics research under the mentorship of one of the faculty members associated with the program. The program faculty selects trainees for the 2 to 3 year program based on their potential as clinician scientists from candidates with MD or MD/PhD degrees who qualify for primary specialty certification. Those who complete the program will develop core competencies in clinical and translational research methods, biostatistics, clinical trials, research ethics, scientific writing, and grant writing. They will also be provided with a structured research mentoring program with an explicit timeline and benchmarks. In depth training focusing on pharmacokinetics, pharmacogenomics, drug development, individualized therapeutics, and clinical trial design is included in a didactic lecture series required of all trainees. For additional information see: http://medicine.iupui.edu/clinpharm/fellowship/available/pediatrics/

Contact: Zeruesenay Desta, PhD, Division Chief, Phone: (317) 274-2823, Email: zdesta@iu.edu

MISSOURI

Children Mercy Hospital and Clinics, Kansas City, MO
Division of Clinical Pharmacology and Therapeutic Innovation
Pediatric Clinical Pharmacology Fellowship Program

Fellows will complete a core curriculum that includes instruction in a variety of areas including developmental pharmacokinetics, pharmacogenomics and early phase clinical trial design and execution. The program is accredited by the American Board of Clinical Pharmacology and encourages research with the involvement of pediatric subspecialist physicians, other health care professionals, and biomedical scientists committed to the evaluation of drugs in children. In 2012, a new pediatric clinical research unit opened, giving fellows access to state-of-the-art facilities for research and clinical trials. For additional information see: https://www.childrensmercy.org/ClinPharmFellowship/

Program Director: Susan Abdel-Rahman, PharmD, (816) 855-1759

NORTH CAROLINA

University of North Carolina-Duke Collaborative Clinical Pharmacology T32 Postdoctoral Training Program

The UNC-Duke Collaborative Clinical Pharmacology T32 Postdoctoral Training Program is a collaboration between the University of North Carolina at Chapel Hill, Duke University, and the Hamner Institute for Drug Safety Sciences to prepare clinician-scientists to become leaders in clinical pharmacology research. This two-year program meets the fellowship training expectations set forth by the American Board of Clinical Pharmacology and is a registered member of ABCP. We anticipate that 80 percent of our graduates will obtain board certification in clinical pharmacology.
Clinical pharmacology, in the broadest sense, encompasses drug discovery, clinical development, regulatory issues, therapeutic use and individualization of drug therapy, optimization of drug dosage regimens, an understanding of drug-induced toxicity, and measures to prevent or minimize adverse effects of drugs. This program will include both didactic and experiential training, with an emphasis in one of the following core research focus areas:

- Drug disposition and action
- Pharmacogenomics
- Drug-induced organ toxicity
- Quantitative pharmacology and clinical trial design

Training will be provided in the methodology and conduct of basic and clinical research necessary to investigate the effects and mechanisms of drug actions in humans. For additional information visit: https://pharmacy.unc.edu/academics/fellowships/unc-duke-collaborative-clinical-pharmacology-t32-postdoctoral-training-program/

Contact: Kristen Leysieffer, 919-843-6144 (kleysief@email.unc.edu).

**OHIO**

Cincinnati Children’s Hospital Medical Center and the University of Cincinnati, College of Medicine
Division of Clinical Pharmacology
Fellowship in Clinical Pharmacology

The expected duration of training is two years with an optional third-year for selected fellows, and incorporates a core comprehensive training curriculum in the foundations of clinical pharmacology, pharmacogenetics, and pharmacometrics with a focus on individualized pediatric therapeutics. The program will implement a rigorous, highly structured, and mentored clinical scholar program in pharmacology-related research that is broad, cross-disciplinary and focused on clinical pharmacology and experimental therapeutics. In addition to participation in the core program curriculum, enrollees will select an academic focus area related to pediatric pharmacology and predictive translational medicine for mentored career training. Current focus areas include clinical and developmental pharmacology, population PK/PD modeling and simulation, pharmacometrics, pediatric clinical trial design, pharmacogenetics and pharmacogenomics, and Bayesian approaches to precision dosing. Fellowship training includes a diverse set of experiences in research, clinical service, program development, teaching/mentorship, and consultation as outlined in the core training elements overview, goals and objectives and sample curriculum. For additional details, visit: http://www.cincinnatichildrens.org/education/clinical/fellowship/pharmacology/default/

Program Director: Alexander A. Vinks, PharmD, PhD, FCP, Phone: 513-636-5833, Email: holly.ward@cchmc.org.

**Pennsylvania**

Thomas Jefferson University Sidney Kimmel Medical College
Department of Pharmacology and Experimental Therapeutics
Fellowship Program in Clinical Pharmacology

The Department of Pharmacology and Experimental Therapeutics has offered an NIH-sponsored fellowship program in Clinical Pharmacology since 1995. A dedicated track in Pediatric Clinical Pharmacology was established in 2010 in conjunction with A.I Dupont Hospital for Children. The program is accredited by the American Board of Clinical Pharmacology. The program combines formal didactic training in basic and clinical pharmacology and research methodologies with hands-on experience in laboratory research and human clinical trials. The overall goals of the program are to integrate training in the general methodologies, concepts, and approaches of basic and clinical pharmacology and in hypothesis-driven basic and clinical research to produce investigators who can establish competitive basic, translational, and/or clinical research programs and bridge the gap between the laboratory and the patient. Programs are individually tailored to the trainee’s professional interests and goals. The expected duration of training is two or three years. For additional details visit: http://www.jefferson.edu/university/jmc/departments/pharmacology/education/fellowship.html
INTERNATIONAL

Global Research in Paediatrics (GRiP)
Master of Science in Paediatric Medicines Development and Evaluation

Coordinating University:
University of Rome “Tor Vergata” School of Paediatrics in collaboration with the Children’s Hospital Bambino Gesù and the EU Project Global Research in Paediatrics (GRiP).

The MSc program on Paediatric Medicines Development and Evaluation is a two-year program with 60 European Credit Transfer and Accumulation System (ECTS) credits awarded by the University of Rome Tor Vergata. The program is based on ten modules to be taken in a sequenced manner. Almost all theoretical education is offered online through the GRiP Virtual Learning Environment. Students are required to attend face-to-face lessons during the Freshers’ and Re-Freshers’ meetings and during their work placement and/or training stages.

For details regarding syllabus, selection criteria, registration and fees, please visit: http://www.grip-network.org/index.php/cms/en/master_paediatric_medicines#top

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