

Clinical Pharmacology Training Network (CPTN)



Eunice Kennedy Shriver National Institute
of Child Health and Human Development

Best Pharmaceuticals for Children Act (BPCA)



Formally known as

Pediatric Clinical and Developmental Pharmacology Training Network (PCDPTN)

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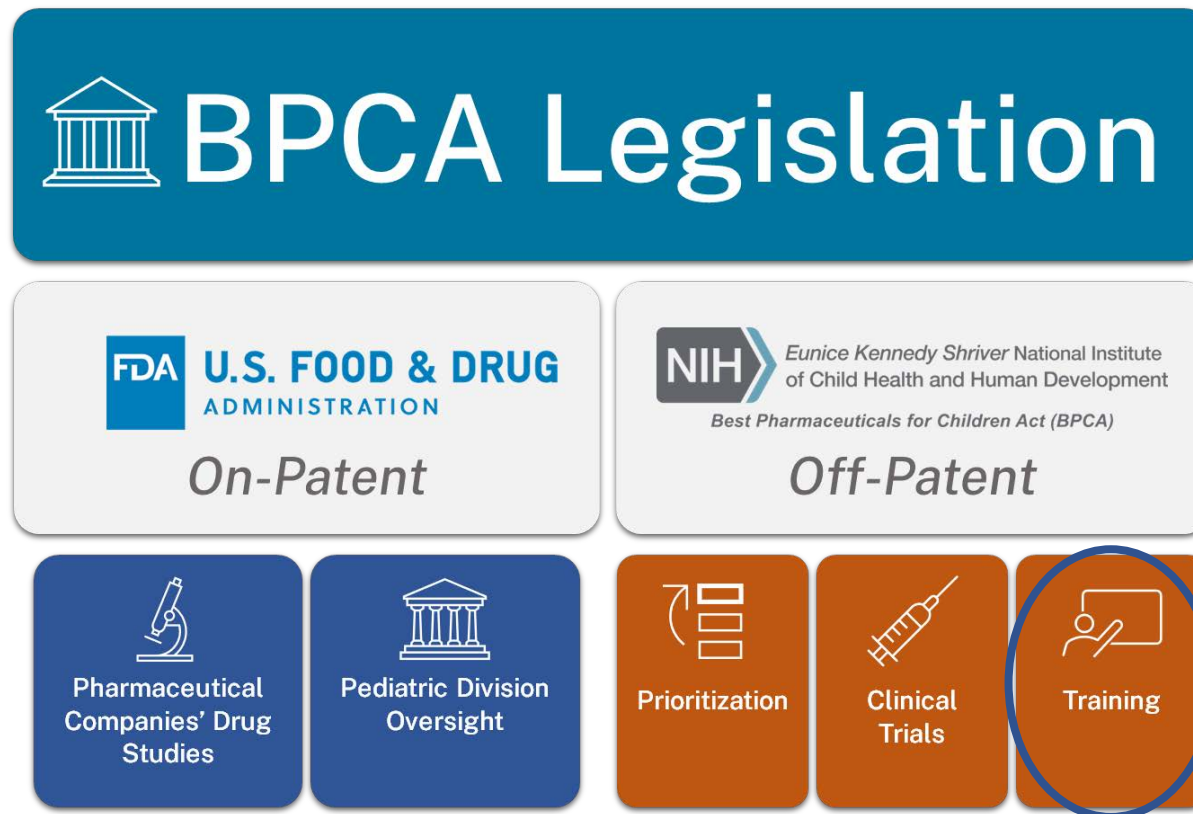
Program Officer

Obstetric and Pediatric Pharmacology and Therapeutics Branch

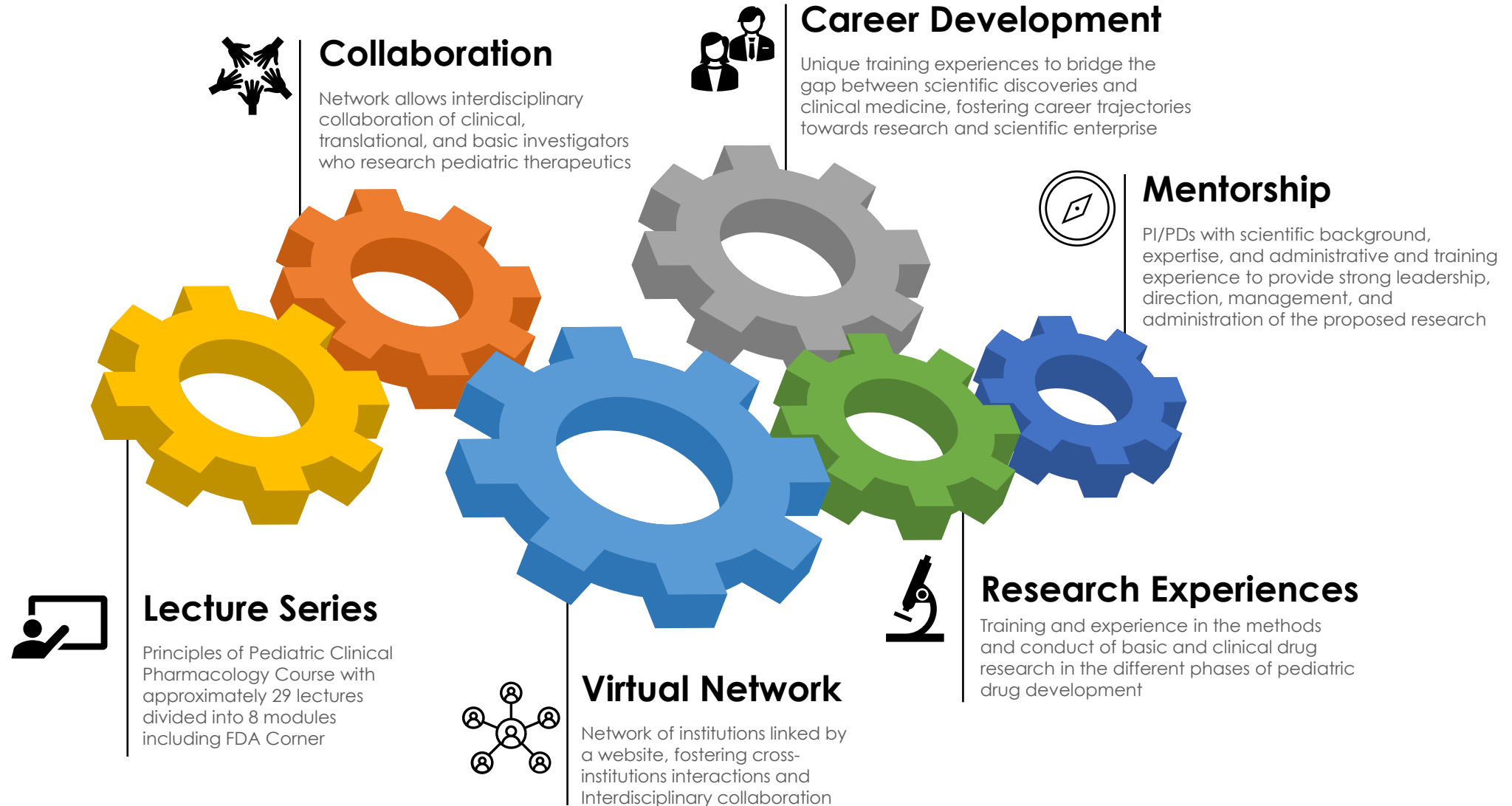
Program Overview



- The T32 Fellowship is funded through the BPCA Legislation.
- <https://www.nichd.nih.gov/research/supported/bpca>

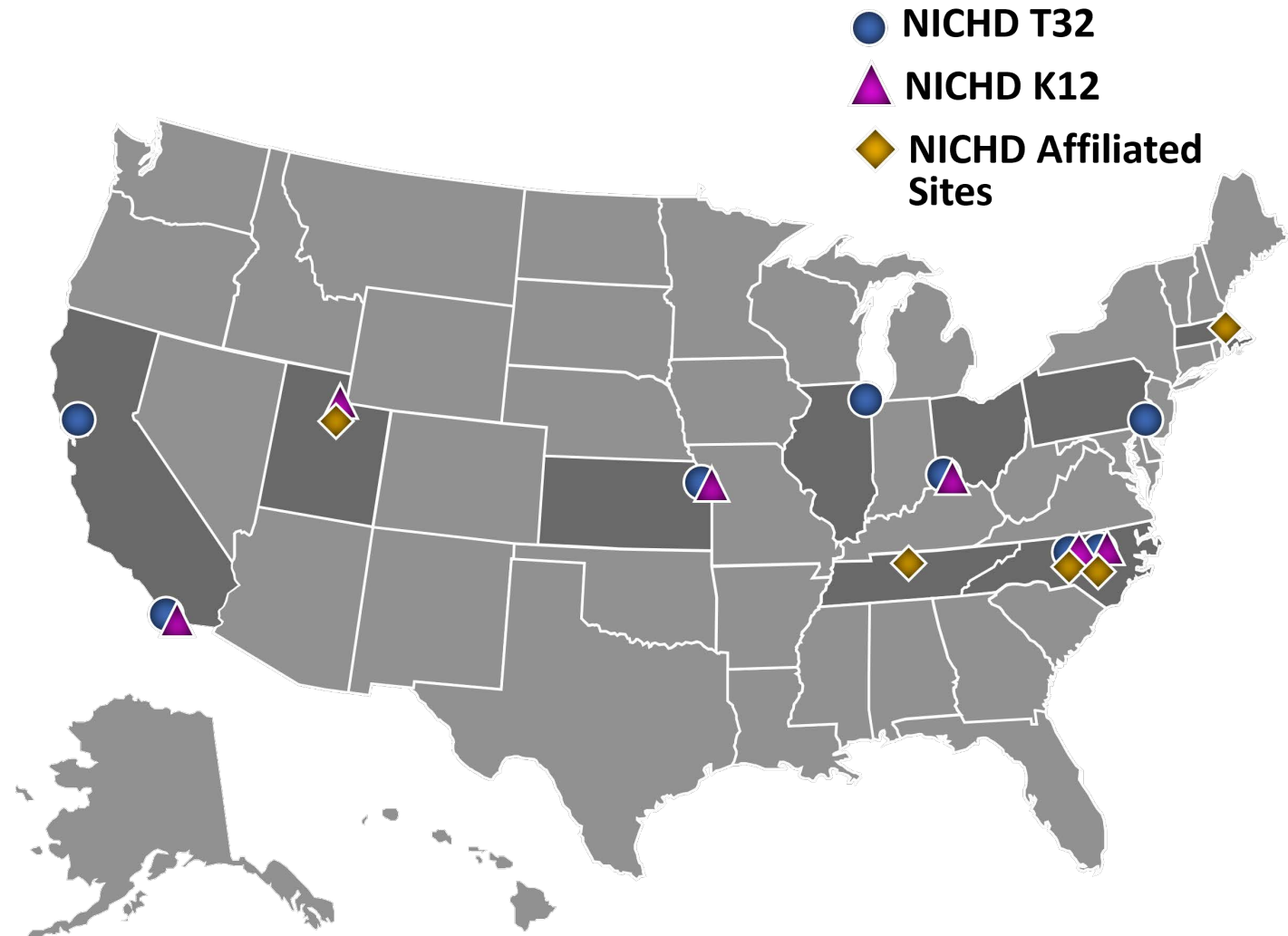


Current Network



Current CPTN Sites

- Boston University (*Affiliated*)
- Children's Mercy Hospitals and Clinics, Kansas City (*T32, K12*)
- Cincinnati Children's Hospital Medical Center (*T32, K12*)
- Duke University (*T32, K12, Affiliated*)
- Jefferson/Children's Hospital of Philadelphia (*T32*)
- University of California, San Diego (*T32, K12*)
- University of California, San Francisco (*T32*)
- University of Chicago (*T32*)
- University of North Carolina at Chapel Hill (*T32, K12, Affiliated*)
- University of Utah (*K12, Affiliated*)
- Vanderbilt University (*Affiliated*)

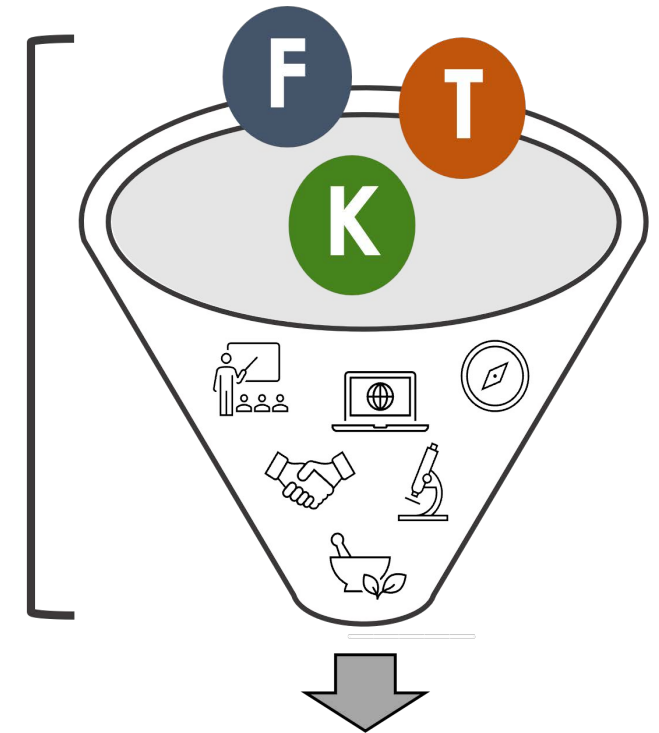


Network Updates

- **Goal:** To develop clinician-scientists who will be leaders in the field of pediatric clinical pharmacology research.
- In 2022, OPPTB supplemented its existing program with the Pediatric Clinical Pharmacology Research Career Development Program (K12).

Stronger Network

- Combining Institutional Training Program (T), Individual Pre-/Post-Doc Fellowships (F), and Career Development Awards (K)
- Exposure/Expansion to Maternal Clinical Pharmacology



Leverage NICHD networks

Pediatric Trials Network (PTN), MPRINT Hub, Maternal-Fetal Medicine Units (MFMU) Network, Neonatal Research Network (NRN), etc.

Network Highlights

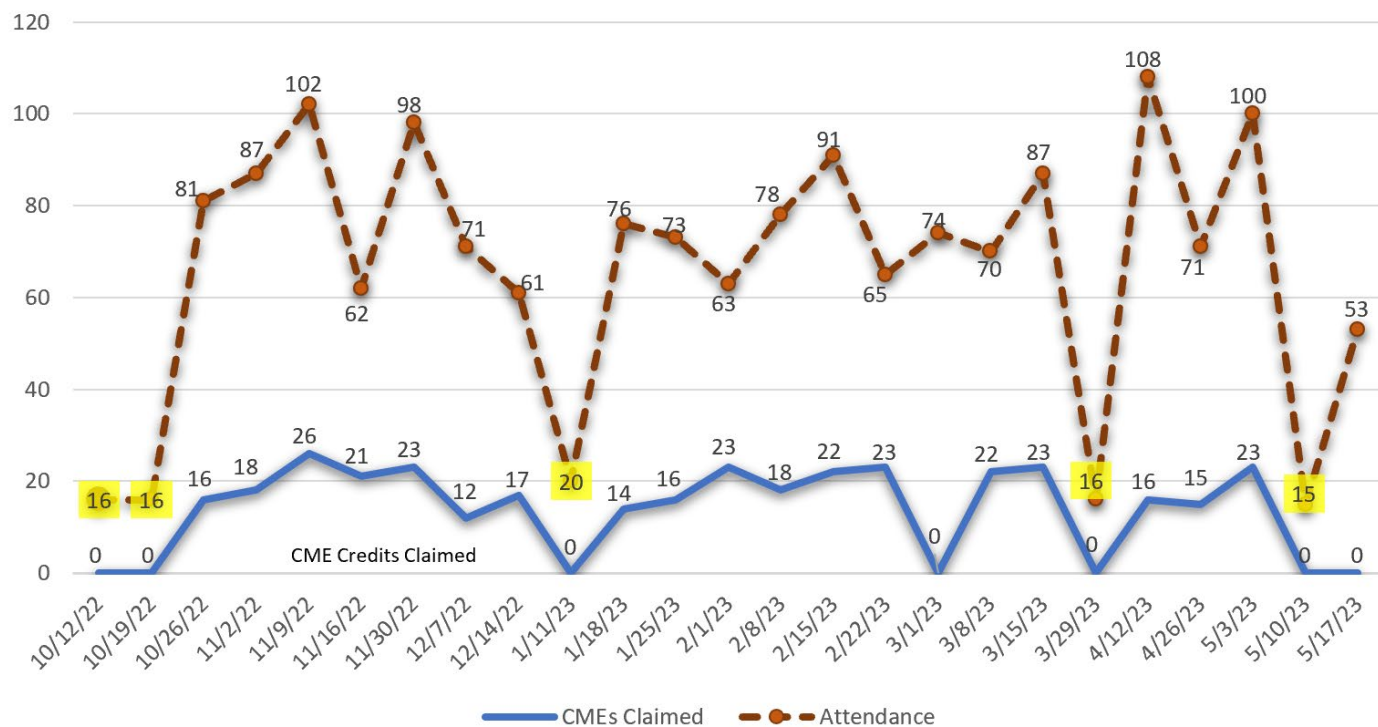


- **Network Annual Meeting**
 - Completely Virtual during pandemic
 - Currently Hybrid
- **NICHD Orientation Meeting**
- **Enhanced Lecture Series Schedule**
 - Incorporated Fellow-Centric Workshops
- **Maternal Pharmacology Inclusion**
- **New K12 extension**
 - 2 - K12 programs with 2 appointed scholars each
- **Inclusion of K & F awardees**
 - F31 awardees
 - F32 Specialty: Surgery/Devices
 - K99 awardee
- **Alumni Network**
- **Fellows Networking & Collaborations**
 - FDA rotations
 - Multi-Site Paper Collaborations: white papers
- **Partnerships with other networks**
 - MPRINT, PTN, other NICHD training programs, and industry



Enhanced Lecture Series

2022-23 Lecture Series Attendance/CME Tracking



Challenges and Opportunities in Pediatric Drug Development

Johnathan Davis, MD, Tufts University School of Medicine
Neonatal drug development for the prevention and treatment of a variety of neonatal conditions

Pharmacotherapy for Transgender Children and Adolescents

Johanna Olson-Kennedy, MD, Children's Hospital of Los Angeles
Care of gender non-conforming children and transgender youth

Physiologically Based Pharmacokinetic Modeling

Sara K. Quinney, PharmD, PhD, Indiana University
Understanding pharmacokinetics and pharmacodynamics to provide precision therapy through pharmacometric modeling

Training Program Expansion



Maternal Pharmacology

Development of a Maternal pharmacology training program to run in parallel with the pediatric (neonate to adolescents) training program

- Paucity of data available to guide practitioners regarding appropriate medication dosing and counseling in pregnancy and lactation
- The increased availability of individual fellowship awards of maternal pharmacology and therapeutics would address these challenges
- Inclusion of a maternity pharmacology training program aligns with research priorities in **Advancing Safe and Effective Therapeutics and Devices for Pregnant and Lactating Women, Children, and People with Disabilities**

Network Offerings & Expectations



Expectations

- PI/PDs, fellows and scholars will participate in the CPTN in its current state and as the program grows and expands
 - Cross-institutional interactions via a virtual network
 - Attendance in the annual NICHD-sponsored meeting to present ongoing or completed research
 - Peer-to-peer mentorship

Offerings/Resources

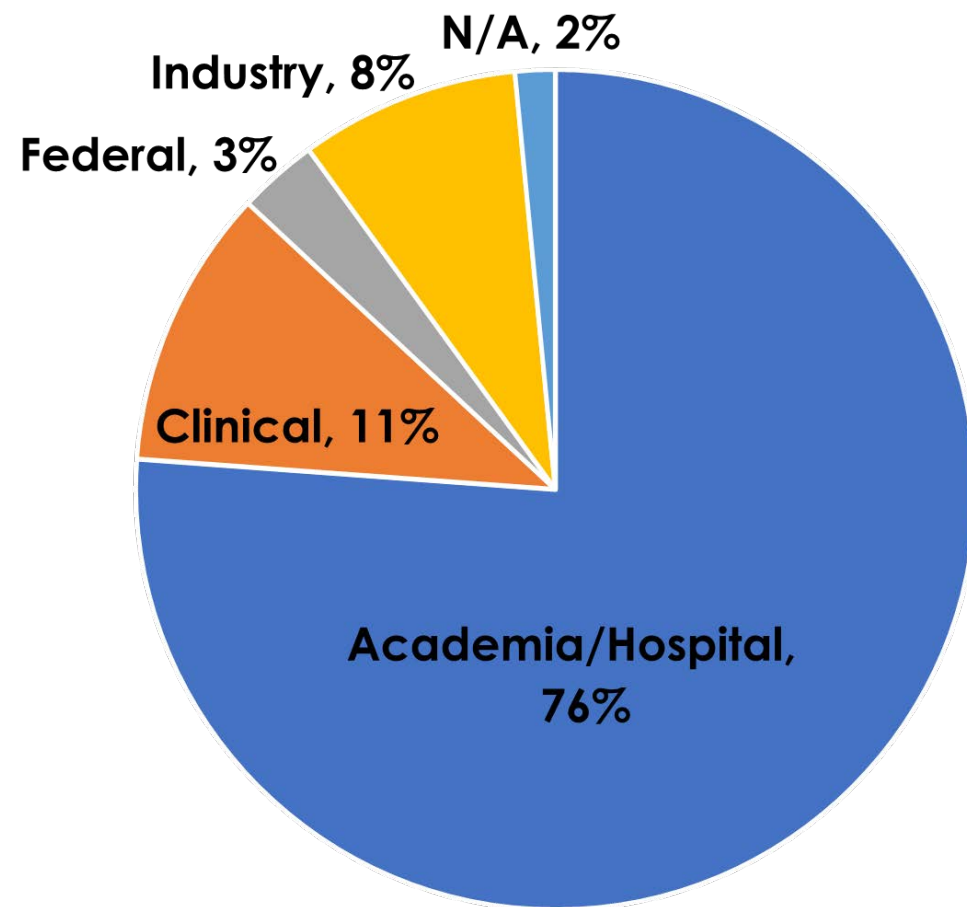
- Research Experiences
 - FDA Summer Internships - Office of Clinical Pharmacology
- Clinical Experiences
 - Pediatric Clinical Trials Network (PTN)
 - MPRINT Hub
- Job Postings
- Didactic opportunities
 - [NIH Principles of Clinical Pharmacology Course](#)



Where are they now?

Post Fellowship Career Paths

Career Category	Number of Former Fellows
Academia/Hospital	99
Clinical	14
Federal	4
Industry	11
N/A	2
TOTAL	130

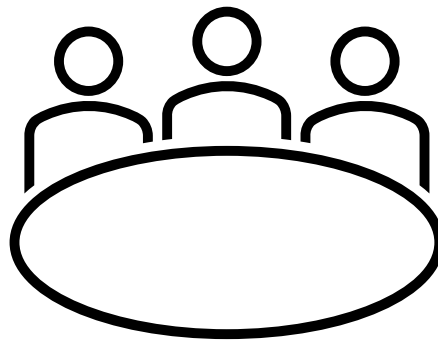


Network Feedback

"The NICHD T32 fellowship not only gave me the skillset to build a successful academic career as physician-scientist, but also prepared me for a smooth transition from academia to a leadership role in the pharmaceutical industry in later stages of my career. The education, mentorship, sponsorship, and networking opportunities that the T32 offered has been invaluable to my career, and personal growth as a leader."

"My 2 years of T32-supported training in pediatric clinical pharmacology not only set me on a trajectory of a successful career in academic research. It has also provided me insights into the workings of the NIH and connections to NICHD and beyond – insights and connections that are very helpful now in my role as the Director of Pediatrics for the *All of Us* Research program."

"This program has helped me tremendously during my postdoctoral training, and I'm very appreciative of this experience!"



Questions



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Program Officer

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