

Clinical Pharmacology Training Network (CPTN)

NIH 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)

VOICE OF THE TRAINEE

Lesly Samedy Bates, Pharm.D., Ph.D., M.S.

Program Officer

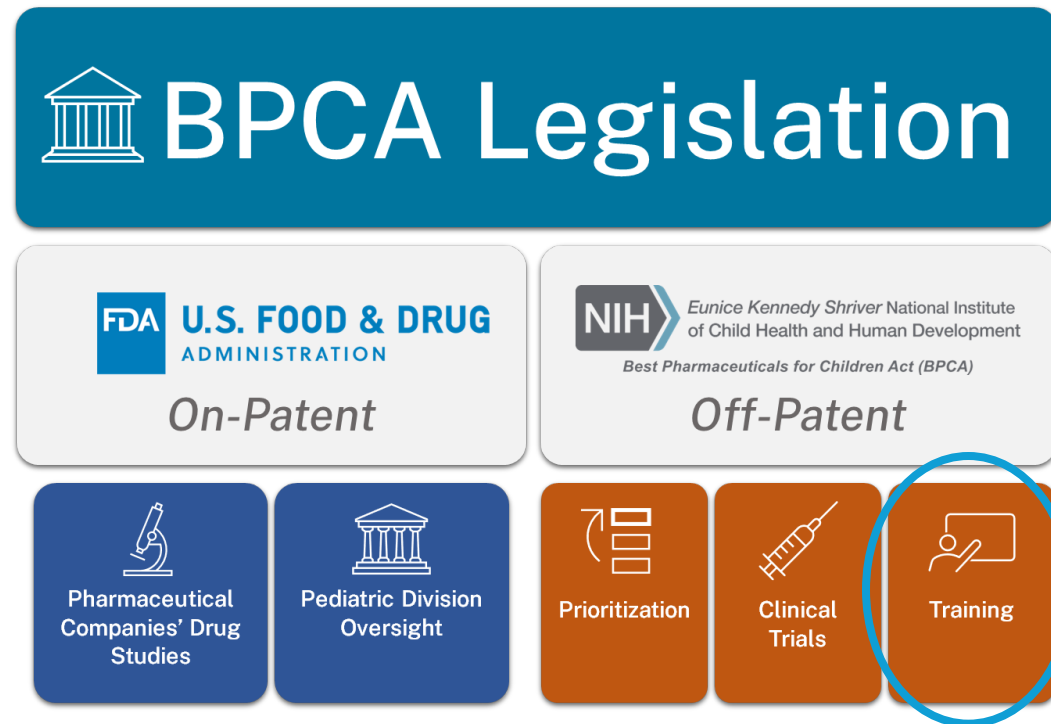
Obstetric and Pediatric Pharmacology and Therapeutics Branch

Overview

- CPTN background information
 - Historical context
 - Training vision
 - Training challenges
- Fellow Survey Results
- Trainee Quotes
- Future Plans

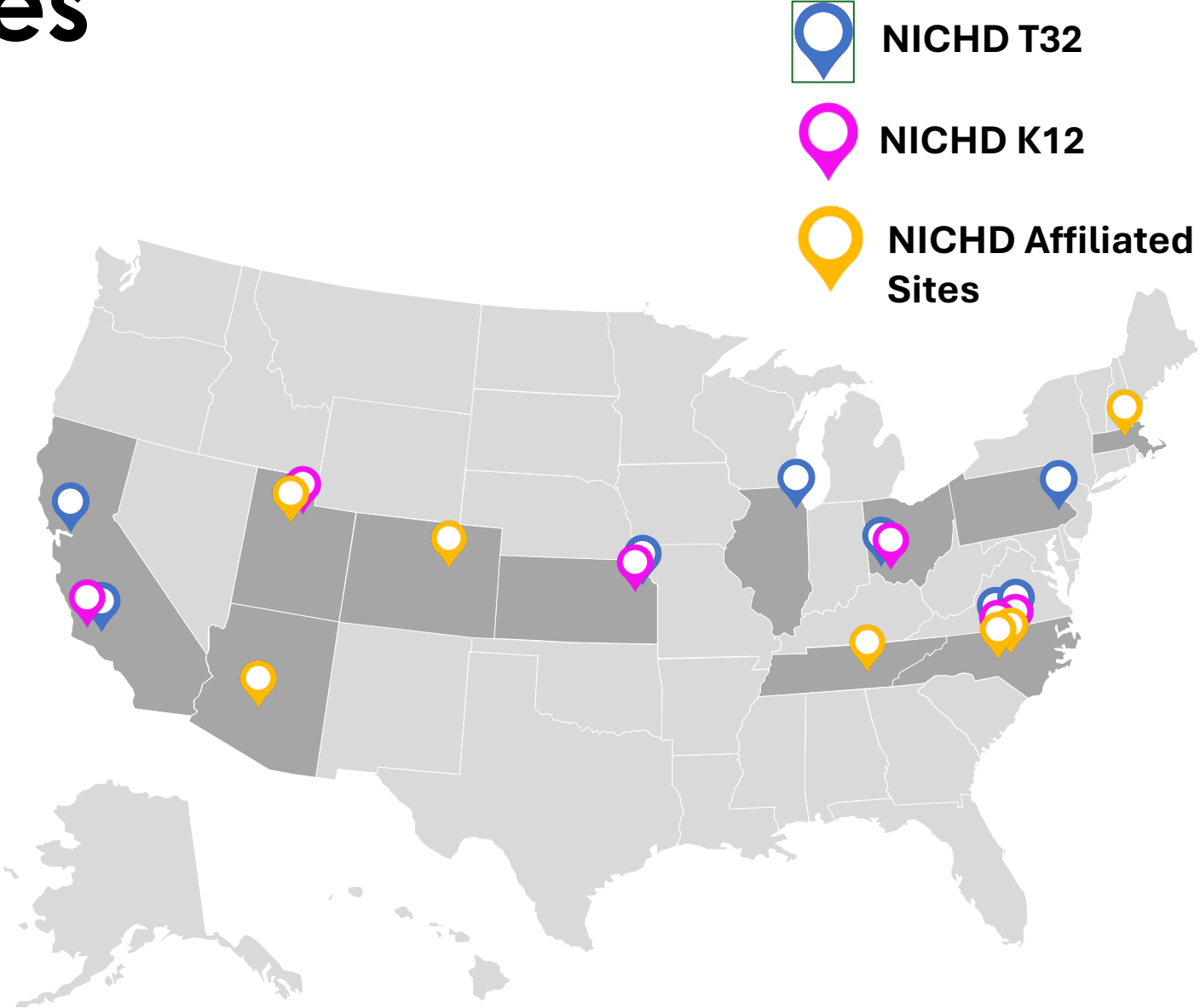
Program Background

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

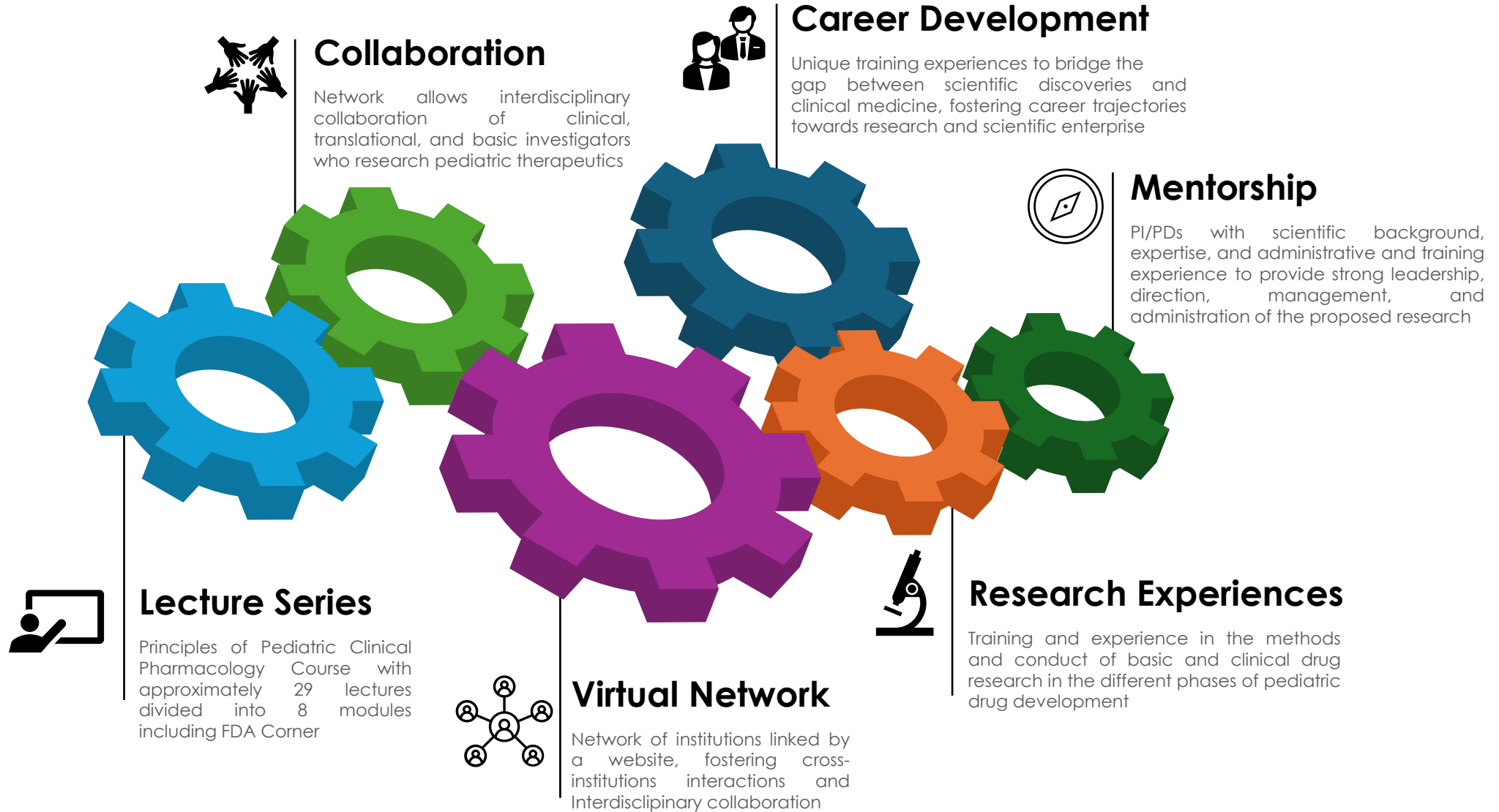


Current CPTN Sites

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



Current Network



Network Highlights



- **Network Annual Meeting**
 - Completely Virtual during pandemic
- **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

Fellows Survey

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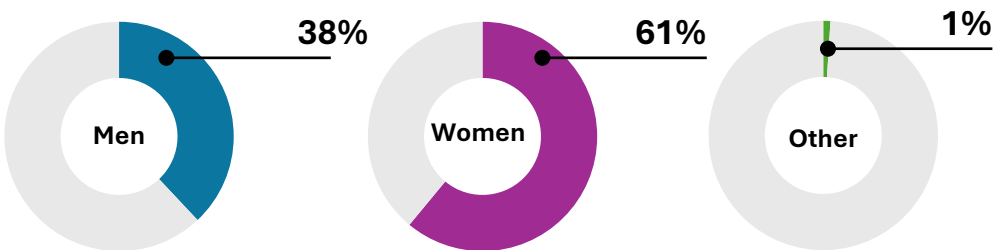


Background

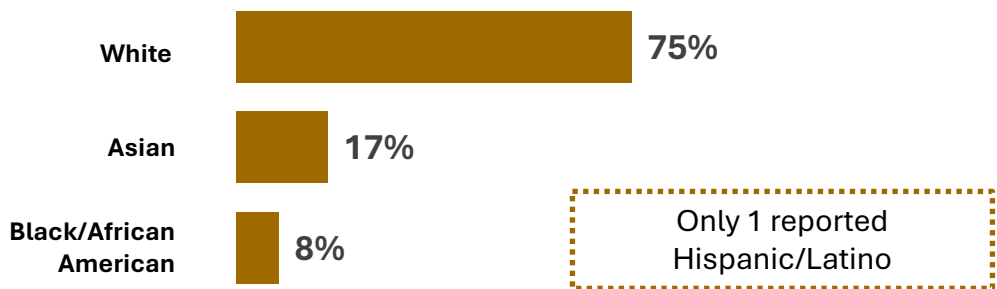
- **Initiation:**
 - Survey proposal began in 2022-23, created as a “Needs Assessment”
 - Only targeted Current Fellows (n=13)
- **Goal:**
 - To inform short- & long-term programmatic development
- **FY 23 Survey:**
 - 17 question electronic (Qualtrics) survey
 - Distributed via email between May 18, 2023 - June 23, 2023
 - 85 responses out of 155 (55%) fellows contacted
 - Included current and alumni fellows
- **Frequency**
 - Plan to survey annually
 - Survey topics and questions to remain consistent to allow for more longitudinal analysis

Demographics

Gender



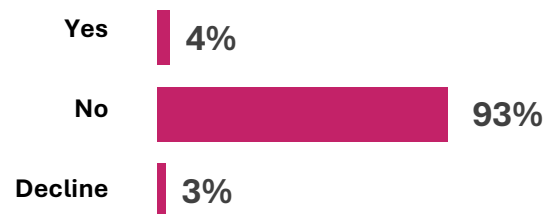
Race/Ethnicity



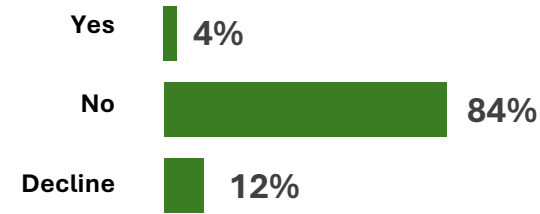
Note: response rates varied by question

**per NSF definition - <https://diversity.nih.gov/about-us/population-underrepresented>

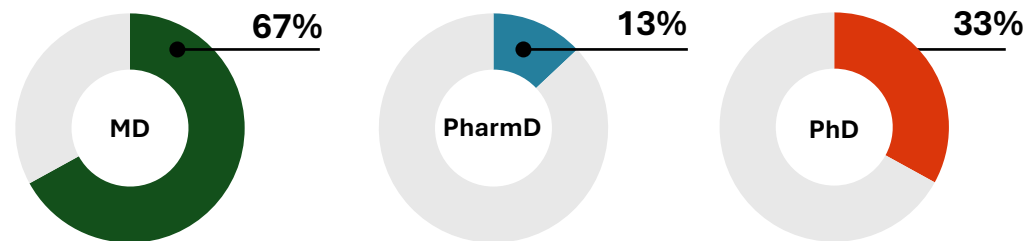
Disability



Disadvantaged**



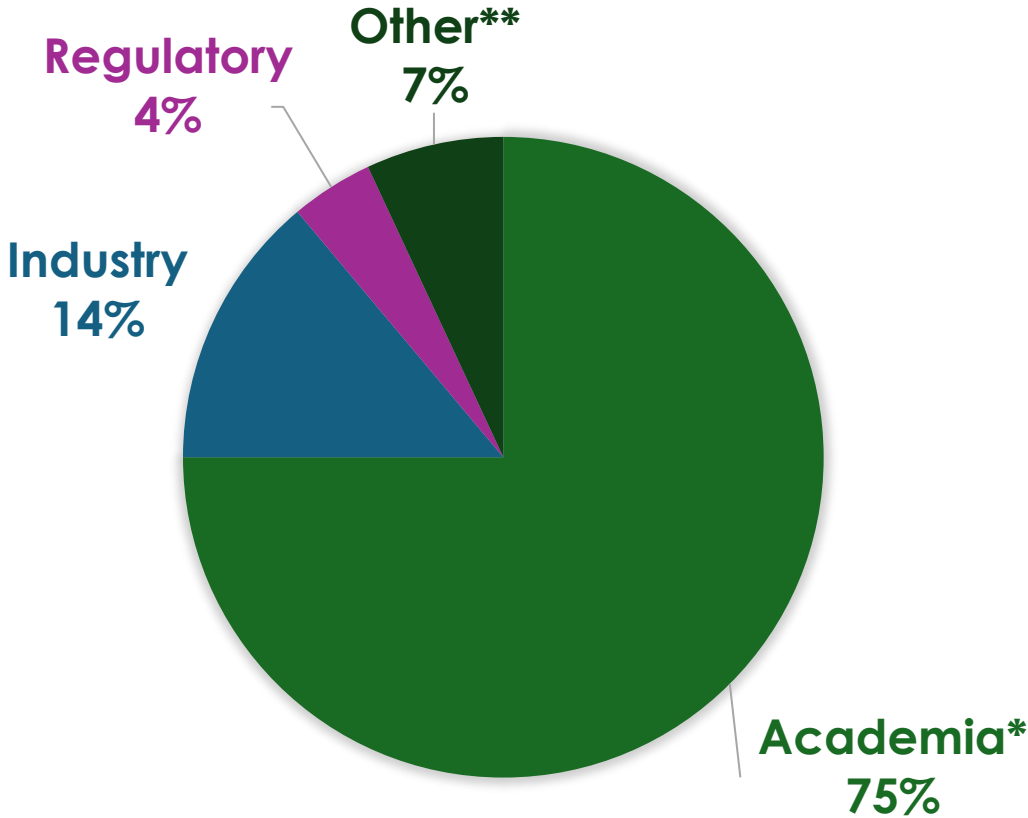
Terminal Degrees



Other Category

First generation college student	13%
Low socioeconomic background	7%

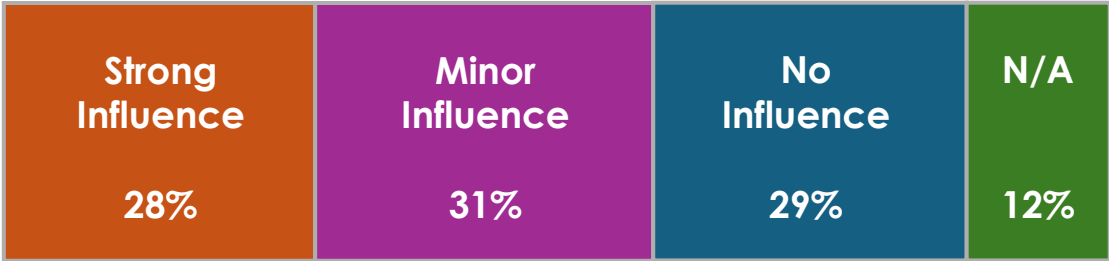
Career Plans



Most important factors for making career decisions:



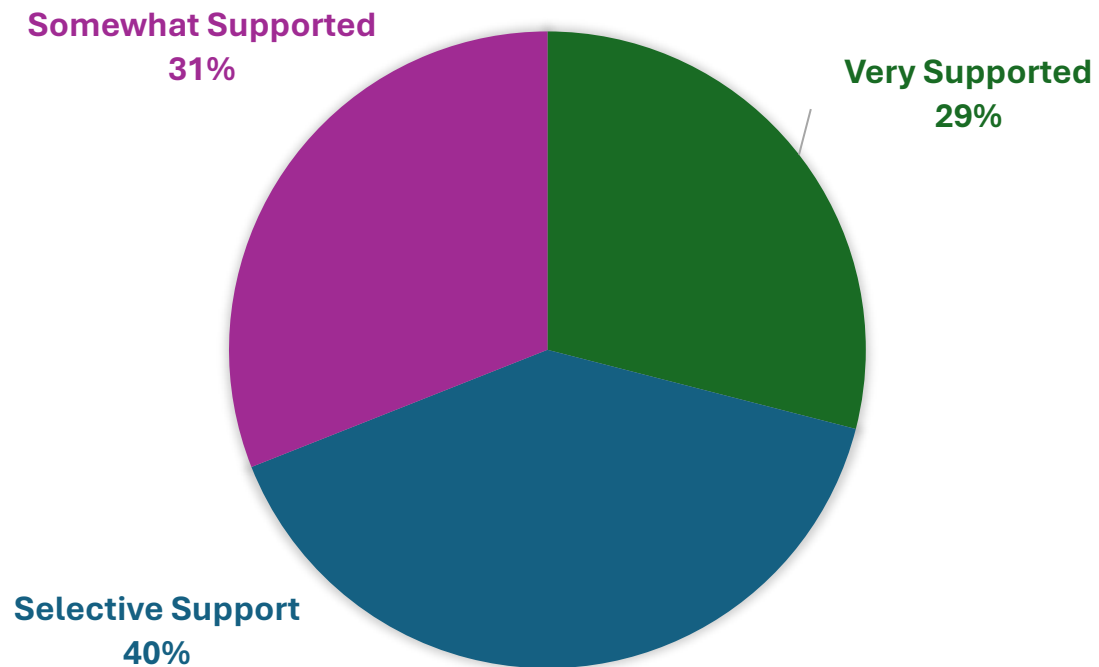
Has student debt influenced your career plans/decisions?



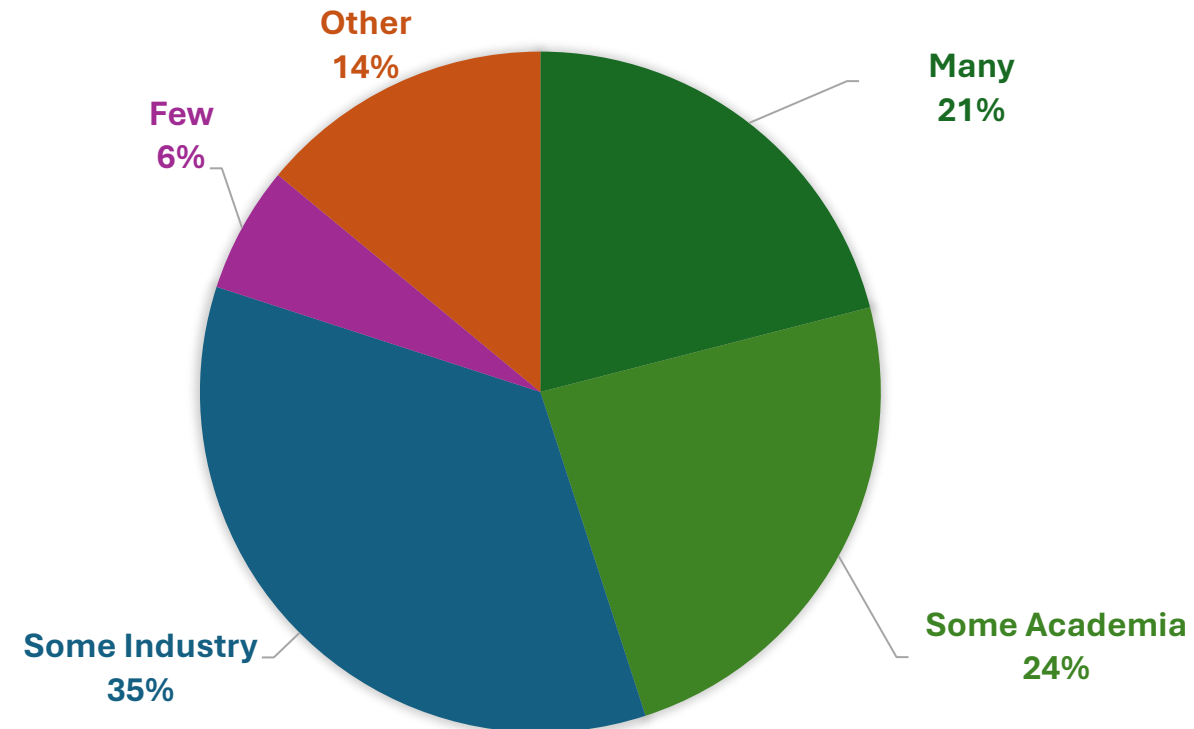
*Only 1/14 responses reflect a current fellow’s plan to enter academia after fellowship
 **Includes clinical medicine, nursing, stay at home parent, or unsure

Opportunities

How supported do you feel in your career trajectory?



How many job opportunities do you feel are available in clinical pharmacology?



Needs Assessment

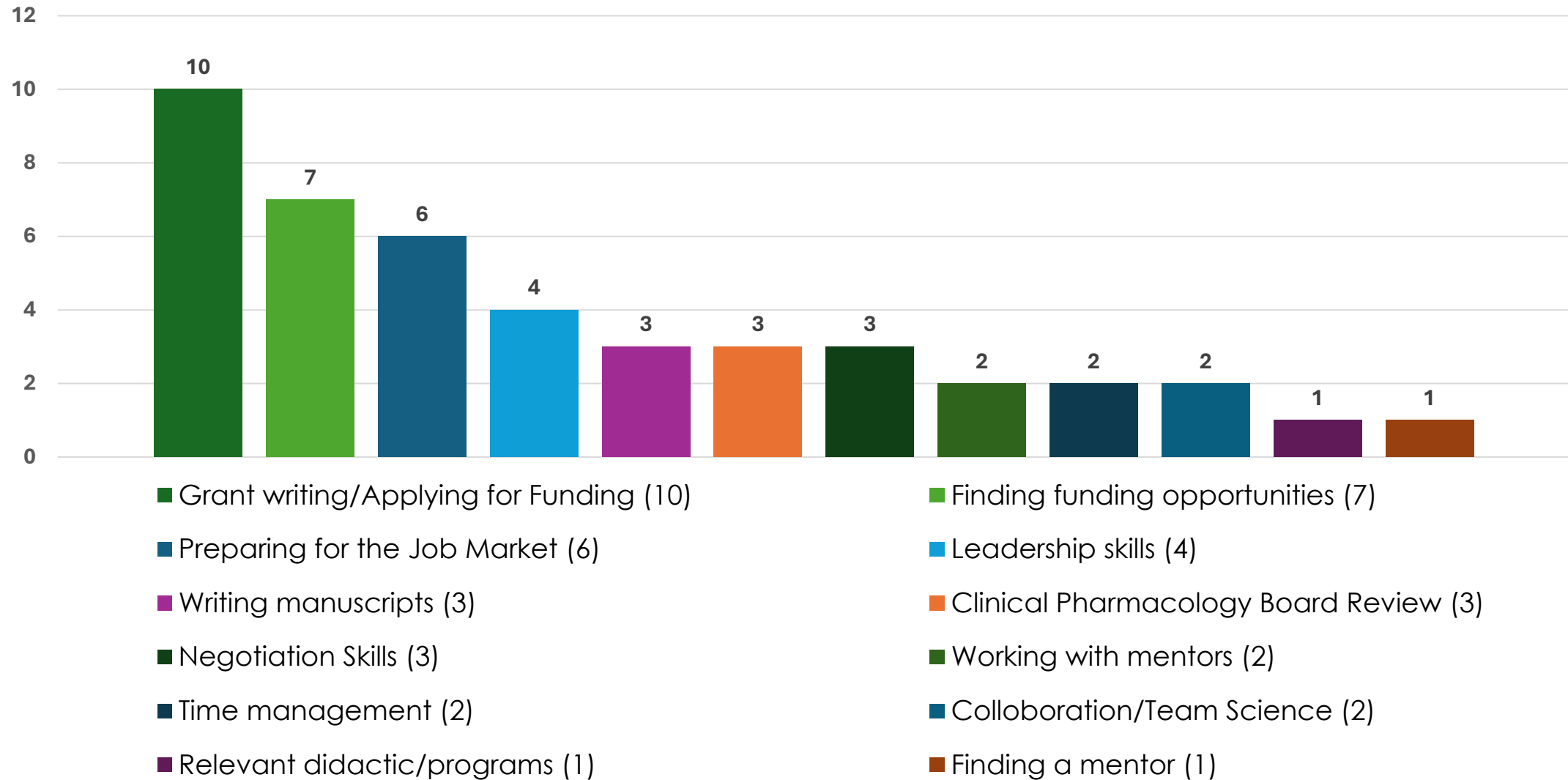
Needs:

- **Training:** Applying for funding, identifying funding, preparing for jobs
- **Career:** Mentors, funding, clear career paths, networking/collaboration

Barriers:

- **Training:** Time, insufficient mentorship, insufficient funding opportunities
- **Career:** Unclear path, lack of funding or positions, poor compensation, not enough mentorship

Fellow Needs



Needs Assessment

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Overall Findings

- Opportunity to enhance demographic diversity within program
- In general, fellows feel supported.
 - Outlook on jobs is mixed.
 - Work-life balance and personal considerations rank highly important for making career decisions
- Opportunity to improve training experience
 - Increased mentorship & role models
 - Assistance with identifying and applying for funding
 - Guidance in preparing for jobs

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."

- **Dr. Valentina Shakhnovich,**
Pediatric gastroenterologist & Clinical pharmacologist,
Ironwood Pharmaceuticals

CPTN catalyzed my research career development. As a trainee, I interacted with leaders in the field, used curated training resources to build my knowledge and skill set, found opportunities for projects and collaboration, and leveraged opportunities for leadership positions. This experience has been critical to my success to date developing an early research career and building a niche as one of the few (<10) pediatric rheumatologists in the US with clinical pharmacology training.

- **Dr. Rachel Randell**
Pediatric Rheumatologist & Clinical pharmacologist,
Duke University

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

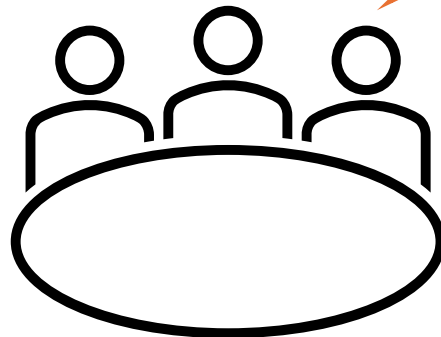
- **Dr. Sara Van Driest,**
Director of Pediatrics, All of Us Research

"This was a great meeting. I'm really sad that I'm only getting most of this information as a second year fellow, but better now than never I suppose. I really valued getting to meet everyone and broadening my networks. Really every session was valuable."

- **Anonymous 2nd year Fellow, regarding Annual Meeting of Clinical Pharmacology Trainees**

"It would be beneficial if we were exposed to these opportunities at the start of our fellowship."

- **Anonymous 2nd year Fellow,**
regarding Fellows Workshops



Future Plans

Actionable Items for Network

- **Training**
 - Continue to provide unique training-related workshops
 - Request ideas for experiences Fellows would find valuable to their training experiences
 - Ask PI/PDs to share any deficits in training experiences and where Network could provide assistance
- **Career**
 - Encourage Peer-to-peer mentoring
 - Enhance job preparation resources – consider a trainee/scholar toolbox
- **Personal Needs**
 - Encourage Fellows & Scholars to apply to NIH Loan Repayment Program
- **Internal**
 - OPPTB to conduct their own survey, with core questions

Acknowledgments

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- **Rose Gelineau-Morel, MD**, Chief Fellow 2023-2024 for analysis of survey results, interpretation of data, writing of the manuscript, and revised and approved the final manuscript
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