Finding the Funds: NICHD Funding and Training Opportunities

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Talk Outline

• Introduction to NICHD
• NICHD Funding
• Clinical Trials Networks
• Training and Career Development
• Some Advice
About NIH
(https://www.nih.gov/)

Mission is to seek fundamental knowledge about nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

Comprised of 27 institutes and centers (ICs)

- NIH Office of the Director (OD) is responsible for setting policy for NIH and for planning, managing, and coordinating programs and activities across all ICs.

Largest funder of medical and behavioral research in the U.S. and worldwide.

Extramural Research, 84%
Intramural Research, 10%
Other*, 6%

* Covers research support, administrative, facility construction, maintenance, and/or operational costs.
NIH Institutes and Centers

Executive Office of the President

HHS Secretary

NIH Director

NICHD  NCI  NEI  NHLBI  NHGRI  NIA  NIAAA  NIAID  NIAMS
NIBIB  NIDCD  NIDCR  NIDDK  NIDA  NIEHS  NIGMS  NIMH  NIMHD
NINDS  NINR  NLM  CC  CIT  CSR  FIC  NCATS  NCCIH
Funding by Institute/Center: FY23 Enacted

Dollars

$0.00

$1,000,000,000.00

$2,000,000,000.00

$3,000,000,000.00

$4,000,000,000.00

$5,000,000,000.00

$6,000,000,000.00

$7,000,000,000.00

$8,000,000,000.00

$1.75B

$1.75B
Introduction to NICHD
NICHD Mission & Vision
(https://www.nichd.nih.gov/about)

NICHD leads research and training to understand human development, improve reproductive health, enhance the lives of children and adolescents, and optimize abilities for all.

• One of 27 institutes and centers within NIH
• Approximately $1.75 billion budget (FY24 enacted)
  - Majority of budget funds extramural research projects that support NICHD’s mission
  - Support is provided through grants and contracts made to outside institutions such as universities, medical schools, hospitals, and small businesses
  - Applications for this funding go through rigorous peer review process; requires approval from both stages
    - First level of review is carried out by NIH Center for Scientific Review or NICHD Scientific Review Branch
    - Second level of review is provided by National Advisory Child Health and Human Development (NACHHD) Council
NICHD Key Achievements

Creating Vaccines for Infectious Childhood Diseases

Developing and Expanding Newborn Screening

Identifying Fetal Alcohol Syndrome

Pioneering the First Home Pregnancy Test

Improving Care and Survival of Premature Infants

Protecting Infants During Sleep

Isolating the Causes of Genetic Disorders

Nearly Eliminating Perinatal Transmission of HIV

https://www.nichd.nih.gov/about/accomplishments
Recent Scientific Highlights

Study led by Division of Population Health Research found that exposure to caffeine in the womb, even in small amounts, may lead to shorter height in childhood.

NIH-funded researchers adapted an experimental cancer therapy to remove endometriosis tissue without the need for surgery in mouse models.

NCMRR-supported study suggested a possible way to accurately and noninvasively diagnose and monitor sports-related concussions.

DIR researchers identified transposable elements of the human genome ("jumping genes") that may be linked to neurologic and psychiatric diseases.
NICHD Organization

Office of the Director

- Division of Intramural Research
- Division of Extramural Research
- Division of Extramural Activities
- National Center for Medical Rehabilitation Research
Division of Extramural Research Scientific Branches
https://www.nichd.nih.gov/about/org/der

- Child Development and Behavior
- Developmental Biology and Congenital Anomalies
- Gynecologic Health and Disease
- Maternal and Pediatric Infectious Disease
- Pediatric Growth and Nutrition
- Population Dynamics
- Contraception Research
- Fertility and Infertility
- Intellectual and Developmental Disabilities
- Obstetric and Pediatric Pharmacology and Therapeutics
- Pediatric Trauma and Critical Illness
- Pregnancy and Perinatology
Through basic, translational, and clinical research, NCMRR fosters development of the scientific knowledge needed to enhance the health, productivity, independence, and quality of life of people with physical disabilities.

Collaborates with many other government agencies and organizations to help advance medical rehabilitation research and care.

Supports research through research grants, training and career development activities, small business and technology grants, and research infrastructure.
Division of Intramural Research Divisions

- Division of Developmental Biology
- Division of Translational Medicine
- Division of Molecular and Cellular Biology
- Division of Neuroscience and Cellular and Structural Biology
- Division of Basic and Translational Biophysics
- Division of Translational Imaging and Genomic Integrity
- Division of Obstetrics and Maternal-Fetal Medicine
- Division of Population Health Research

https://www.nichd.nih.gov/about/org/dir
Affinity Groups (AGs) within DIR serve as hubs for groups of investigators who share closely aligned scientific interests.
NICHD and NIH Strategic Plans Establish Our Goals and Aspirations


#NICHDStrategicPlan

https://www.nichd.nih.gov/about/org/strategicplan

NICHD funding
NICHD Funds by Mechanism FY22 (Dollars in Millions)

- Contracts, $174.8, 10%
- NRSA Training (Fs & Ts), $40.3, 2%
- Other Research*, $46.6, 3%
- Coop Clinical (UG1), $14.1, 1%
- Careers (Ks), $42.0, 3%
- Centers, $73.8, 4%
- SBIR/STTR, $49.6, 3%
- Intramural Research, $225.3, 14%
- Research and Management Support, $85.5, 5%

*such as R13, R25, U24, and P2C
NICHD FY22 Budget Extramural Only (Dollars in Millions)

- Research Project Grants (RPGs), $929.2, 68%
- SBIR/STTR, $49.6, 4%
- Centers, $73.8, 5%
- Careers (Ks), $42.0, 3%
- Other Research*, $46.6, 3%
- NRSA Training (Fs & Ts), $40.3, 3%
- Coop Clinical (UG1), $14.1, 1%
- Contracts, $174.8, 13%

*such as R13, R25, U24, and P2C
NICHD Funding by Research Area, FY22

Note: topics and amounts are overlapping.
Global Health Research

- NICHD has supported research around the globe since its establishment, with a strong commitment to continued global health research collaborations.

- **NICHD Global Health Catalog**, prepared by OGH with support from institute colleagues, provides annual reporting of global health activities across NICHD:
  - Includes current research initiatives and achievements, collaborative partnerships, and staff membership on committees and working groups.

- Additional information on NIH-wide global research can be found through the [World RePORT](#).
NICHD-Funded Research by Country, FY21
Clinical Trials Networks
Clinical Trial Phases and Approval Process

PRECLINICAL
Laboratory Research determines if treatment is useful and safe

PHASE I
6-10 Participants Understand effects of treatment in humans

PHASE II
20-50 Participants Evaluate safety and efficacy of treatment

PHASE III
100-200 Participants Confirm benefit and safety of treatment

PHASE IV
200+ Participants Evaluate long-term effects of treatment

Phases of clinical trials
NICHD Clinical Trial Networks

Maternal-Fetal Medicine Units Network

Global Network for Women’s & Children’s Health Research

Pelvic Floor Disorders Network
Clinical Trial Network Structure
Clinical Trials Diversity

2020

75% Identified as White
11% Identified as Hispanic
8% Identified as Black or African American
6% Identified as Asian

• The Food and Drug Administration implemented a Race and Ethnicity Diversity Plan (referred to as “The Plan”) in 2022.

• COVID-19 pandemic sparked development of digital health technologies (DHTs) and the adoption of decentralized clinical trials (DCTs).
NICHD Needs Diverse Scientists at Every Level

- Expand the talent pool available for science
- Wider range of perspectives to inform research questions
- Avoid blind spots
- Address cultural, other experiences of research participants
- Foster inclusive and successful teams
- Improve external validity; research that is applicable to all
Training is a Pathway, Not a Pipeline

Molecules can enter and exit the TCA Cycle at multiple points

Funding “Pie” of NICHD Training Support

Current Funding by Training Mechanism

- individual fellowships (F) 15%
- training grants (T) 24%
- career development awards (K) 59%
- diversity and re-entry supplements 2%

https://www.nichd.nih.gov/grants-contracts/training-careers
Training and Career Development at NIH

• Training in NICHD Division of Intramural Research
  ▪ https://www.nichd.nih.gov/grants-contracts/training-careers/intramural/DIR

• NIH Office of Intramural Training and Education
  ▪ https://www.training.nih.gov/

• NIH Clinical Center Office of Clinical Research Training and Medical Education
  ▪ https://www.cc.nih.gov/training/index.html

• Jobs at NIH
  ▪ https://hr.nih.gov/jobs
Some Advice
Who should you talk to at NIH?

• Program Officer (PO): Helps investigators apply for grants, interpret reviews, makes funding recommendations, manages award in noncompeting years

• Scientific Review Officer (SRO): Refers application to appropriate study section, identifies and recruits reviewers, assigns reviewers to your application, runs the study section meeting, produces summary statement

• Grants Management Specialist (GMS): Handles financial aspects of the grant award, non-scientific issues such as PI effort, changes in animal/human subject use, etc.
When should you contact NIH staff?

- Program Officer: Before you submit an application and after the summary statement is available, anytime after application is recommended for funding.

- Scientific Review Officer: After you submit an application and before the summary statement is available.

- Grants Management Specialist: After application is recommended for funding and anytime an administrative issue arises.

- “Firewall” between Program and Review: POs do not review grants, SROs do not fund grants.
How to identify right NIH contact

• Colleagues, friends, other researchers in your field

• Look at the acknowledgements section of publications: who funds the work?

• NIH RePORTER searches for funded grants (https://reporter.nih.gov)

• The Center for Scientific Review (https://public.csr.nih.gov) has information about study sections and the application process

• NIH Institute/Center websites, e.g. NICHD, NCI, NIAID
In conclusion…

• Don’t be the person who sends in an application, has the application reviewed, and receives a summary statement without communicating with NIH staff throughout the process.

• Figure out which institute(s) may be interested in funding your research, and then contact program staff who manage grants similar to your work.

• Develop a working relationship with NIH staff – the same people may be managing and reviewing your grants for a long time.
Thank you!

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https://www.nichd.nih.gov/about/history/establishment