Finding the Funds: NICHD Funding and Training Opportunities

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April 17, 2024

Talk Outline

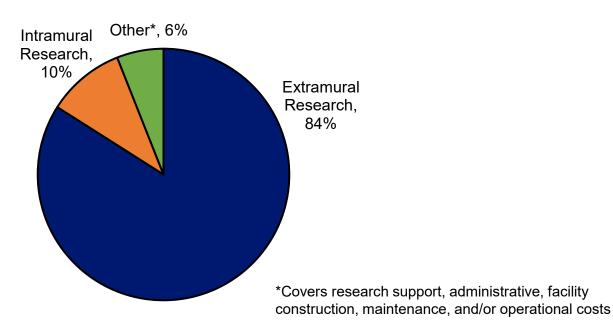
- Introduction to NICHD
- NICHD Funding
- Clinical Trials Networks
- Training and Career Development
- Some Advice



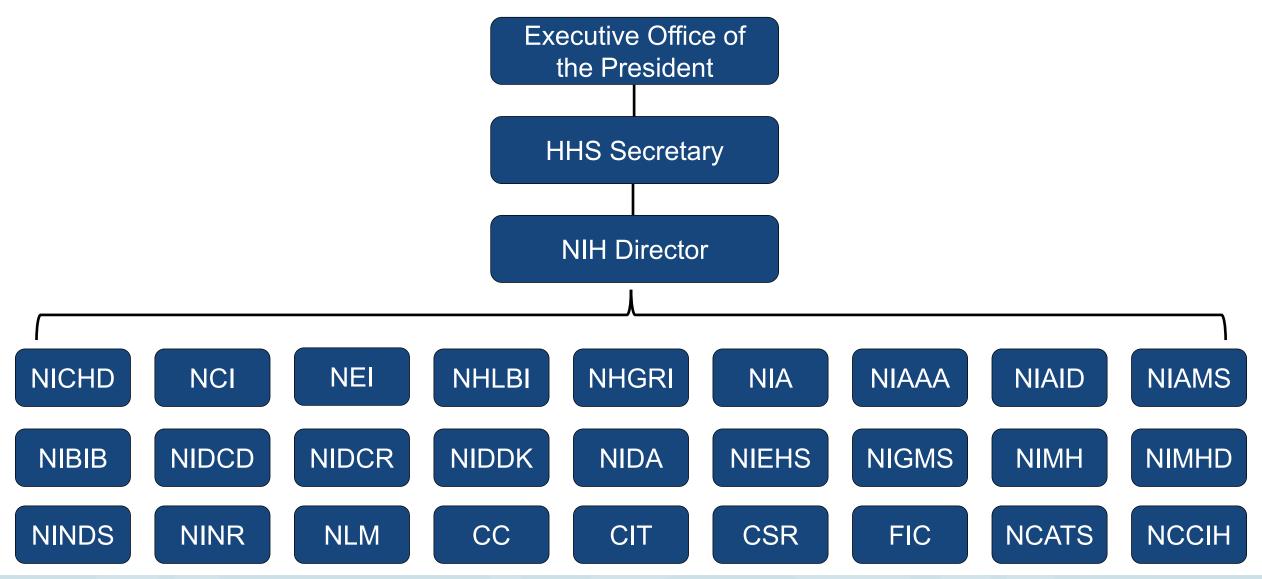
About NIH (https://www.nih.gov/)



- 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

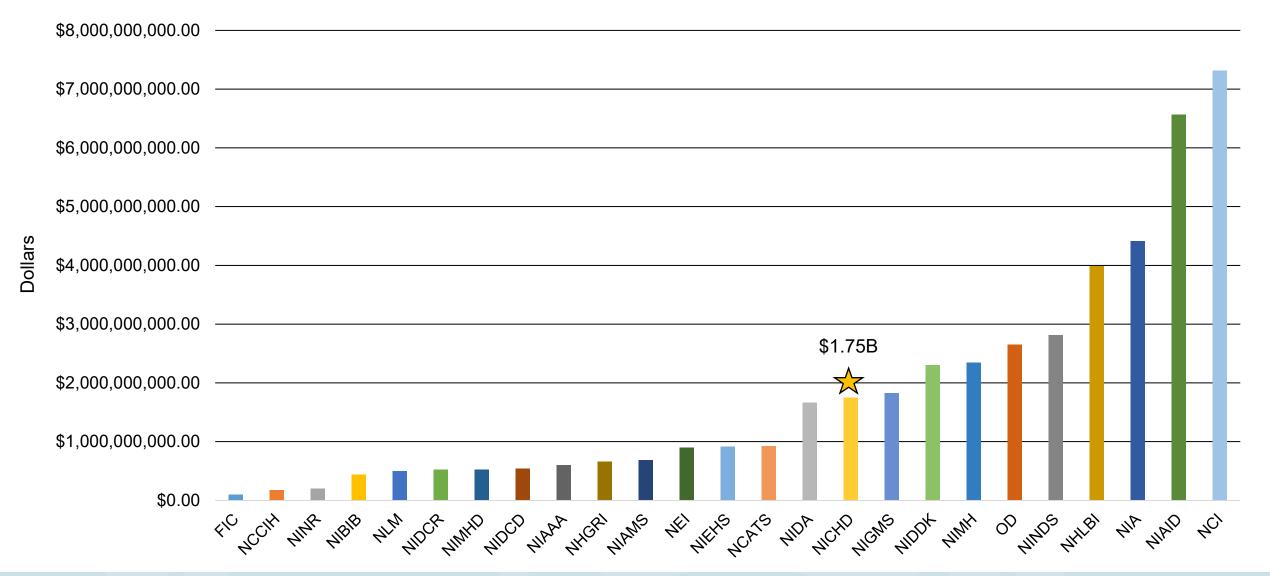


NIH Institutes and Centers





Funding by Institute/Center: FY23 Enacted





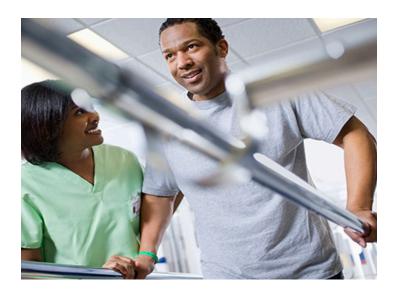


NICHD Mission & Vision (https://www.nichd.nih.gov/about)

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







Healthy pregnancies. Healthy children. Healthy and optimal lives.



About NICHD







- 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 History



Congress directs NICHD to lead SIDS research 1974



Best Pharmaceuticals for Children Act 2002

Healthy pregnancies.

Healthy children.

Healthy and optimal lives.

New Mission and Vision **2020**

1962 NICHD Founded



1990
National Center for Medical
Rehabilitation Research



2007Renamed: *Eunice Kennedy Shriver*NICHD





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



Recent Scientific Highlights



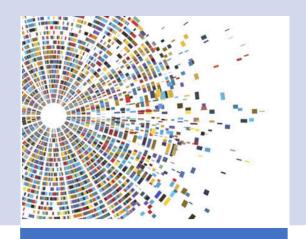
Study led by
Division of
Population Health
Research found
that exposure to
caffeine in the
womb, even in
small amounts,
may lead to shorter
height in childhood.



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



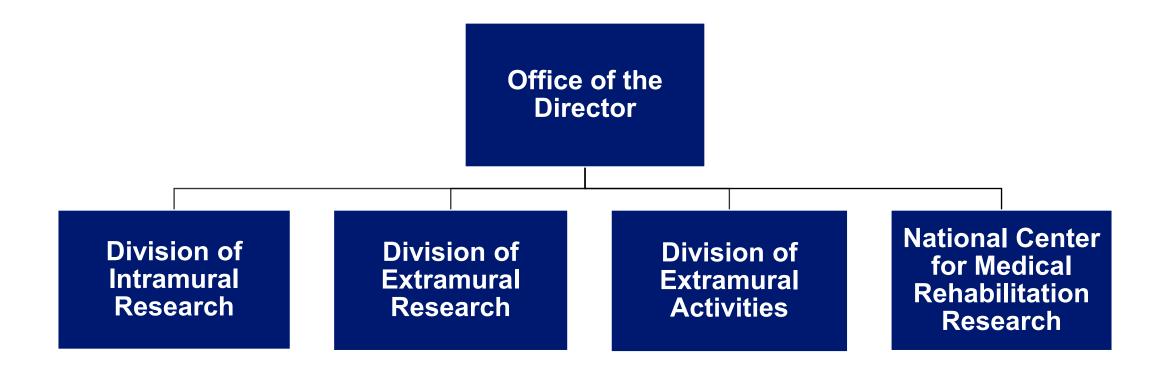
NCMRRsupported study suggested a possible way to accurately and noninvasively diagnose and monitor sportsrelated concussions.



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



NICHD Organization





Division of Extramural Research Scientific Branches

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



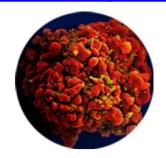
Child
Development
and Behavior



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



National Center for Medical Rehabilitation Research (NCMRR, https://www.nichd.nih.gov/about/org/ncmrr)

- 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



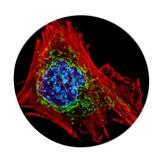


- Division of Developmental Biology
- Division of Translational Medicine
- Division of Molecular and Cellular Biology
- Division of Neuroscience and Cellular and Structural Biology
- Division of Basic and Translational Biophysics
- Division of Translational Imaging and Genomic Integrity
- Division of Obstetrics and Maternal-Fetal Medicine
- Division of Population Health Research
- https://www.nichd.nih.gov/about/org/dir

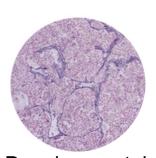
Division of Intramural Research Affinity Groups (https://www.nichd.nih.gov/about/org/dir/affinity-groups)



Aquatic Models of Human Development



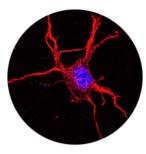
Cell and Structural Biology



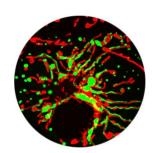
Developmental
Endocrinology,
Metabolism, Genetics,
and Endocrine Oncology



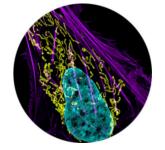
Genomics and Basic Mechanisms of Growth and Development



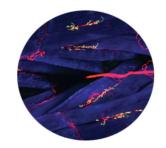
Molecular Medicine



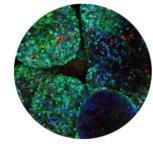
Physical Biology and Medicine



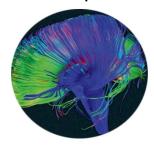
Bone and Matrix
Biology in
Development and
Disease



Cell Regulation and Development



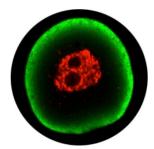
Genetics and Epigenetics of Development



Maternal-Fetal Medicine and Translational Imaging



Neurosciences



Reproductive
Endocrinology &
Infertility and Pediatric
& Adolescent
Gynecology

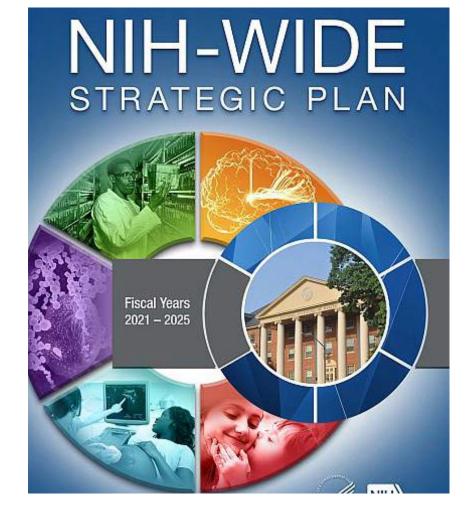
Affinity Groups (AGs) within DIR serve as hubs for groups of investigators who share closely aligned scientific interests.



NICHD and NIH Strategic Plans Establish Our Goals

and Aspirations





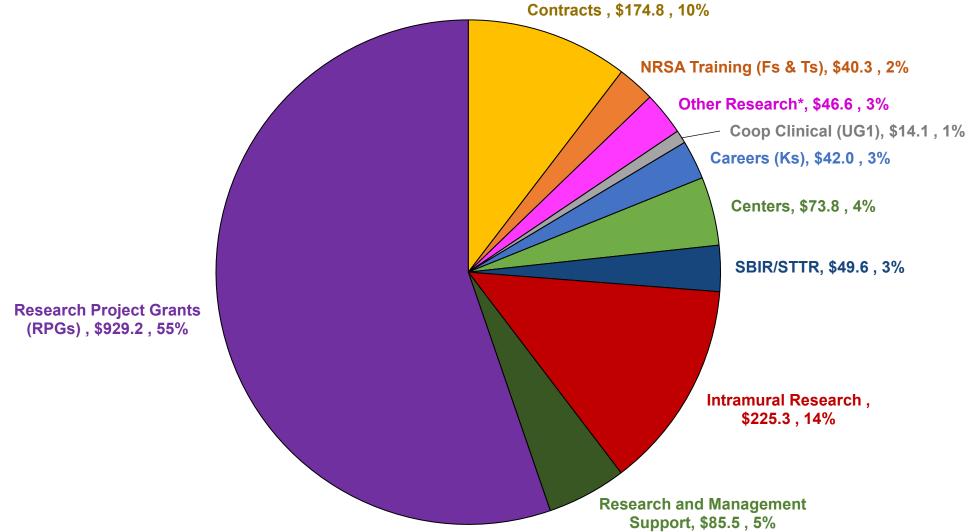
https://www.nichd.nih.gov/about/org/strategicplan

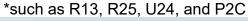
https://www.nih.gov/about-nih/nih-wide-strategic-plan





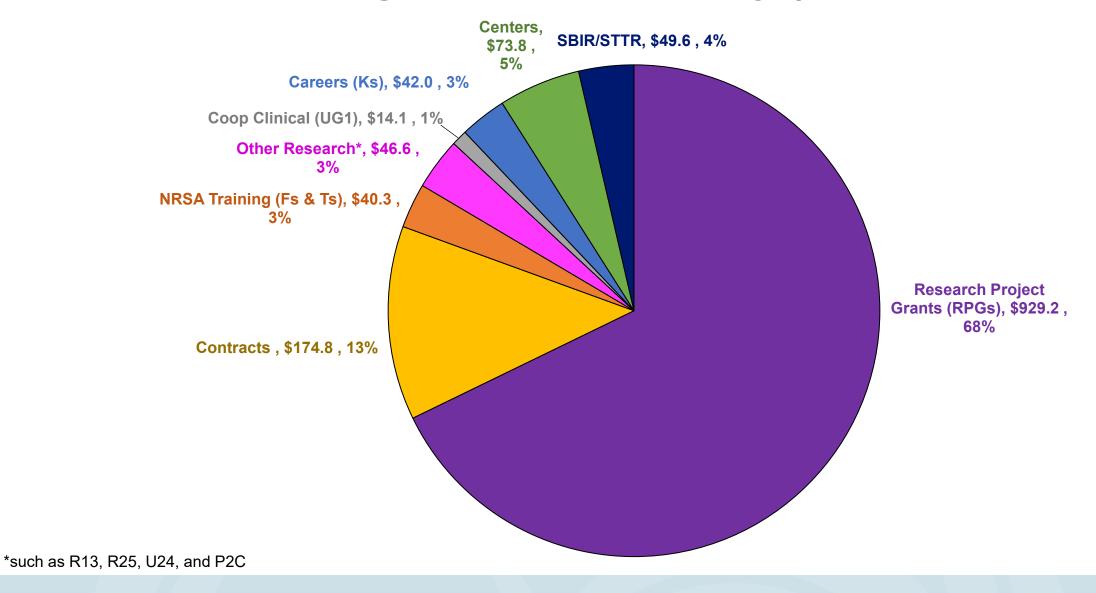
NICHD Funds by Mechanism FY22 (Dollars in Millions)





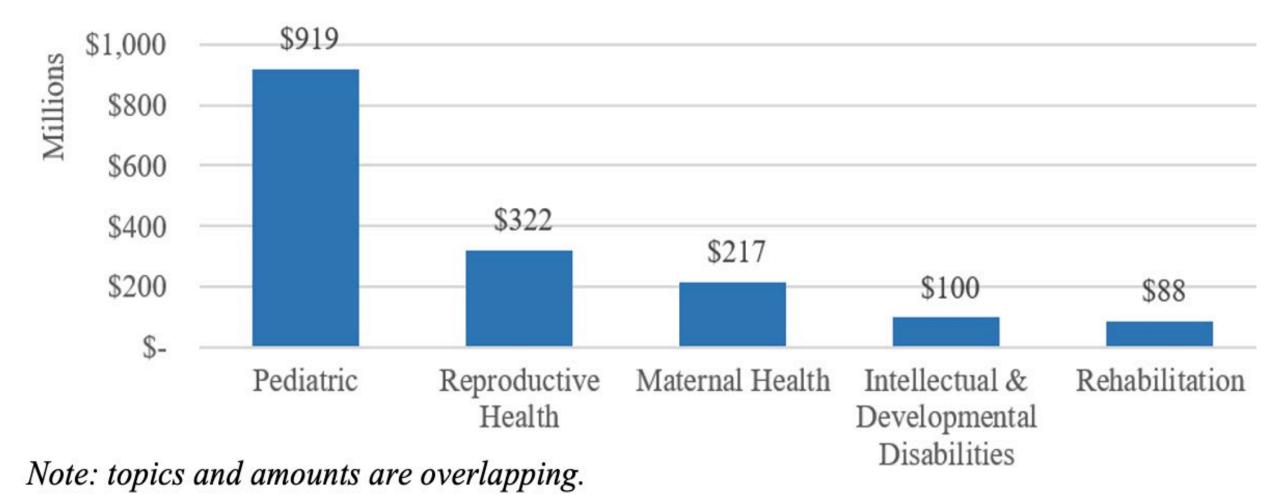


NICHD FY22 Budget Extramural Only (Dollars in Millions)



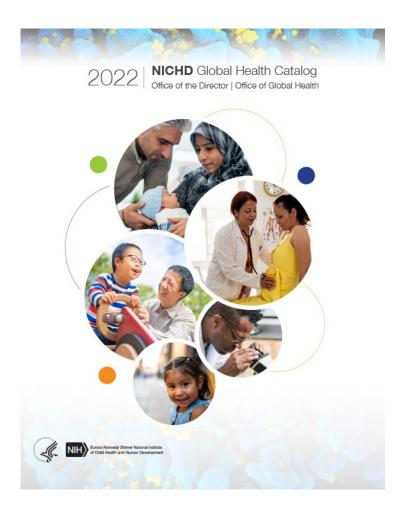


NICHD Funding by Research Area, FY22





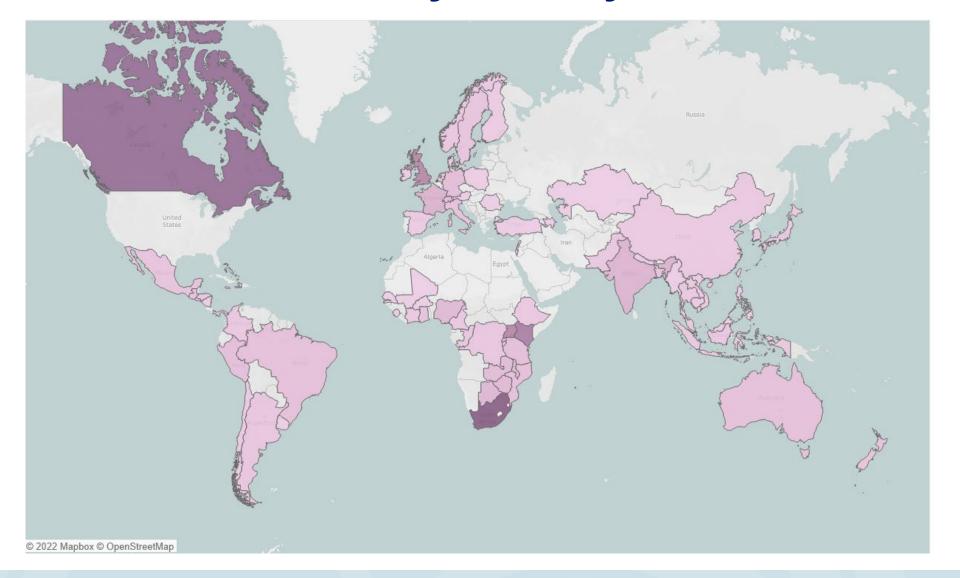
Global Health Research



- 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 <u>World RePORT</u>



NICHD-Funded Research by Country, FY21

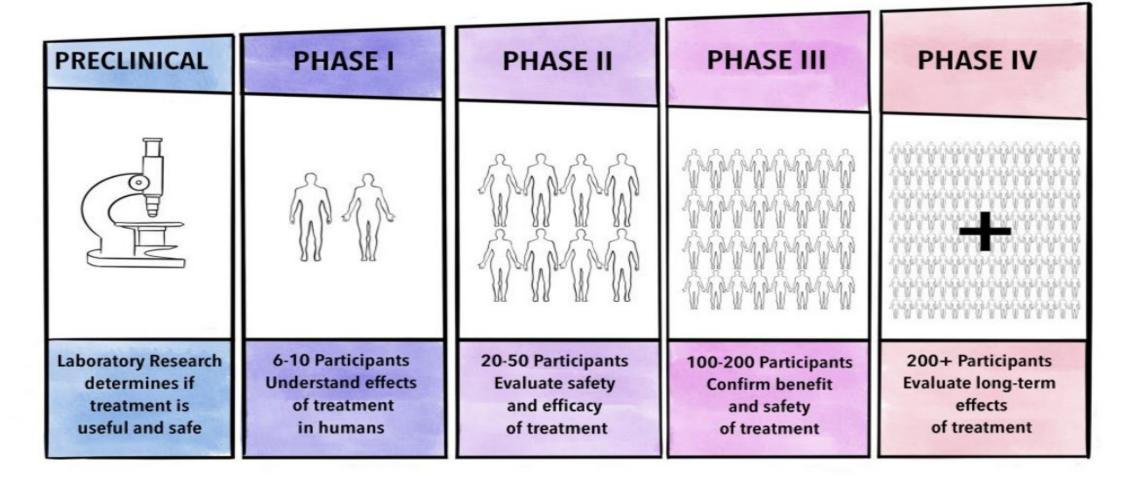






Clinical Trials Networks

Clinical Trial Phases and Approval Process



Phases of clinical trials



NICHD Clinical Trial Networks

Maternal-Fetal Medicine Units Network

EUNICE KENNEDY SHRIVER I NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT



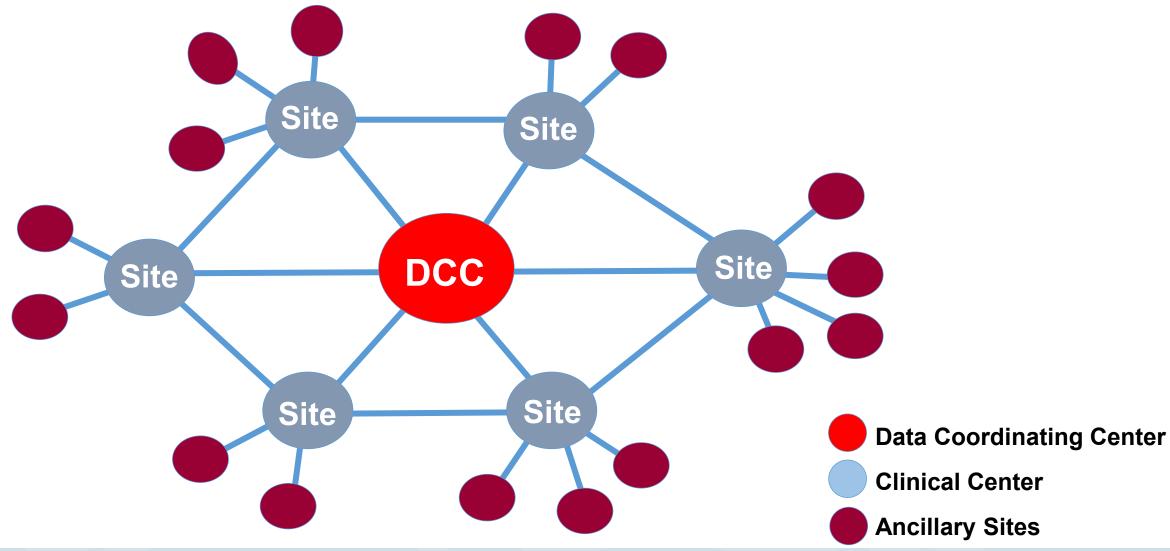








Clinical Trial Network Structure





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).

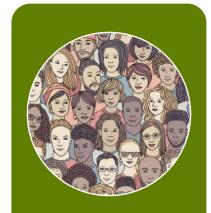






Training and Career Development

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



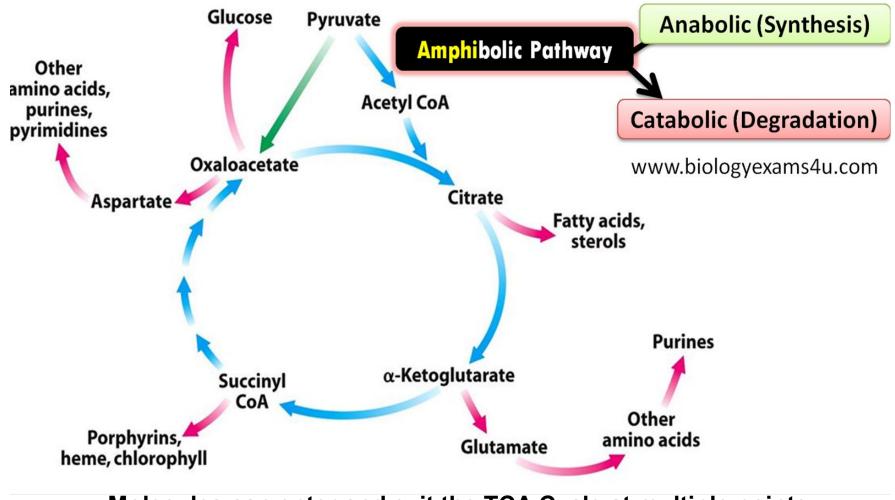
Foster inclusive and successful teams



Improve external validity; research that is applicable to all



Training is a Pathway, Not a Pipeline



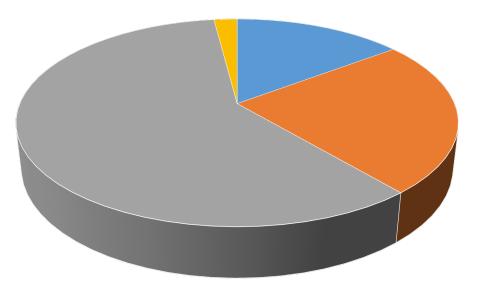
Molecules can enter and exit the TCA Cycle at multiple points

https://www.biologyexams4u.com/2021/10/what-is-amphibolic-pathway-why-citric.html



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





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!

Email: joe.gindhart@nih.gov



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



