# Funding and the NIH Alphabet Soup

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Professor of Surgery
Vice-Chair of Research & Innovation

# Common Funding Agencies for Healthcare

- National Institute of Health (NIH)
- Patient-Centered Outcomes Research Institute (PCORI)
- Agency for Healthcare Research and Quality (AHRQ)
- Center for Disease Control (CDC)
- Department of Defense (DOD)
- National Science Foundation (NSF)
- US Department of Veterans Affairs (VA)
- Health Resources and Service Administration (HRSA)
- Food and Drug Administration (FDA)

- Since December 2012 as part of the Affordable Care Act (ACA) under President Obama
- Patients and other healthcare stakeholders required in comparative effectiveness research (CER)



- Engagement: Engage patients, caregivers, and all other stakeholders in our entire research process, from topic generation to dissemination and implementation of results
- Methods: Develop and promote rigorous patient-centered outcomes research methods, standards, and best practices
- Research: Fund a comprehensive agenda of high-quality patientcentered outcomes research and evaluate its impact
- Dissemination and Implementation: Disseminate patient-centered outcomes research to all stakeholders and support its uptake and implementation
- Infrastructure: Promote and facilitate the development of a sustainable infrastructure for conducting patient-centered outcomes research



### List of Institutes and Centers



#### NIH Institutes

#### National Cancer Institute (NCI) — Est. 1937

NCI leads a national effort to eliminate the suffering and death due to cancer. Through basic and clinical biomedical research and training, NCI conducts and supports research that will lead to a future in which we can prevent cancer before it starts, identify cancers that do develop at the earliest stage, eliminate cancers through innovative treatment interventions, and biologically control those cancers that we cannot eliminate so they become manageable, chronic diseases.

#### National Eye Institute (NEI) — Est. 1968

The National Eye Institute's mission is to conduct and support research, training, health information dissemination, and other programs with respect to blinding eye diseases, visual disorders, mechanisms of visual function, preservation of sight, and the special health problems and requirements of the blind.

#### National Heart, Lung, and Blood Institute (NHLBI) — Est. 1948

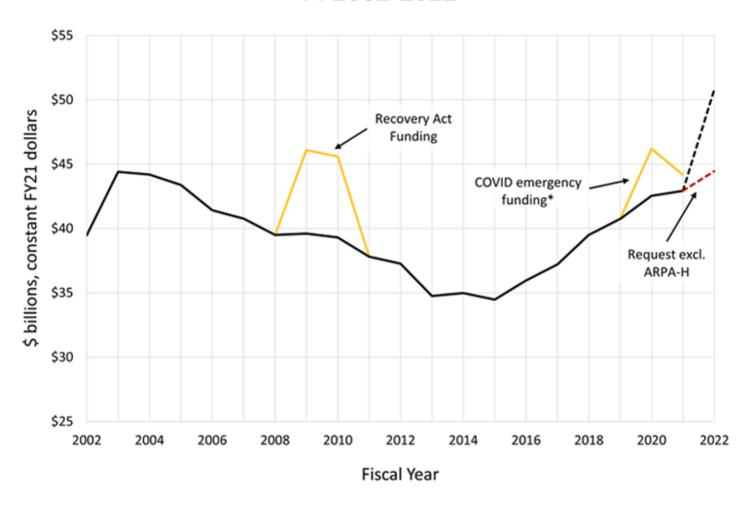
The National Heart, Lung, and Blood Institute (NHLBI) provides global leadership for a



# Appropriation

 NIH is operating at a program level of \$ 47.1 billion in FY 2024, a DECREASE by \$0.5 billion over the FY 2023 final budget allocations.

# National Institutes of Health Funding FY 2002-2022

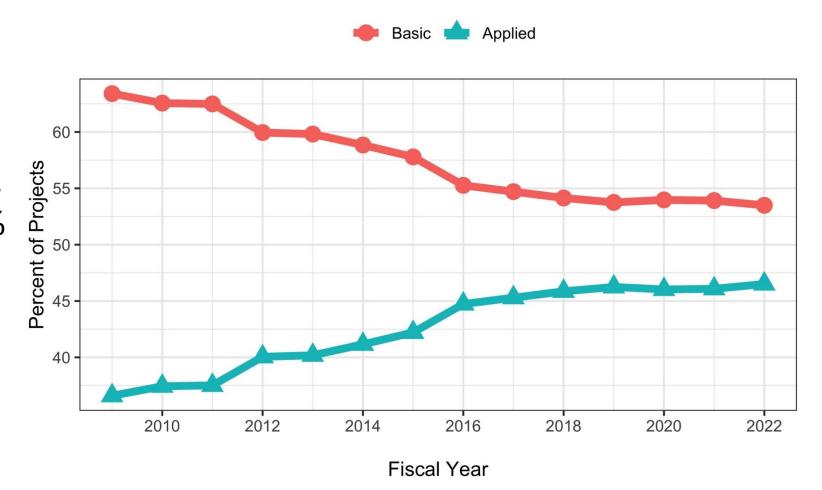


--- Administration Requests

Appropriation

### Distribution

- Increase of applied sciences from ~37% in 2010 to ~46% in 2022
- Decrease in basic sciences from ~63% in 2010 to 54% in 2022



### NIDDK

# National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) — Est. 1950

The mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is to conduct and support medical research and research training and to disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney, urologic, and hematologic diseases, to improve people's health and quality of life.

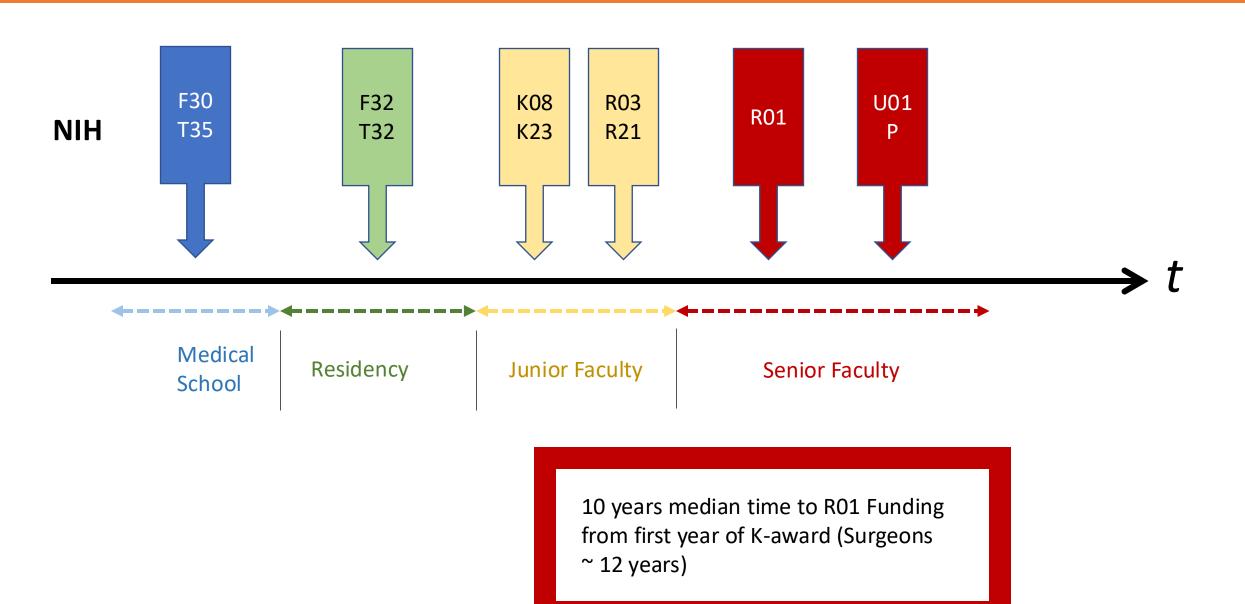


### Other Common NIH Institutes

- NCI: National Cancer Institute
- NHLBI: National Heart, Lung, and Blood Institute
- NIA: National Institute on Aging
- NIAID: National Institute of Allergy and Infectious Diseases
- National Institute on Minority Health and Health Disparities



# NIH Grant Categories



### Postdoctoral Awards

- T32: Pipeline awards for future scientist and physician-scientists; research with federally funded investigator in a wet or dry lab;
- F32: individual postdoctoral award for MD/PhDs
  - Saieesh Rao (F32 AHRQ)/ Anne Stey (AHRQ funded)
- Other opportunities
  - Supplements for diversity
  - Administrative supplement for pre- and post-docs on existing grants (R,U,P-grants)
  - Directly on grants (R,U,P-grants)

# Purpose of training grants outlined by NIH

T32

### Ruth L. Kirschstein Institutional National Research Service Award

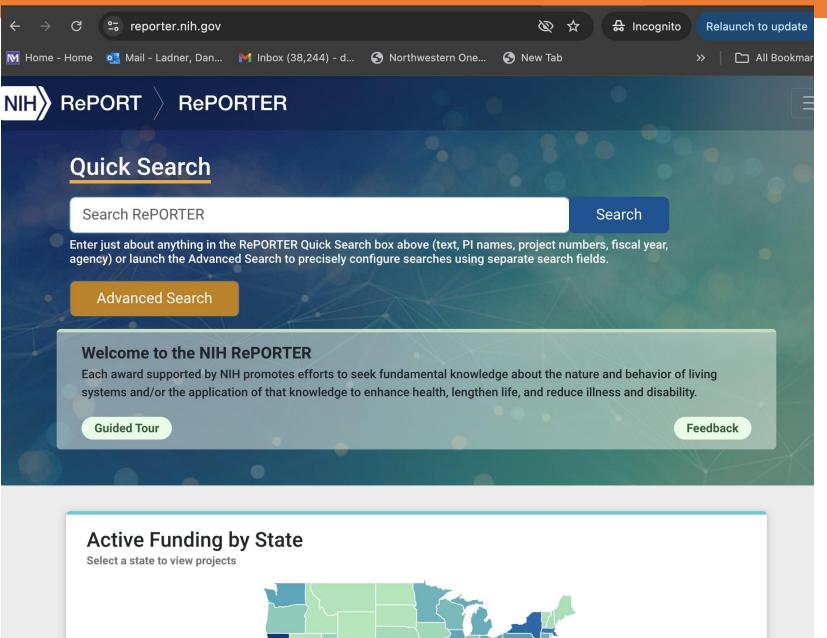
### **Program Purpose**

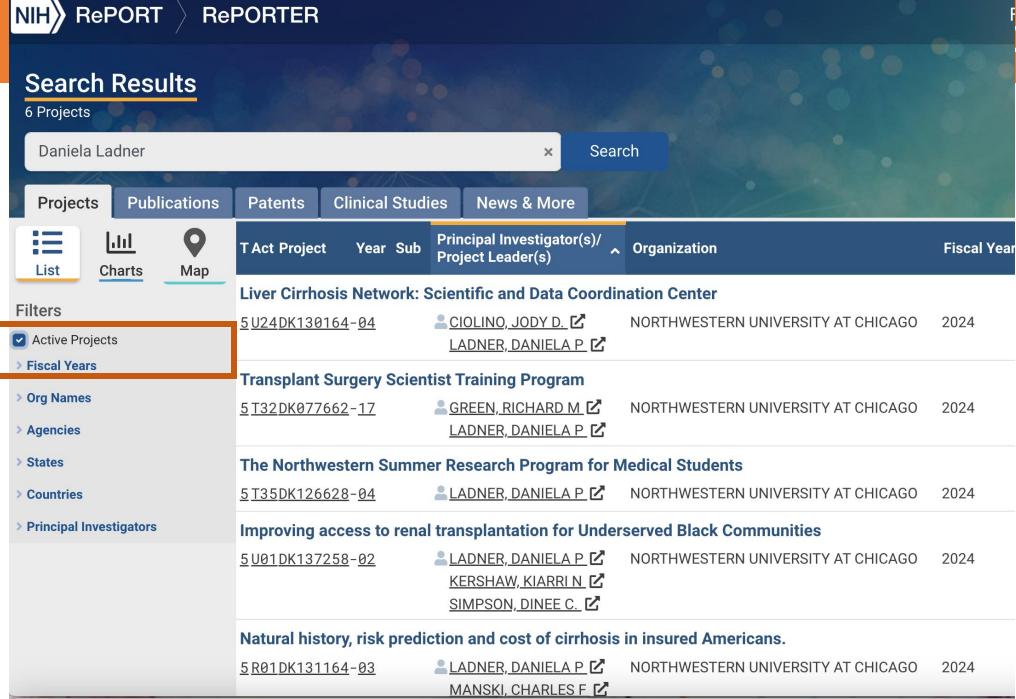
The purpose of this Kirschstein-NRSA training program is to enable institutions to recruit individuals selected by them for predoctoral and postdoctoral research training in specified shortage areas. The goal of this program is to prepare

training in specified shortage areas. The goal of this program is to prepare qualified predoctoral and/or postdoctoral trainees for careers that have a significant impact on the health-related research needs of the Nation.

203	APPOINTEE	Eligibility	Career level		
		U.S. citizens or permanent residents enrolled in a research or clinical doctoral Posor postdoctoral program.	Graduate/Clinical <u>Doctorate</u> stdoctorate/Residency		
	PD/PI	Eligibility	Career level		
		Established investigator capable of providing administrative and scientific leadership.	<u>Established</u> <u>Investigator</u>		
	INSTITUTION	Eligibility			
		U.S. domestic institutions			

# Find funded investigators in NIH reporter





### NIH Reporter

### **The Northwestern Summer Research Program for Medical Students**

Project Number 1T35DK126628-01

Contact PI/Project Leader LADNER, DANIELA P

Awardee Organization
NORTHWESTERN UNIVERSITY AT
CHICAGO



### **Description**

#### **Abstract Text**

PROJECT SUMMARY As a gateway for a clinician-scientist career, this T35 Summer Program ("The Northwestern Summer Research Program for Medical Students"), aims to offer academically promising medical students from five medical schools in the greater Chicago area (FSM, Loyola, Chicago, Illinois at Chicago, and Rosalind Franklin) a rich and didactic summer research basic science or outcomes research experience in NIDDK areas of interest. Feinberg School of Medicine (FSM) does not have a T35 program and has assembled 33 federally, primarily NIDDK funded T35 mentors with excellent mentorship track record for 8 T35 trainees from a pool of ~880 first-year medical students (25% URM and 52% women). Champions at each medical school participate to facilitate recruitment. Events, such as a T35 Meet-and-Greet, where interested students meet potential T35 mentors and student/mentor matching through the PD and T35 Committees facilitate the application process. The selection process is rigorous and transparent with special emphasis on selecting the most competitive URM and female students. The selected T35 trainees engage in an onboarding process prior to the summer, that includes and Onboarding Lunch, training modules for IRB and RCR, as

## Career Development Grants

- 50%-75% support provided
  - (max salary support FY24: \$222K/yr)
- 3-5 years
- Cannot have an R01 with it (but smaller grants ok; e.g., R21, R03)
- Year 3-5 time to start submitting R grants

 10 years median time to R01 Funding from first year of K-award (Surgeons ~ 12 years)

### **R-Grants**

- R03: 'small' funding program provided
  - 2 years
  - ~\$50,000/year
- R21: intended to encourage exploratory/developmental research by providing support for the early and conceptual stages of project development.
  - \$275,000 over 2 years
- R01: original and historically oldest grant mechanism used by NIH
  - 5-year grants
  - Usually \$250,000-500,000/year for 5 years

## RFA – request for applications

# Department of Health and Human Services Part 1. Overview Information

Participating Organization(s)

National Institutes of Health (NIH)

**Components of Participating Organizations** 

National Eye Institute (NEI)

National Institute on Aging (NIA)

National Institute of Allergy and Infectious Diseases (NIAID)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)

National Institute on Deafness and Other Communication Disorders (NIDCD)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

National Institute of Environmental Health Sciences (NIEHS)

National Center for Complementary and Integrative Health (NCCIH)

Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP)

National Heart, Lung, and Blood Institute (NHLBI)

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

**Special Note**: Not all NIH Institutes and Centers participate in Parent Announcements. Applicants should carefully note which ICs participate in this announcement and view their respective areas of research interest and requirements at the Table of IC-Specific Information, Requirements and Staff Contacts website. ICs that do not participate in this announcement will not consider applications for funding. Consultation with NIH staff before submitting an application is strongly encouraged.

**Funding Opportunity Title** 

Ruth L. Kirschstein National Research Service Award (NRSA) Short-Term Institutional Research Training Grant (Parent T35)

# NIH Deadlines

	Receipt Cycle	Receipt Cycle	Receipt Cycle
Research Grants – R01 (Investigator-initiated basic and applied research) new	February 5	June 5	October 5
Research Grants – R01 (Investigator-initiated basic and applied research) renewal, resubmission, revision	March 5	July 5	November 5
Research Grants – R21 (Exploratory/Developmental) new	February 16	June 16	October 16
Research Grants – R21 (Exploratory/Developmental) renewal, resubmission, revision	March 16	July 16	November 16
Career Development – K series new	February12	June 12	October 12
Career Development – K series renewal, resubmission, revision	March 12	July 12	November 12

Study Section ^	Study Section Description	Scientific Review Officer
ACTS	Arthritis, Connective Tissue and Skin Study Section	Dr. Robert Gersch
AIMR	Aging, Injury, Musculoskeletal, and Rheumatologic Disorders	
ANIE	Acute Neural Injury and Epilepsy Study Section	Dr. Elyse Schauwecker
APDA	Adult Psychopathology and Disorders of Aging Study Section	Dr. Benjamin Shapero
ARM	Addiction Risks and Mechanisms Study Section	Dr. Kristen Prentice
ASG	Aging Systems and Geriatrics Study Section	Dr. Roger Bannister
ASPA	Analytics and Statistics for Population Research Panel A	
ASPB	Analytics and Statistics for Population Research Panel B	
AUD	Auditory System Study Section	Dr. Brian Scott
AVI	Atherosclerosis and Vascular Inflammation	Dr. Natalia Komissarova
ВАСР	Bacterial Pathogenesis Study Section	Dr. Richard Kostriken
BBHV	Basic Biology of Blood, Heart and Vasculature	Dr. Katherine Malinda
BBM	Biochemistry and Biophysics of Membranes Study Section	Dr. Nuria Assa-Munt
ВСО	Biochemical and Cellular Oncogenesis	
BDE	Biology and Development of the Eye	Dr. Kevin Czaplinski
BDMA	Biodata Management and Analysis Study Section	Dr. E. Bryan Crenshaw III
BGES	Behavioral Genetics and Epidemiology Study Section	Dr. Lisa Steele

# Review of grants

- Study Section



- Council
- Funding cycle 10/1/xx-9/30/xx

# NIH Scoring

Impact	Score	Descriptor	Additional Guidance on Strengths/Weaknesses
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

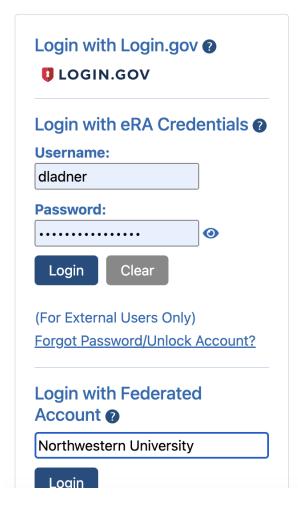
### Score and Percentile



#### **Commons**







### eRA Commons •

Track your application; manage and report on your federally funded award

#### **1** Commons He

**%** 866-504-95 301-402-7469

• Hours Moi

#### A Recent News

Reminder: Federal financial assistance award recipients are a crucial part of safeguarding Federal funds and maint environment. Check out this <u>Grants.gov blog post</u> to learn more.

Announcement: Effective Monday June 3rd, 2024, the Commons Quick Queries page has been retired. We effull advantage of other eRA tools in Commons Status and Research Performance Progress Report (RPPR related information. In addition, we encourage you to use Reported to obtain desired information on Organiety of other grant related topics. For questions, please contact the eRA Service Desk

### Score and Percentile

#### **∨** Review

#### **Application**

**Award Document Number:** 

RAG070194A

**FSR Accepted Code:** N

**Snap Indicator Code:** Y

**Impact Score:** 30

Percentile: 9.0

**Early Stage Investigator** 

Eligible: N

**New Investigator Eligible:** N

**Eligible for FFATA Reporting:** 

Yes

#### **Study Section**

Scientific Review Group: KNOD

Council Meeting Date

**(YYYY/MM):** 2020/10

Meeting Date: 06/04/2020

Meeting Time: 10:00

**Study Roster:** View Meeting Roster

#### **Advisory Council (AC)**

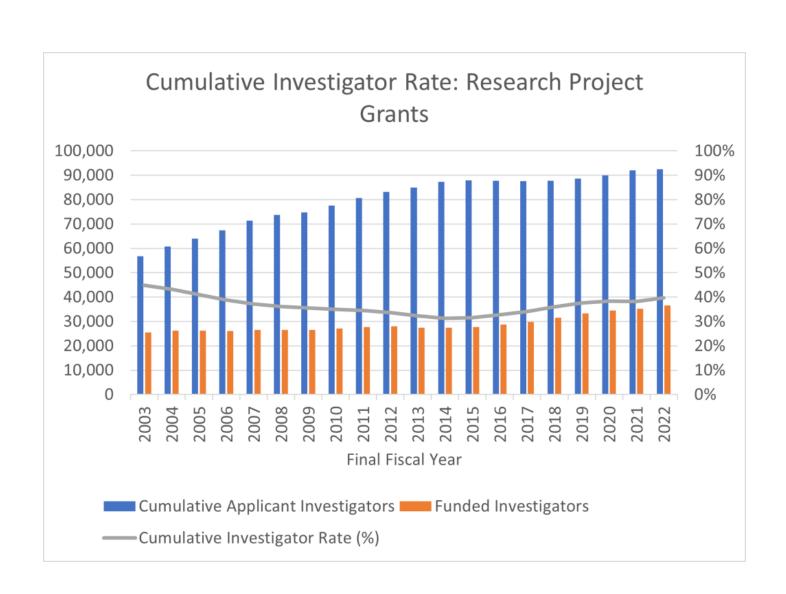
Meeting Date: 09/08/2020

Meeting Time: 03:00

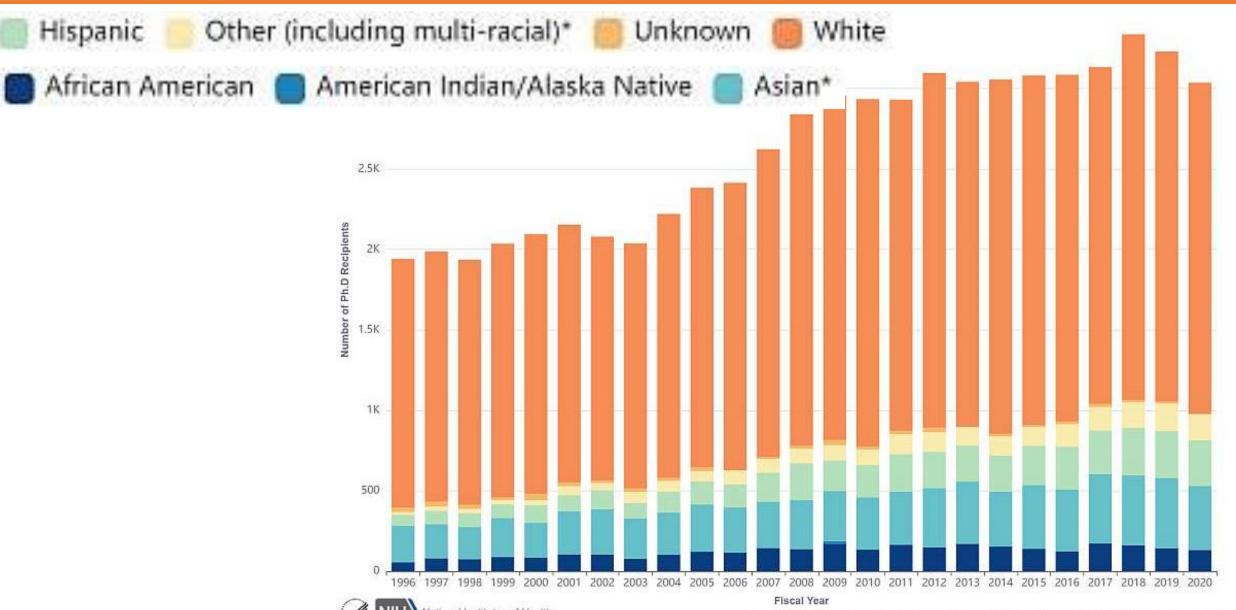
Paylines	Institute	SUCCESS RATE	SUCCESS RATE FY18	PAYLINE-17	PAYLINE -18	PAYLINE-19
	NCI	11.7	11.3	10	9	8
	NEI	24.9	26.7		">til	<b>e</b>
	NHGRI	23.9	28		rcelle.	
	NHLBI	23.5	25.1	Eth De	ant	116/6
	NIA	26.6			orcein	
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	MODK	17.8	21.6	12	13	13
	NIEHS	15	17.1			10
	NIGMS	30.6	29.2			
	NIMH	20.9	22.2	20	20	20
	NIMHD	21.5	10.7			
	NINDS	17.7	21.8	12	15	16
	NINR	8.9	10.3			

### Success Rates

Funded Investigators
 ~35% overall



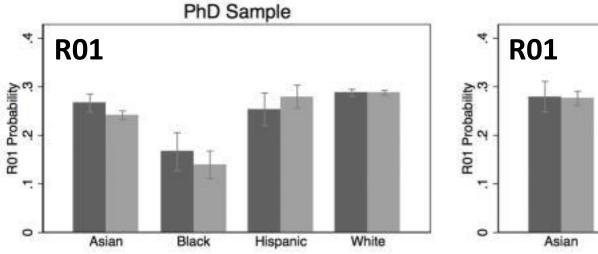
### Racial Distribution

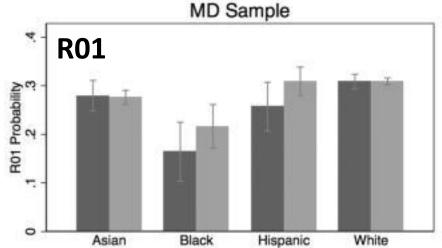


# Probability of award by gender &

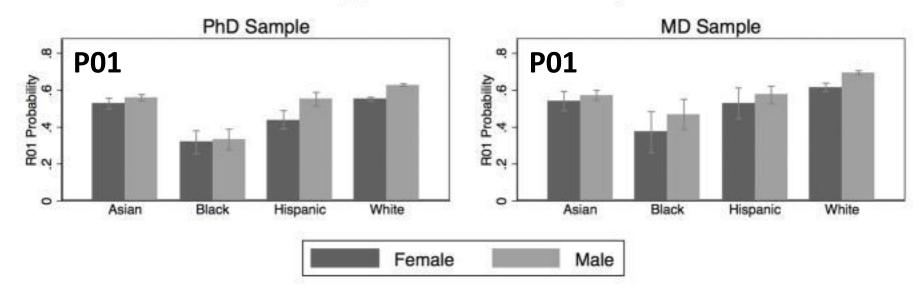
# Race/ Ethnicity

### A. Application Award Probability





### B. Applicant Award Probability



# NIH definition of Diversity

### SUPPLEMENT FOR DIVERSITY (For K-awards, R-awards, P-awards)

### **Predoctoral:**

- race, ethnicity, disability, LGBTQI+, underprivileged background

### Postdoctoral/Faculty:

- race, ethnicity, disability

# National Institute on Minority Health and Health Disparities (NIMHD) — Est. 2010

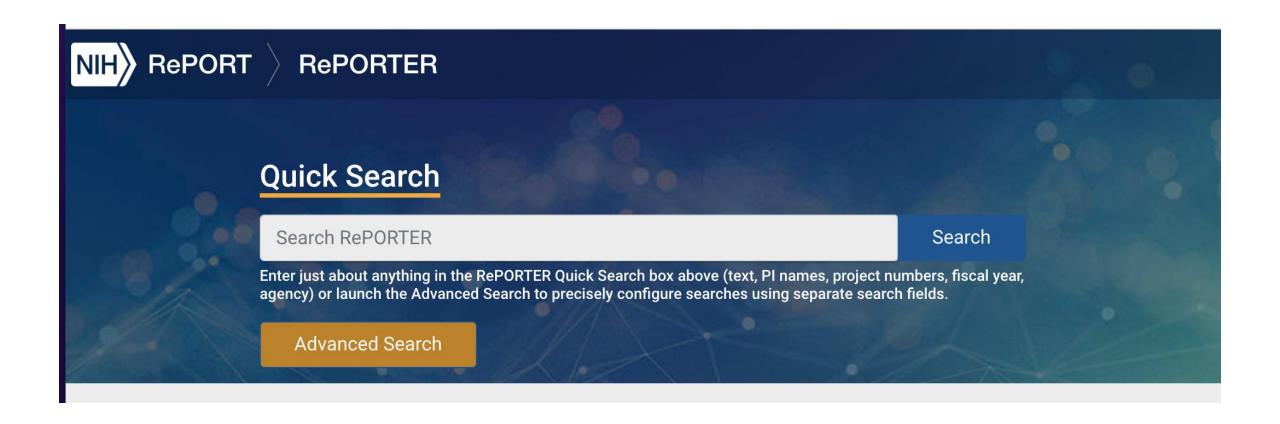
NIMHD has a long history, beginning in 1990 as an Office and later designated a Center in 2000. The mission of NIMHD is to lead scientific research to improve minority health and eliminate health disparities. To accomplish its mission, NIMHD plans, reviews, coordinates, and evaluates all minority health and health disparities research and activities of the National Institutes of Health; conducts and supports research in minority health and health disparities; promotes and supports the training of a diverse research workforce; translates and disseminates research information; and fosters innovative collaborations and partnerships.

# The game of grant submission – Keep on Going

(my second R01) (Wolf/Ladner)

- 1. R01 submission to NIDDK unscored (Wrong Study Section)
- 2. PCORI submission: invited for full submission unfunded
- 3. RO1 Resubmission with basic science not funded
- 4. R01 Resubmission with basic science not funded
- 5. R01 Submission original PLUS, different study section
  - → missed payline by 1%
- 6. R01 Resubmission funded

# NIH reporter is your friend



# THANK YOU

