



National Institutes of Health 101

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Research and Partnerships

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Questions and topics to be addressed in this series:

How do I break into the NIH funding pool?

What is the NIH looking to fund?

Why do I keep getting rejected?

**How do I choose the appropriate IC and study section
for my submission?**

How do I strategize for my resubmission?

What are “innovation” and “significance”?

What can I ask my program manager?

**What other types of grants are available other than the
R01?**

**Can I submit the same proposal to more than one
agency at the same time?**

Differential Missions and Processes

NIH

NSF

USDA

AHRQ

NIST

DoD

DoE

DHS

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NIH

More than 80 percent of NIH's \$45B funding is awarded for **extramural research**, largely through over 52,000 competitive grants to more than 45,000 researchers at more than 2,500 universities, medical schools, and other research institutions in every state and 53 foreign countries

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President's Requested budget of \$62.5B for FY2022

- **Includes \$5B for an administrative initiative to create the Advanced Research Project Agency for Health (ARPA-H)**
- **\$30M for Implementing a Maternal health and Pregnancy Outcomes Vision for Everyone (IMPROVE) Initiative**
- **\$216M for the Cancer moonshot/childhood cancer data initiative**
- **\$2.2B for mental health (primarily NIMH)**

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- 
- **\$3M for the NICHD to support research on mitigating the effects of COVID-19 on pregnancies, lactation, and post-partum health with a focus on individuals from racial and ethnic minority groups**
 - **\$2.6B for the HEAL initiative (opioids, pain research and addiction research)**
 - **\$97.2M for the Office of Nutrition Research (now in the Office of the Director)**
 - **\$50M for Artificial Intelligence for Chronic Disease initiative**

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ARPA-H

- **This initiative will, at least initially, focus on cures for cancer, Alzheimer's Disease, diabetes and other diseases. ARPA-H will operate within the NIH but unique from the other ICs.**
- **Will run similarly to the Human Genome Project (1990) or Accelerating COVID-19 Therapeutics Interventions and Vaccines (ACTIV) and Rapid Acceleration of Diagnostics (RADx)**
- **Vaccines to prevent most cancers**
- **Creation of patient-specific T cells for search and destroy missions**
- **"zip code" targeted drugs or vectors**
- **24/7 monitors**
- **Brain imaging and biomarkers**
- **Rapid design, testing, and approval of infectious disease vaccines (100 days)**
- **Platforms to reduce health disparities in maternal morbidity and mortality**

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Common Fund Initiatives

FY23

- **Harnessing data science for health discovery and innovation in Africa**
- **Artificial intelligence for biomedical excellence**
- **Somatic cell gene editing program**
- **Cellular senescence**
- **Community Partnerships to Advance Science for Society (ComPASS)**

FY24

- **Bridge to AI**
- **Advancing Health Communication Science and Practice**
- **Human Virome Program**

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27 NIH Institutes and Centers (ICs)

Director

budgeting, strategic planning, congressional mandates

Program

portfolio management, concept/RFA writing

Review

proposal review

Advisory Council

strategic planning, concept clearance, final proposal review

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Funding Mechanisms

Research Projects (R01, R03, R21)

Solicited vs. Unsolicited

Generally due three times per year:

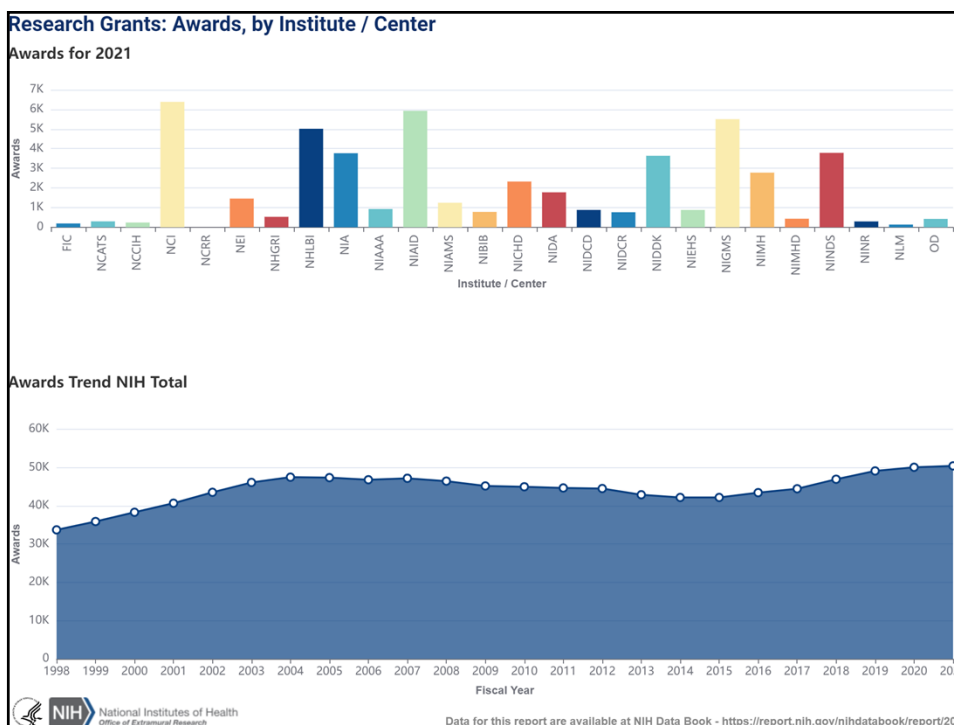
Feb 5, June 5 and Oct. 5 for R01

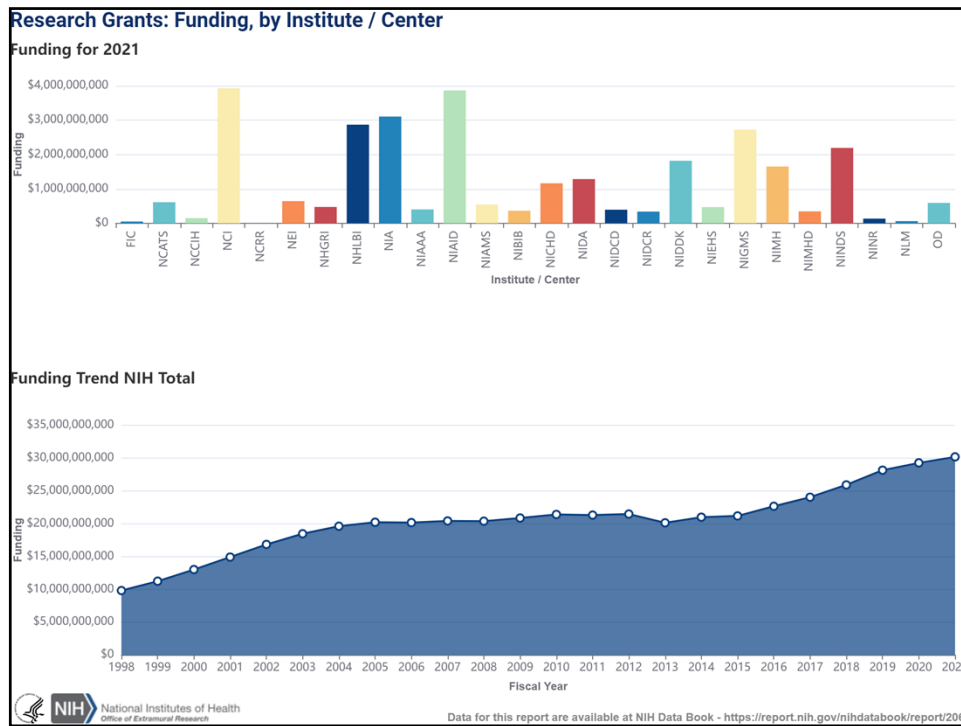
**Feb 15, June 15 and Oct 15 for
R03 and R21 proposals**

Program Projects (P01)

Cooperative Agreements (U01, U19)

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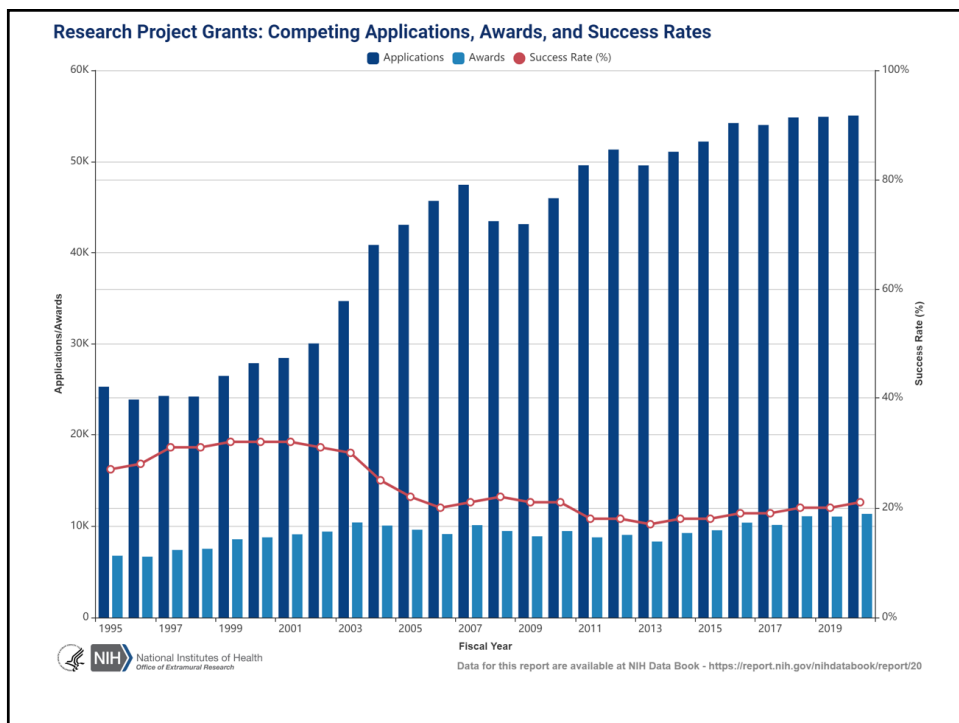
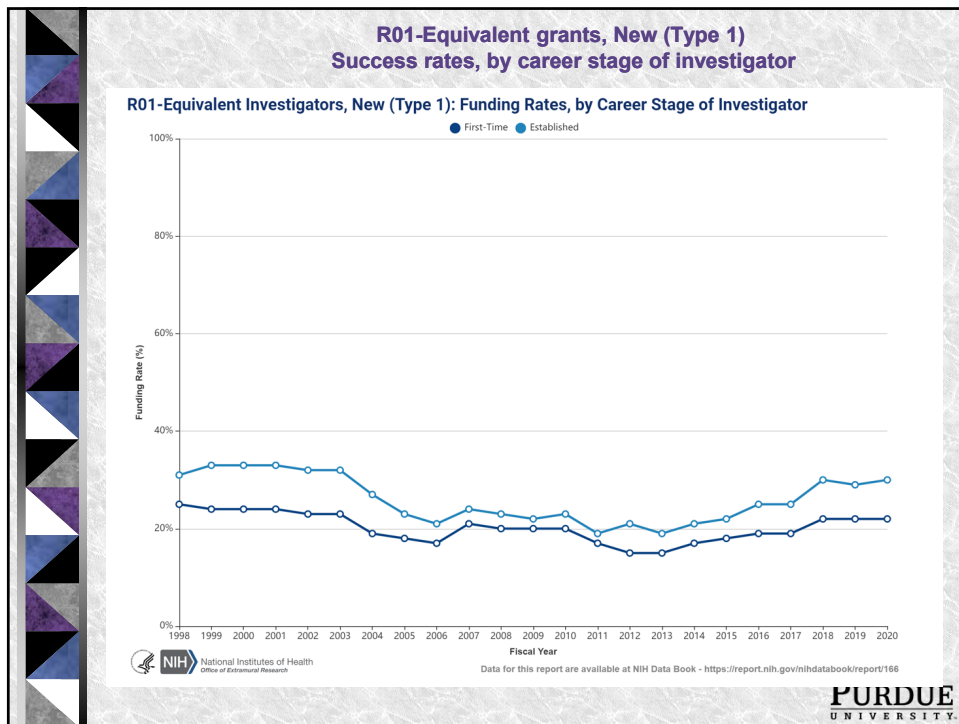
NIH Institutes / Centers	Activity Code	Number of Applications Reviewed	Number of Applications Awarded	Success Rate ³	Total Funding ⁴
NCI	R03	727	104	14.3%	\$9,120,722
NHLBI	R03	30	16	53.3%	\$1,343,723
NIDCR	R03	137	24	17.5%	\$3,492,387
NIDDK	R03	75	35	46.7%	\$2,733,896
NINDS	R03	158	35	22.2%	\$2,720,297
NIAID	R03	265	37	14.0%	\$2,912,279
NICHD	R03	367	84	22.9%	\$6,797,678
NIEHS	R03	78	7	9.0%	\$532,921
NIA	R03	205	43	21.0%	\$4,236,302
NIAMS	R03	6	3	50.0%	\$247,589
NIDCD	R03	3	0	0.0%	\$0
NIMH	R03	125	15	12.0%	\$1,185,329
NIDA	R03	142	32	22.5%	\$4,091,055
NIAAA	R03	49	7	14.3%	\$564,364
NHGRI	R03	8	2	25.0%	\$157,000
NIBIB	R03	129	23	17.8%	\$2,056,985
NIMHD	R03	35	9	25.7%	\$747,577
FIC	R03	2	0	0.0%	\$0
FY2017					

NIH Institutes / Centers	Activity Code	Number of Applications Reviewed	Number of Applications Awarded	Success Rate ³	Total Funding ⁴
NCI	R21	1,901	153	8.0%	\$30,515,060
NHLBI	R21	333	35	10.5%	\$5,483,504
NIDCR	R21	220	22	10.0%	\$4,973,237
NIDDK	R21	407	30	7.4%	\$6,810,635
NINDS	R21	1,344	188	14.0%	\$44,525,922
NIAID	R21	2,550	408	16.0%	\$92,462,775
NIGMS	R21	3	3	100.0%	\$549,332
NICHD	R21	1,194	152	12.7%	\$34,694,103
NEI	R21	323	49	15.2%	\$11,260,172
NIEHS	R21	336	37	11.0%	\$8,696,641
NIA	R21	865	186	21.5%	\$43,408,922
NIAMS	R21	570	79	13.9%	\$15,852,639
NIDCD	R21	266	56	21.1%	\$11,150,098
NIMH	R21	678	120	17.7%	\$27,124,729
NIDA	R21	539	109	20.2%	\$24,411,427
NIAAA	R21	275	46	16.7%	\$9,847,715
NINR	R21	253	10	4.0%	\$2,359,940
NHGRI	R21	83	14	16.9%	\$3,617,712
NIBIB	R21	860	73	8.5%	\$15,822,295
NCCIH	R21	64	4	6.3%	\$647,308
NIMHD	R21	139	18	12.9%	\$4,232,327
FIC	R21	158	13	8.2%	\$2,570,409
NLM	R21	46	6	13.0%	\$1,172,743
NCATS	R21	11	4	36.4%	\$927,852

FY2017

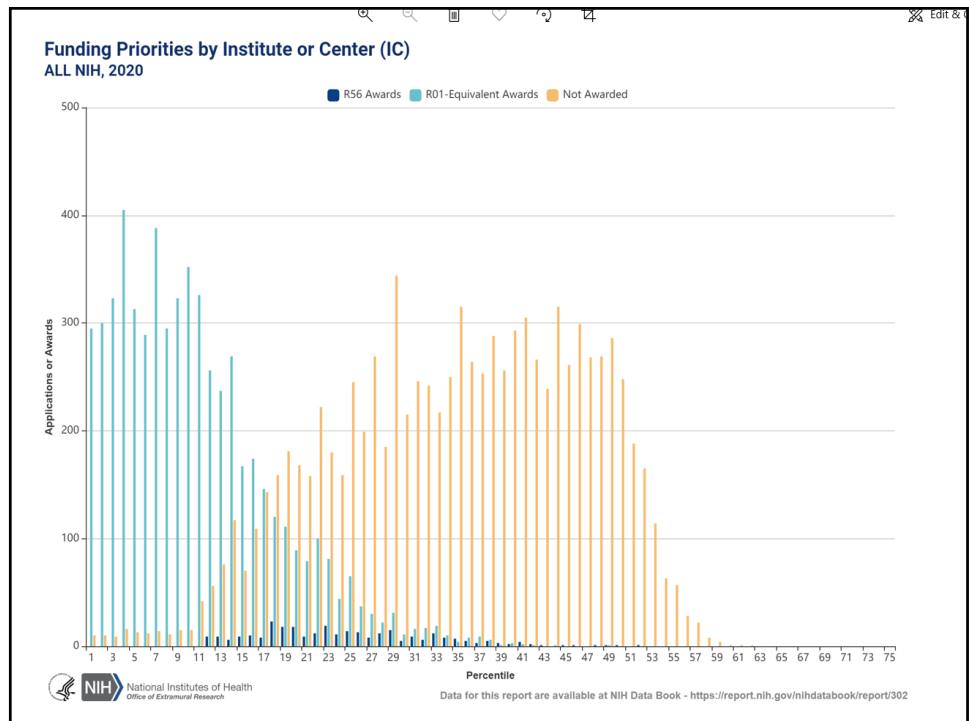
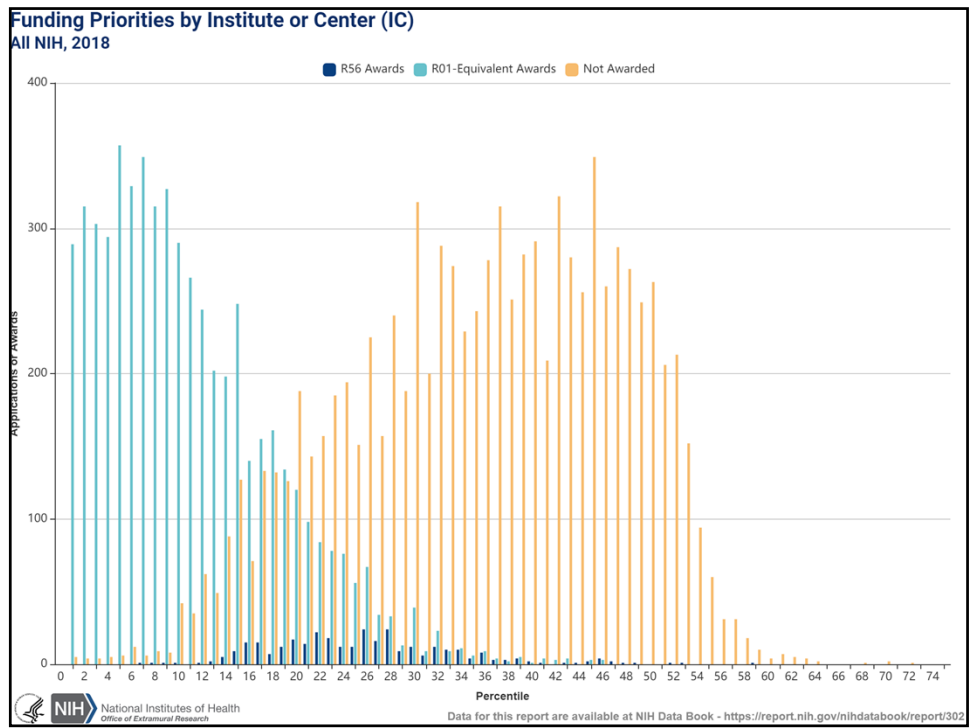
NIH Institutes / Centers	Activity Code	Number of Applications Reviewed	Number of Applications Awarded	Success Rate ³	Total Funding ⁴
NCI	R01	5,572	694	12.5%	\$318,146,726
NHLBI	R01	3,229	738	22.9%	\$405,816,910
NIDCR	R01	412	77	18.7%	\$34,326,692
NIDDK	R01	2,570	432	16.8%	\$197,648,443
NINDS	R01	2,305	374	16.2%	\$161,675,480
NIAID	R01	2,897	555	19.2%	\$308,499,044
NIGMS	R01	2,948	833	28.3%	\$305,420,554
NICHD	R01	1,533	257	16.8%	\$132,329,594
NEI	R01	868	251	28.9%	\$105,304,878
NIEHS	R01	601	86	14.3%	\$37,914,602
NIA	R01	1,646	343	20.8%	\$228,255,505
NIAMS	R01	931	165	17.7%	\$68,996,909
NIDCD	R01	471	115	24.4%	\$51,171,456
NIMH	R01	1,477	305	20.6%	\$176,235,079
NIDA	R01	1,104	191	17.3%	\$105,807,496
NIAAA	R01	443	81	18.3%	\$33,127,171
NINR	R01	280	34	12.1%	\$17,092,569
NHGRI	R01	180	41	22.8%	\$25,306,424
NIBIB	R01	458	88	19.2%	\$40,991,237
NCCIH	R01	85	15	17.6%	\$7,117,518
NIMHD	R01	227	59	26.0%	\$38,621,990
FIC	R01	35	8	22.9%	\$1,668,105
NLM	R01	79	17	21.5%	\$7,034,546
OD Common Fund	R01	143	11	7.7%	\$7,614,035

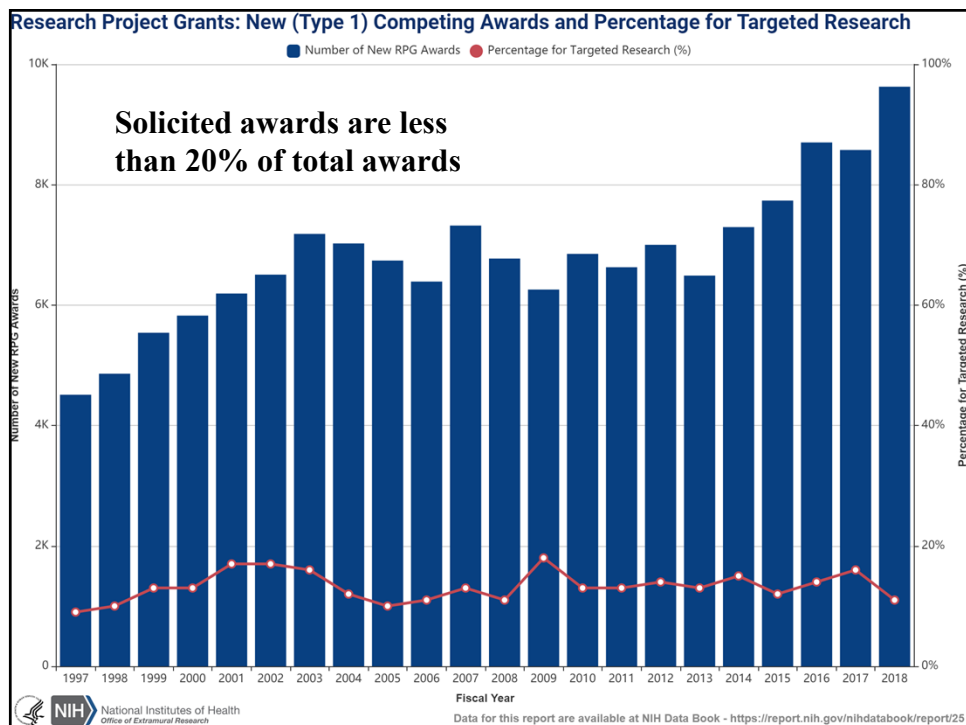
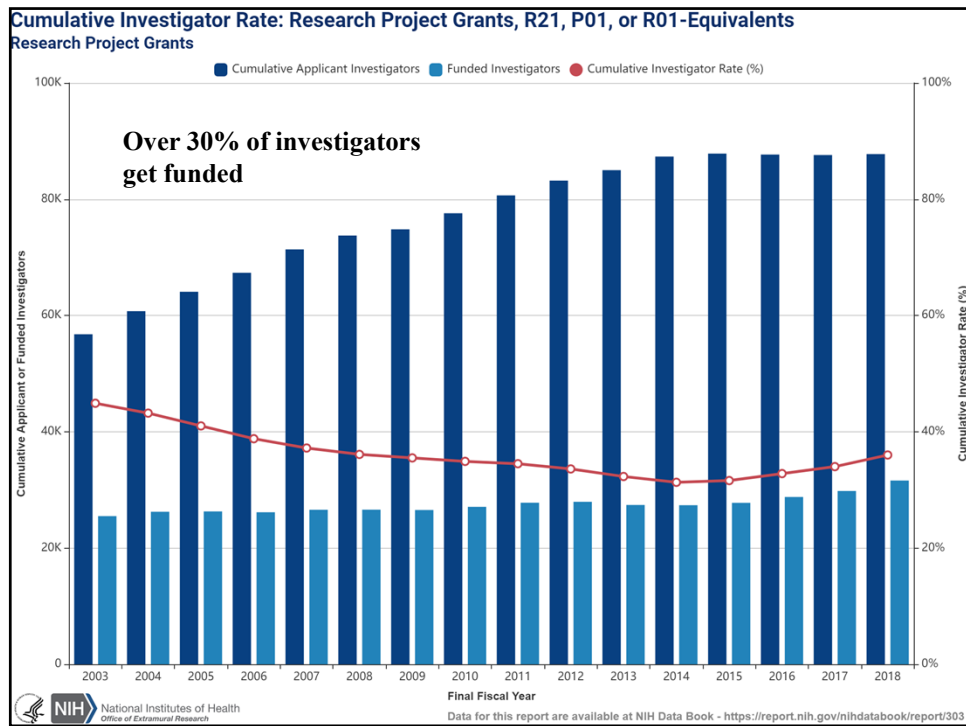
FY2017



Research/Disease Areas (Dollars in millions and rounded)	2014	2015	2016	2017	2018	2019	2020	2021	2022 Estimated	2023 Estimated
Clinical Research	\$11,087	\$11,366	\$12,176	\$12,695	\$13,870	\$15,868	\$17,610	\$17,681	\$18,405	\$18,383
Genetics	\$7,324	\$7,480	\$8,070	\$8,501	\$9,105	\$9,864	\$10,544	\$11,010	\$11,480	\$11,425
Prevention	\$6,858	\$7,027	\$7,566	\$8,052	\$8,757	\$9,485	\$10,482	\$10,553	\$10,973	\$10,910
Biotechnology	\$5,889	\$6,018	\$6,433	\$6,556	\$6,923	\$7,219	\$7,767	\$7,847	\$8,142	\$8,014
Neurosciences	\$5,580	\$5,742	\$6,460	\$7,317	\$8,224	\$9,468	\$10,122	\$10,716	\$11,163	\$11,468
Cancer	\$5,392	\$5,389	\$5,589	\$5,980	\$6,335	\$6,520	\$7,035	\$7,362	\$7,644	\$7,459
Infectious Diseases	\$5,002	\$5,032	\$5,518	\$5,684	\$6,024	\$6,313	\$8,301	\$8,212	\$8,324	\$8,031
Women's Health ⁸	\$3,935	\$3,989	\$4,540	\$4,769	\$5,048	\$4,469	\$4,466	\$4,610	\$4,861	\$4,926
Brain Disorders	\$3,894	\$3,916	\$4,577	\$5,156	\$5,882	\$6,954	\$7,565	\$7,963	\$8,313	\$8,382
Behavioral and Social Science	\$3,688	\$3,762	\$4,137	\$4,547	\$5,096	\$6,499	\$7,040	\$7,329	\$7,650	\$7,781
Rare Diseases	\$3,639	\$3,679	\$4,342	\$4,613	\$5,227	\$5,655	\$5,947	\$6,191	\$6,482	\$6,355
Pediatric	\$3,486	\$3,632	\$3,959	\$4,176	\$4,499	\$4,922	\$5,347	\$5,465	\$5,752	\$5,707
Bioengineering	\$3,329	\$3,540	\$3,841	\$4,106	\$4,592	\$5,091	\$5,646	\$5,720	\$5,866	\$5,998
Clinical Trials and Supportive Activities ¹⁷	\$3,221	\$3,136	\$3,476	\$3,775	\$5,207	\$6,058	\$6,637	\$6,480	\$6,832	\$6,825
HIV/AIDS ⁹	\$2,978	\$3,000	\$3,000	\$3,000	\$2,995	\$3,037	\$3,076	\$3,082	\$3,194	\$3,100
Health Disparities ³⁰	\$2,734	\$2,825	\$3,093	\$3,168	\$3,178	\$3,381	\$3,484	\$4,362	\$4,566	\$4,963
Human Genome	\$2,701	\$2,891	\$3,200	\$3,274	\$3,626	\$3,895	\$4,340	\$4,293	\$4,477	\$4,450
Aging	\$2,556	\$2,698	\$3,150	\$3,572	\$4,084	\$4,653	\$5,276	\$5,657	\$6,069	\$5,838

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Pediatric	\$3,486	\$3,632	\$3,959	\$4,176	\$4,499	\$4,922	\$5,347	\$5,465	\$5,752	\$5,707
Emerging Infectious Diseases	\$1,930	\$2,053	\$2,336	\$2,591	\$2,767	\$2,950	\$4,867	\$4,666	\$4,614	\$4,319
Women's Health ⁸	\$3,935	\$3,989	\$4,540	\$4,769	\$5,048	\$4,469	\$4,466	\$4,610	\$4,861	\$4,926
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Health Disparities ³⁰	\$2,734	\$2,825	\$3,093	\$3,168	\$3,178	\$3,381	\$3,484	\$4,362	\$4,566	\$4,963





NIH RePORTER
Version: 7.32.0

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QUERY **BROWSE NIH** **MATCHMAKER** **SEARCH PUBLICATIONS BETA**

[SUBMIT QUERY](#) [CLEAR QUERY](#)

Fiscal Year (FY): Active Projects [SELECT](#)
Current FY is 2018

RESEARCHER AND ORGANIZATION

Principal Investigator (PI) / Project Leader:
(Last Name, First Name) Use '%' for wildcard in PI names
[Enter several PI/Project Leader names OR PI Profile IDs](#)

City: Use '%' for wildcard

State: [SELECT](#)

Country: [SELECT](#)

Congressional District: [SELECT](#)

DUNS Number:

Organization: [LOOKUP](#)
Please enter at least 3 characters to use Lookup.
☒ Contains ☐ Begins with ☐ Exact

Department Type: [SELECT](#)

Organization Type: [SELECT](#)

TEXT SEARCH

Text Search (Logic):
☒ And ☐ Or ☐ Advanced
Characters left: 2500

Search in: ☒ Projects ☐ Publications ☐ News

Limit Project search to: ☐ Project Title ☐ Project Terms ☐ Project Abstracts

Limit Publication search to: Start Year: 2017 End Year: 2018

PROJECT DETAILS

Project Number/ Application ID:
Format: 5R01CA012345-04/ 8015397
Use '%' for wildcard in project number, e.g. %R21%
[Enter multiple project numbers/application IDs](#)
OR

Agency/Institute/Center: [SELECT](#)
☒ Admin ☐ Funding

NIH Spending Category: [SELECT](#)

Funding Mechanism: [SELECT](#)

Award Type: [SELECT](#)

Program Officer (PO):

1 R01 CA 811099 01 A1S1

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NIH URLs of interest:

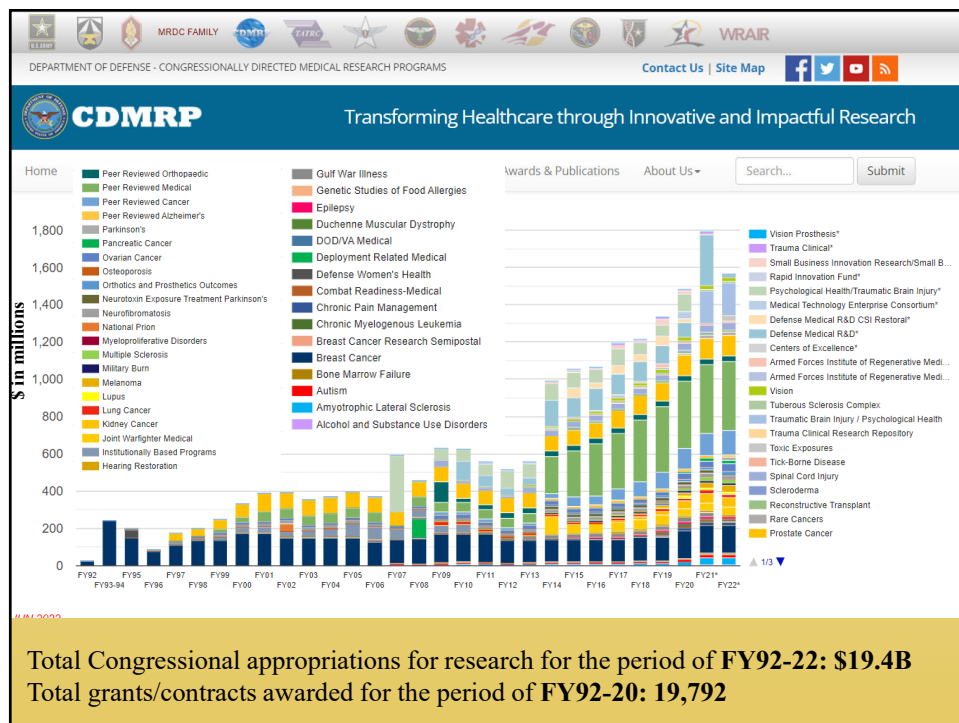
Funded awards and investigators:
Projectreporter.nih.gov/reporter.cfm

Spending, success and funding data:
Report.nih.gov

Graphic representation of data by IC:
report.nih.gov/ReTools/competing_research_project.aspx

IC strategic plans:
Report.nih.gov/strategicplans/index.aspx

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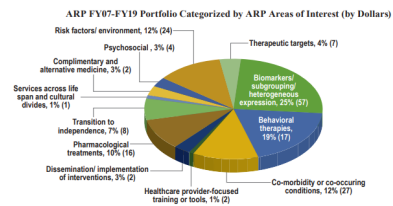
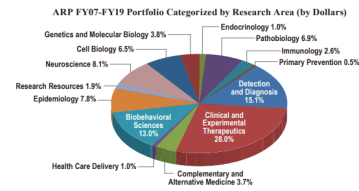
- Alcohol and Substance Use Disorders
- Amyotrophic Lateral Sclerosis
- Autism
- Bone Marrow Failure
- Breast Cancer
- Chronic Pain Management
- Combat Readiness-Medical
- Duchenne Muscular Dystrophy
- Epilepsy
- Gulf War Illness
- Hearing Restoration
- Joint Warfighter Medical
- Kidney Cancer
- Lung Cancer
- Lupus
- Melanoma
- Military Burn
- Multiple Sclerosis
- Neurofibromatosis
- Neurotoxin Exposure Treatment Parkinson's
- Orthotics and Prosthetics Outcomes
- Ovarian Cancer
- Pancreatic Cancer
- Parkinson's
- Peer Reviewed Alzheimer's
- Peer Reviewed Cancer
- Peer Reviewed Medical
- Peer Reviewed Orthopaedic
- Prostate Cancer
- Rare Cancers
- Reconstructive Transplant Research
- Scleroderma
- Spinal Cord Injury
- Tick-Borne Disease
- Toxic Exposures
- Traumatic Brain Injury and Psychological Health
- Tuberous Sclerosis Complex
- Vision

Mechanism	Pre-Applications Received	Pre-Applications Invited (%)	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
IDA	108	41 (38%)	33 (30.5%)	3 (9%)	\$1.98M
CDA	37	20 (54%)	18 (48%)	4 (22%)	\$2.70M
CTRA	26	13 (50%)	12 (46.2%)	1 (8%)	\$0.92M
CTA	25	14 (56%)	13 (52%)	3 (23%)	\$7.76M
Total	163	88 (45%)	76 (46.6%)	11 (14%)	\$13.36M

*The number of awarded projects is to be determined for fiscal year 2020 (FY20), pending final negotiations.

The ARP has funded projects that address the critical needs of the ASD community across a multitude of research areas, as noted in the figure to the right. Specific award information and abstracts of ARB-funded projects can be seen on the CDMRP website (<http://cdmrp.army.mil>).

With each congressional appropriation, the ARP identifies and encourages particular Areas of Interest based upon the needs of the ASD community. The figure to the right presents the ARP portfolio from fiscal years 2007-2016 (FY07-FY16), categorized into these Areas of Interest.



NIH Overview and IC Missions; Perry Kirkham;

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CDMRP
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 FY22 Toxic Exposures Research Program (TERP)

Mechanism	Program Announcement/Instructions	Release Date	Funding Amount	Submission Deadline
Investigator-Initiated Research Award (IIRA)	Program Announcement Application Instructions	September 21, 2022	- The maximum allowable funding for the entire period of performance is \$500,000 for direct costs. - Indirect costs may be proposed in accordance with the institution's negotiated rate agreement. - The maximum period of performance is 3 years.	Pre-Application (Letter of Intent): November 3, 2022 5:00 p.m. Eastern Time (ET) Letter of Intent is required; an invitation to submit full application is not required. Application: December 1, 2022 11:59 p.m. ET
Translational Research Award (TRA)	Program Announcement Application Instructions	September 21, 2022	- The maximum allowable funding for the entire period of performance is \$800,000 for direct costs. - Indirect costs may be proposed in accordance with the institution's negotiated rate agreement. - The maximum period of performance is 3 years. Partnering PI Option: - The maximum allowable funding for the entire period of performance is \$1,600,000 for direct costs. - Indirect costs may be proposed in accordance with the institution's negotiated rate agreement. - The maximum period of performance is 3 years.	Pre-Application (Letter of Intent): November 3, 2022 5:00 p.m. Eastern Time (ET) Letter of Intent is required; an invitation to submit full application is not required. Application: December 1, 2022 11:59 p.m. ET