

National Institutes of Health 101

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Research and Partnerships

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PURDUE
UNIVERSITY

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?**

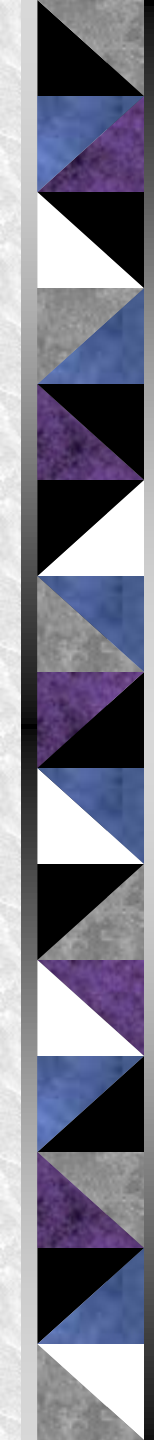
How do I strategize for my resubmission?

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

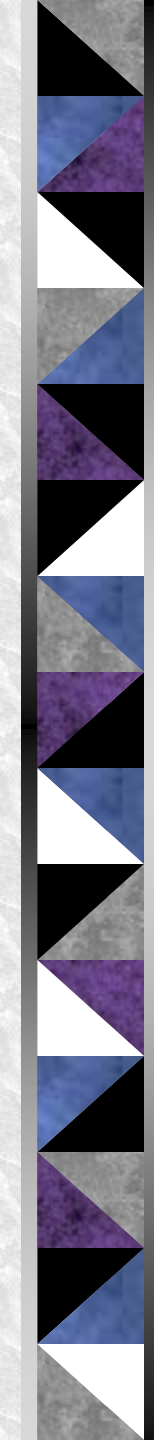
AHRQ

NIST

DoD

DoE

DHS



27 NIH Institutes and Centers (ICs)

Director

budgeting, strategic planning, congressional mandates

Program

portfolio management, concept/RFA writing

Review

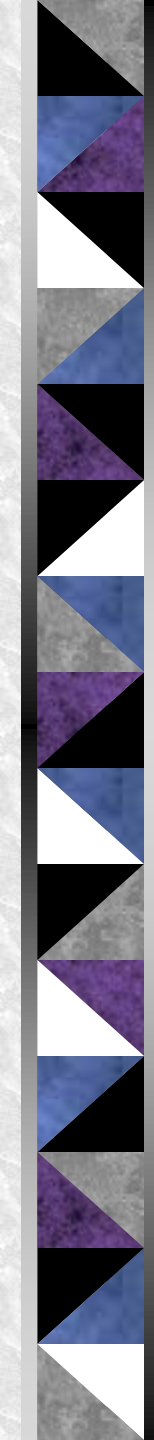
proposal review

Advisory Council

strategic planning, concept clearance, final proposal review

FY19 Senate NIH Budget request – increase to \$34.8B

- **Incorporating other DHHS agencies into the NIH:**
 - **Agency for Healthcare Research and Quality into the NIH as National Institute for Research on Safety and Quality (NIRSQ; \$380M)**
 - **National Institute for Occupational Safety and Health (NIOSH; \$255M)**
 - **National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR; \$95M)**
- **\$850M investment into research on pain and addiction**
- **Continue to support new tissue chip initiatives**
- **Dedicated fund of \$100M to support ESI**



Common Fund Initiatives

Acute to Chronic Pain Signatures

Extracellular RNA Communication

Gabriella Miller Kids First

Glycoscience

Illuminating the Druggable Genome

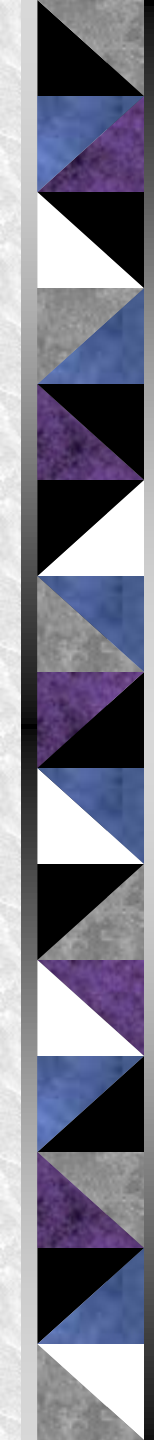
Somatic Cell Genome Editing

Stimulating Peripheral Activity to Relieve Conditions

Expect to fund 333 RPG awards in FY19

Number of grant awards made by FY

IC	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
FIC	145	150	178	203	266	283	303	283	269	248	226	209	207	185	191	173	127	122	132
NCATS															210	197	174	189	215
NCCAM		31	115	178	220	230	276	309	318	306	275	277	262	249	250	226	228	215	218
NCI	4,774	5,290	5,536	5,846	6,153	6,376	6,717	6,711	6,697	6,736	6,631	6,336	6,194	6,162	6,115	5,898	5,854	5,772	5,714
NCRR	700	755	838	870	1,126	1,147	1,052	1,069	1,105	1,060	900	902	883	863					
NEI	1,240	1,283	1,340	1,379	1,417	1,472	1,522	1,475	1,431	1,387	1,306	1,278	1,317	1,297	1,263	1,244	1,283	1,284	1,339
NHGRI	196	201	210	208	232	270	305	322	329	341	351	354	362	340	363	356	370	378	384
NHLBI	3,851	4,189	4,477	4,763	5,011	5,163	5,223	4,966	4,794	4,723	4,738	4,856	4,820	4,768	4,673	4,325	3,990	4,066	4,341
NIA	1,341	1,380	1,428	1,590	1,645	1,725	1,776	1,847	1,848	1,965	1,935	1,897	1,791	1,851	1,843	1,785	1,788	1,821	2,042
NIAAA	669	708	767	819	848	876	901	895	904	915	915	902	875	862	825	829	850	832	835
NIAID	3,361	3,547	3,781	3,850	4,094	4,613	4,848	4,850	4,804	4,928	4,881	4,615	4,616	4,601	4,730	4,503	4,419	4,536	4,883
NIAMS	957	991	1,050	1,145	1,181	1,224	1,272	1,259	1,250	1,273	1,291	1,287	1,273	1,267	1,256	1,272	1,255	1,212	1,191
NIBIB					287	732	743	764	766	792	741	676	661	632	688	703	721	743	796
NICHD	1,733	1,813	1,933	2,081	2,264	2,343	2,338	2,382	2,333	2,370	2,341	2,253	2,233	2,226	2,242	2,182	2,091	2,047	2,100
NIDA	1,318	1,412	1,506	1,655	1,745	1,845	1,863	1,860	1,840	1,932	1,969	1,925	1,904	1,905	1,941	1,822	1,771	1,685	1,707
NIDCD	688	772	824	906	986	1,018	1,026	999	966	982	939	926	947	946	924	899	874	856	890
NIDCR	603	601	671	739	747	799	839	847	791	778	788	753	748	755	702	647	630	655	674
NIDDK	2,799	3,009	3,240	3,393	3,560	3,905	4,116	4,144	4,043	3,942	3,793	3,638	3,722	3,689	3,579	3,406	3,324	3,328	3,343
NIEHS	622	632	707	754	797	792	786	750	767	791	788	759	849	839	859	848	888	877	870
NIGMS	3,932	4,069	4,195	4,369	4,534	4,536	4,588	4,627	4,572	4,657	4,626	4,538	4,539	4,414	4,716	4,531	4,588	4,663	4,763
NIMH	2,042	2,200	2,435	2,653	2,838	2,980	3,093	3,084	2,974	2,990	2,976	2,873	2,842	2,747	2,791	2,697	2,591	2,467	2,532
NIMHD					48	85	102	133	125	114	135	164	191	236	252	282	307	284	246
NINDS	2,425	2,518	2,726	2,885	3,122	3,230	3,319	3,291	3,395	3,425	3,338	3,220	3,215	3,284	3,282	3,273	3,253	3,317	3,364
NINR	228	255	277	312	332	359	359	357	340	331	342	315	283	291	300	281	264	253	252
NLM	76	68	67	66	67	78	88	99	101	118	119	104	99	98	105	95	101	111	104
OD							9	22	35	77	93	113	131	135	400	393	426	453	496
NIH Total	33,700	35,874	38,301	40,664	43,520	46,081	47,464	47,345	46,797	47,181	46,437	45,170	44,964	44,642	44,500	42,867	42,167	42,166	43,431



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

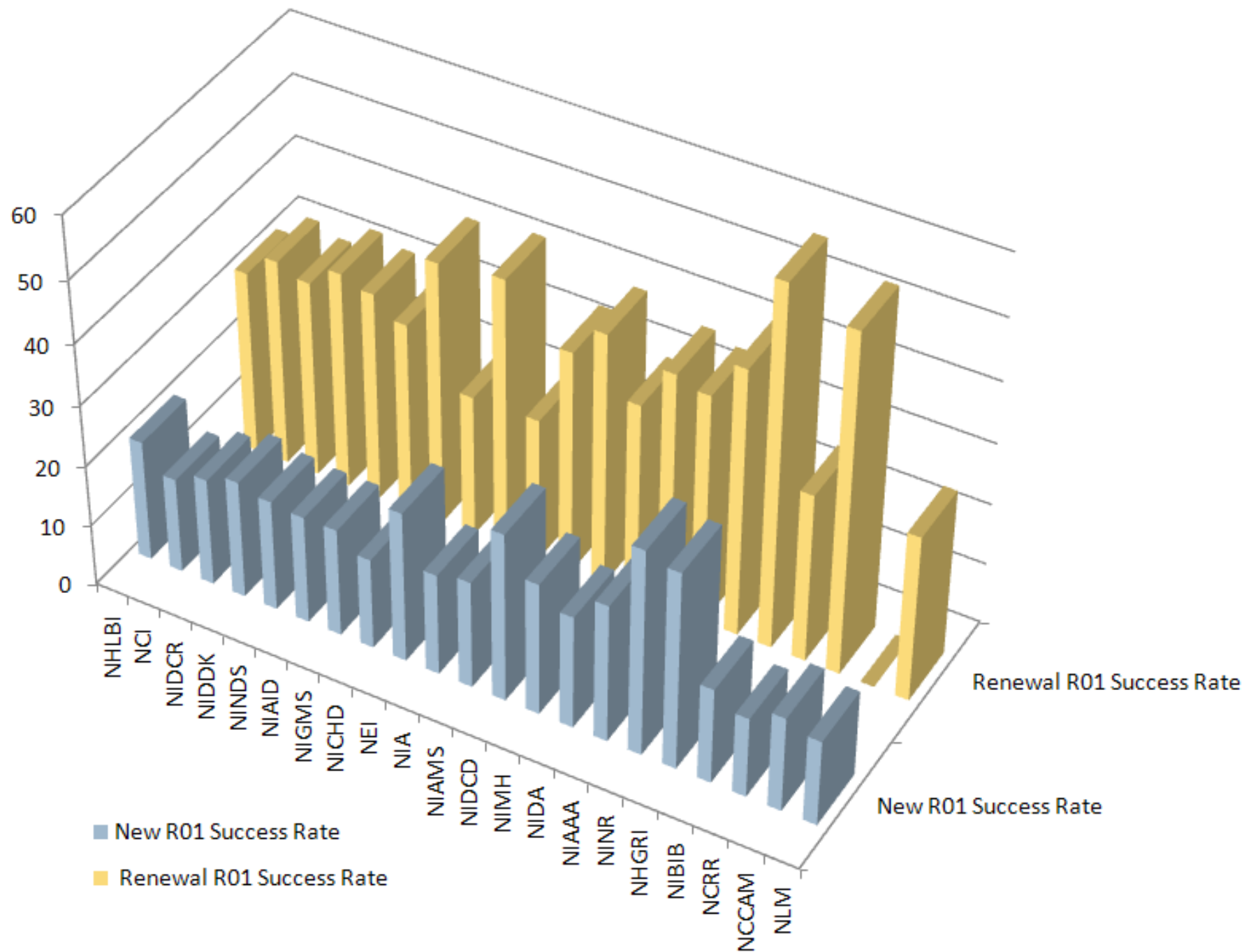
**Feb 15, June 15 and Oct 15 for
R03 and R21 proposals**

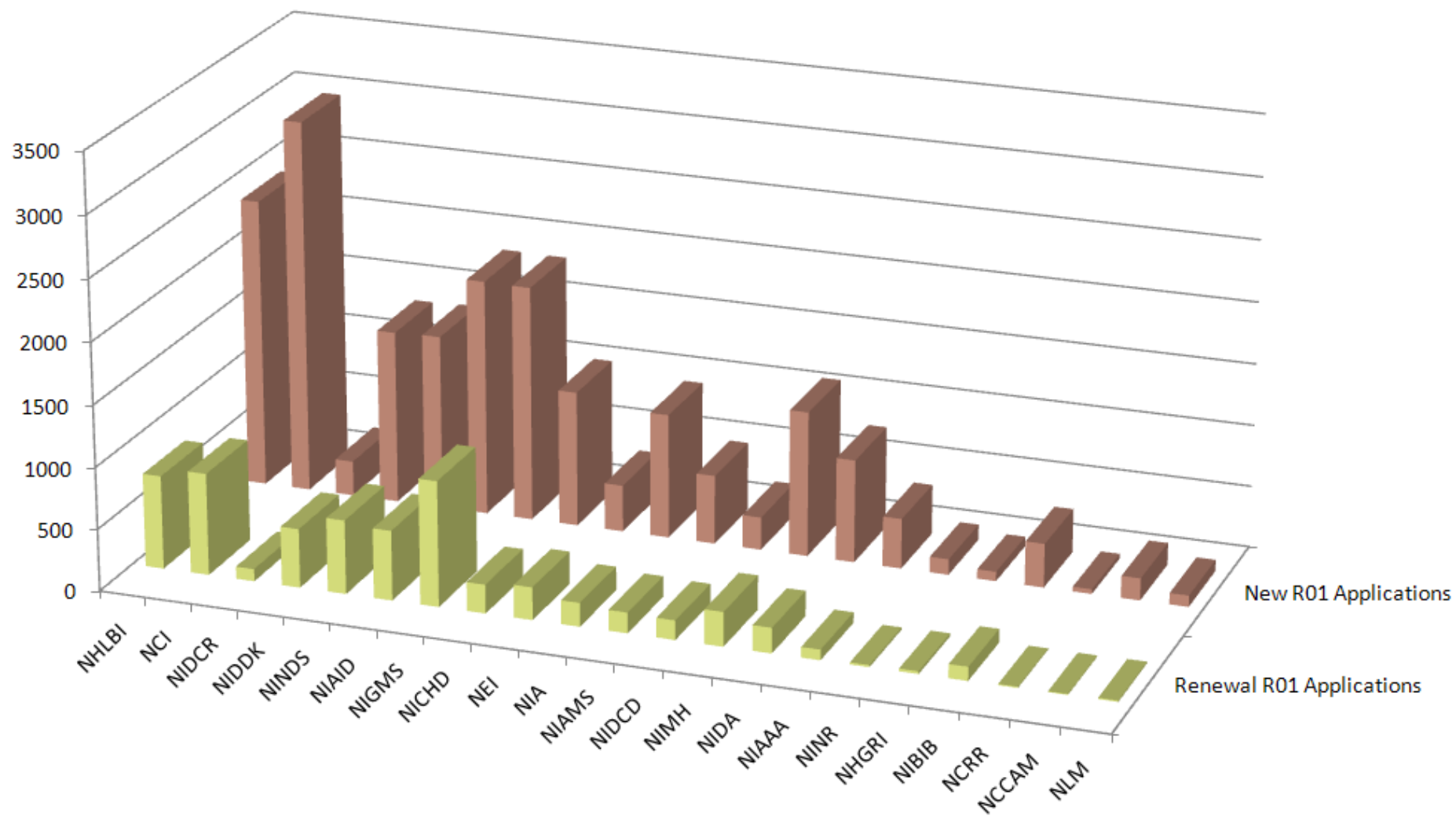
Program Projects (P01)

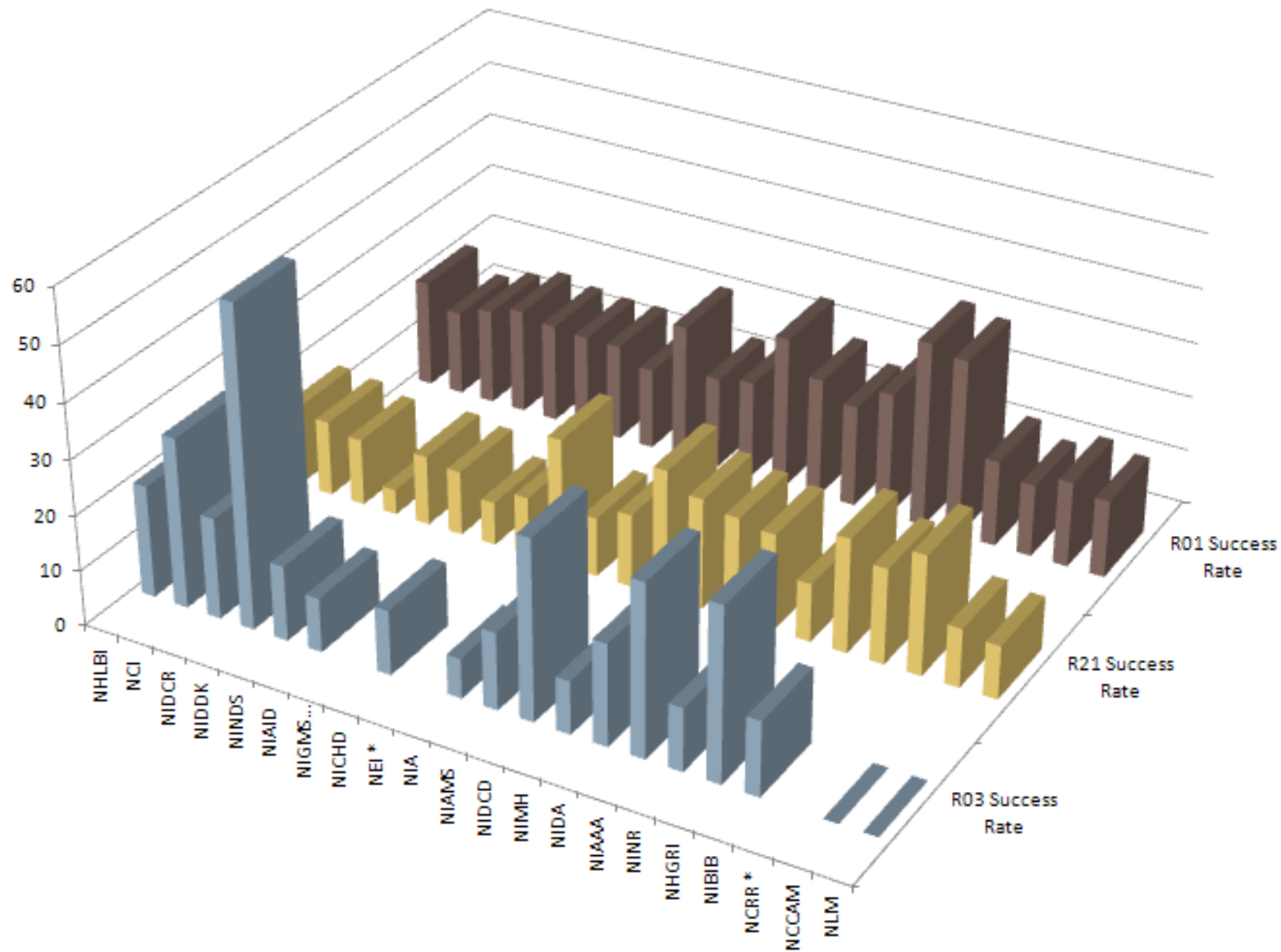
Cooperative Agreements (U01, U19)

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
OD ORIP-SEPA†		R21	75	11	14.7%	\$2,306,984

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
OD ORIP-SEPA†		R01	22	5	22.7%	\$1,909,926

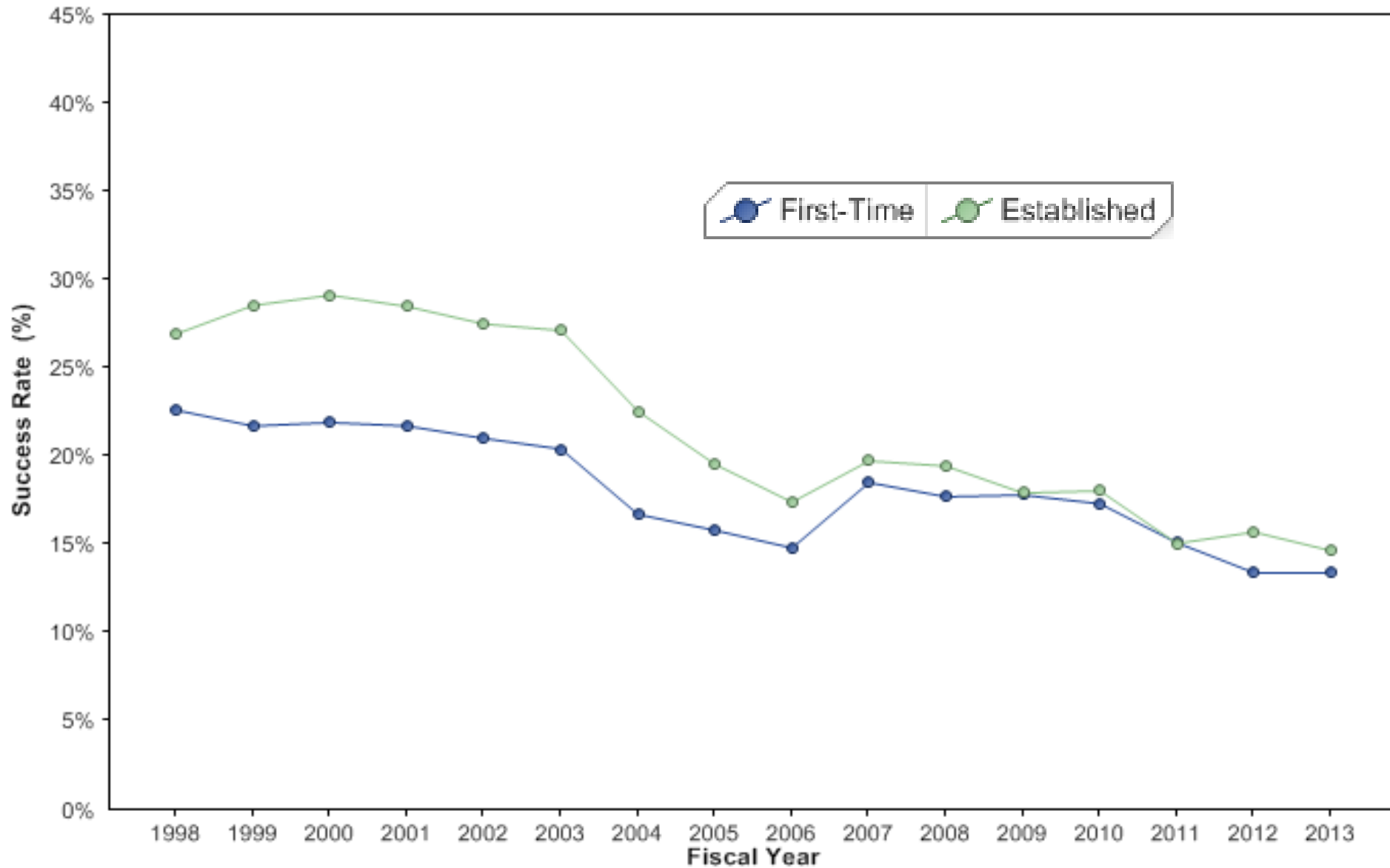






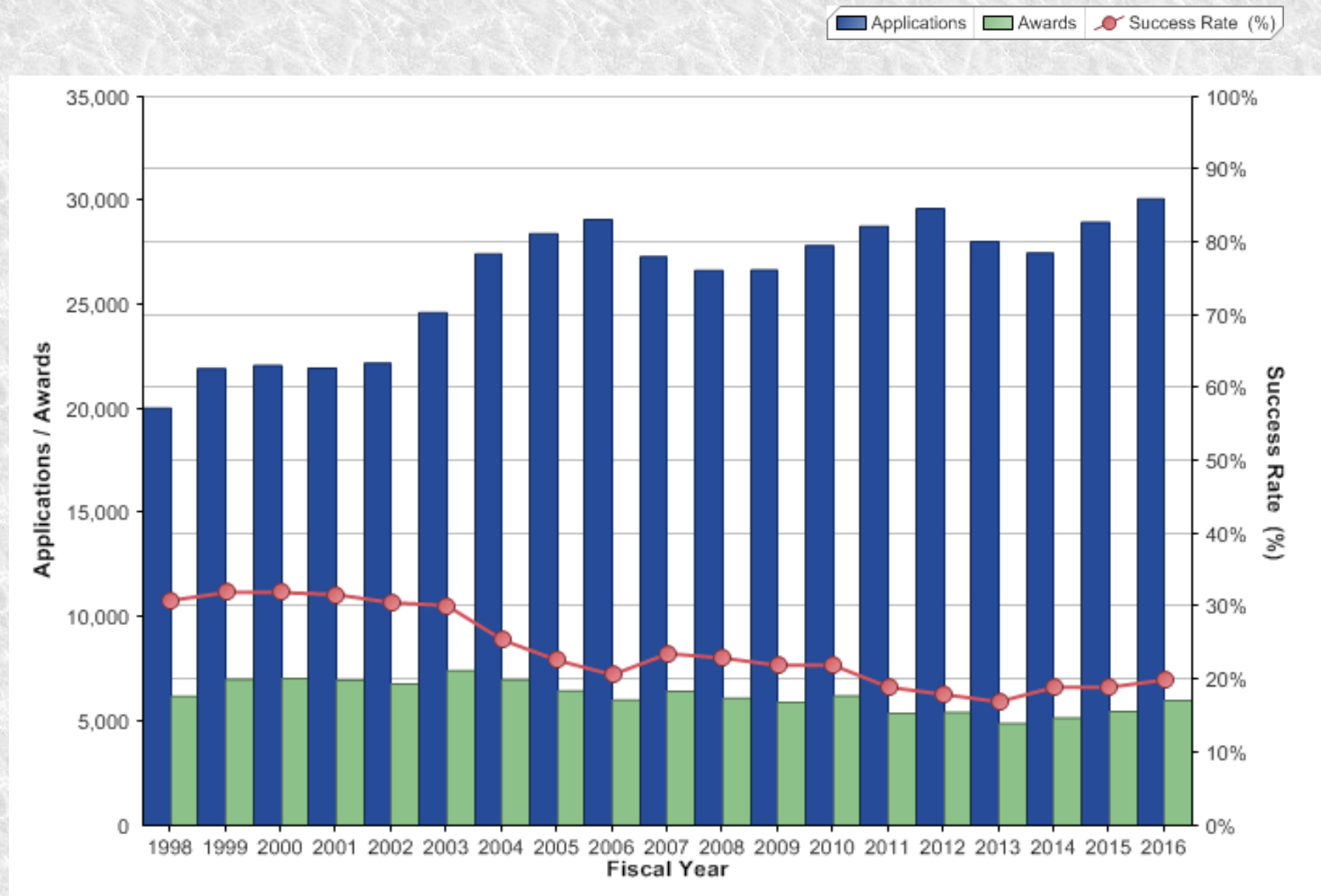
(Dollars in Thousands)	FY 2017 Final	FY 2018 Annualized CR	FY 2019 President's Budget
NCI.....	\$5,659,955	\$5,650,693	\$5,626,312
NHLBI.....	\$3,209,929	\$3,184,813	\$3,112,032
NIDCR.....	\$424,797	\$422,860	\$413,196
NIDDK ¹	\$2,009,504	\$2,007,892	\$1,965,434
NINDS.....	\$1,778,688	\$1,771,541	\$1,838,556
NIAID.....	\$4,905,718	\$4,873,317	\$4,761,948
NIGMS ²	\$2,646,152	\$2,632,836	\$2,572,669
NICHD.....	\$1,376,608	\$1,370,921	\$1,339,592
NEI.....	\$731,212	\$727,643	\$711,015
NIEHS ³	\$790,018	\$786,234	\$747,166
NIA.....	\$2,048,814	\$2,034,698	\$1,988,200
NIAMS.....	\$556,606	\$554,063	\$545,494
NIDCD.....	\$435,904	\$433,908	\$423,992
NIMH.....	\$1,604,658	\$1,591,052	\$1,612,192
NIDA.....	\$1,070,846	\$1,083,445	\$1,137,403
NIAAA.....	\$482,451	\$480,080	\$469,109
NINR.....	\$149,937	\$149,252	\$145,842
NHGRI.....	\$528,346	\$524,977	\$512,979
NIBIB.....	\$356,981	\$354,655	\$346,550
NIMHD.....	\$287,670	\$287,106	\$280,545
NCCIH.....	\$134,389	\$133,774	\$130,717
NCATS.....	\$704,330	\$701,109	\$685,087
FIC.....	\$71,852	\$71,723	\$70,084
NLM.....	\$406,604	\$404,743	\$395,493
B&F.....	\$128,567	\$127,988	\$200,000
OD.....	\$1,728,603	\$1,706,132	\$2,004,306

R01-Equivalent grants, New (Type 1) Success rates, by career stage of investigator



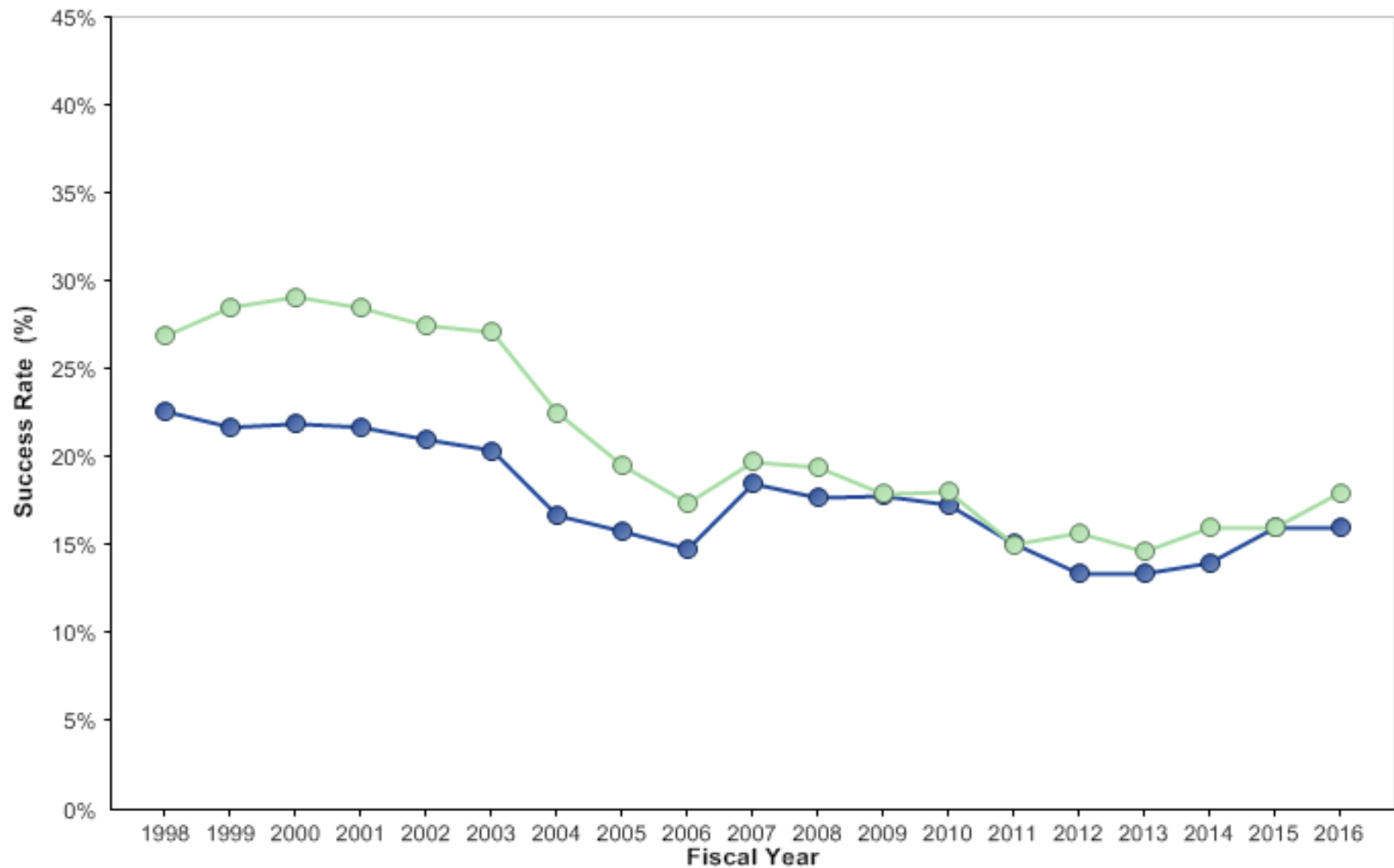
R01-Equivalent grants

Competing applications, awards, and success rates



R01-Equivalent grants, New (Type 1) Success rates, by career stage of investigator

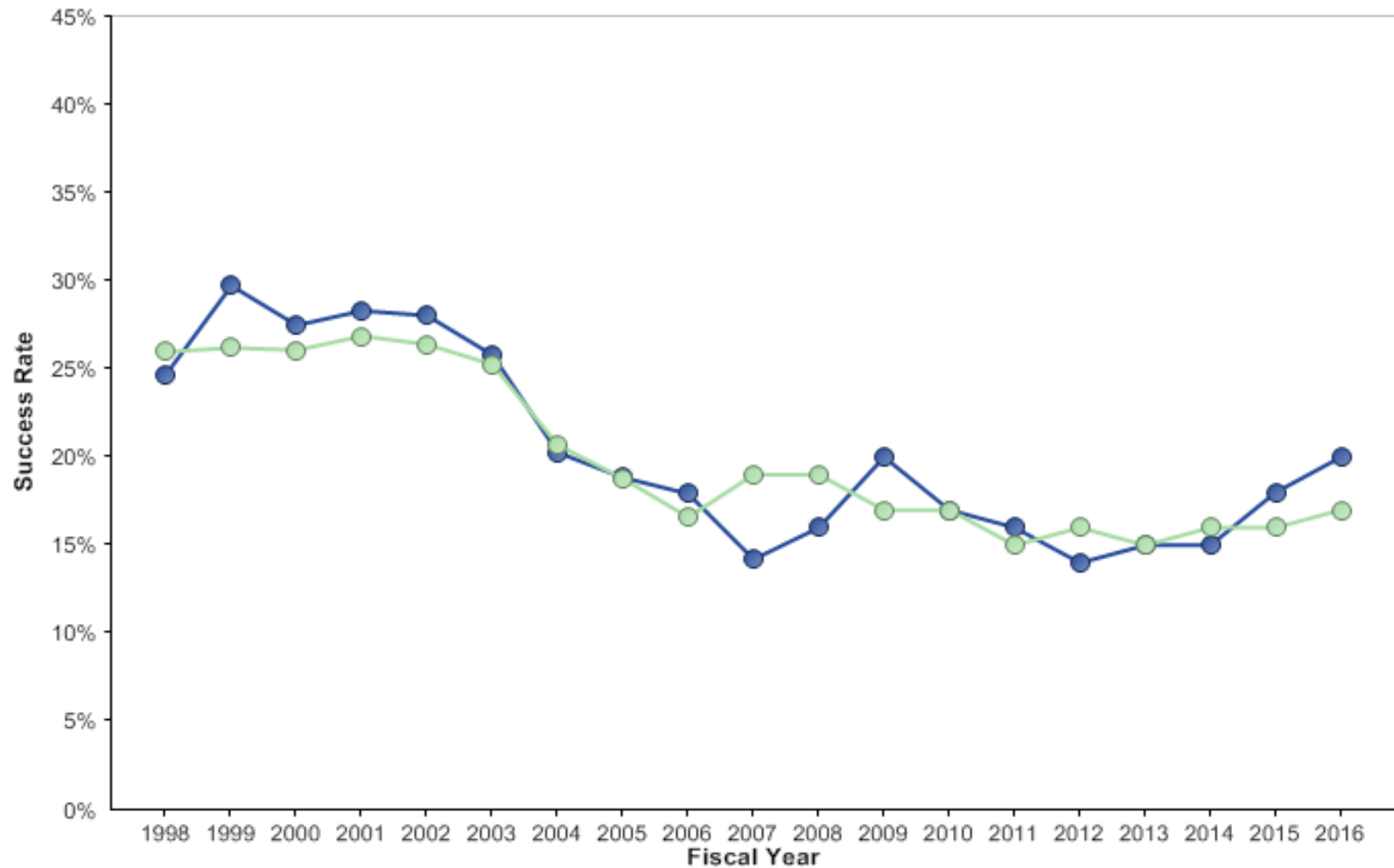
First-Time Established



Research Project Grants

Success rates of new (type 1) applications for targeted and untargeted research

Targeted Untargeted



Research/Disease Areas	FY 2013Actual	FY 2014Actual	FY 2015Actual	FY 2016Actual	FY 2017Estimated	FY 2018Estimated
Genetics	\$7,144	\$7,324	\$7,480	\$8,070	\$8,431	\$6,602
Prevention	\$6,686	\$6,858	\$7,027	\$7,566	\$7,886	\$6,212
Neurosciences	\$5,340	\$5,580	\$5,742	\$6,460	\$6,743	\$5,174
Biotechnology	\$5,698	\$5,889	\$6,018	\$6,433	\$6,713	\$5,263
Cancer	\$5,274	\$5,392	\$5,389	\$5,589	\$6,032	\$4,696
Infectious Diseases	\$4,887	\$5,002	\$5,032	\$5,518	\$5,723	\$4,364
Brain Disorders	\$3,708	\$3,894	\$3,916	\$4,577	\$4,744	\$3,640
Women's Health 8/	\$3,745	\$3,935	\$3,989	\$4,540	\$4,758	\$3,687
Rare Diseases	\$3,456	\$3,639	\$3,679	\$4,342	\$4,566	\$3,518
Behavioral and Social Science	\$3,535	\$3,688	\$3,762	\$4,137	\$4,316	\$3,227
Pediatric	\$3,266	\$3,486	\$3,632	\$3,959	\$4,108	\$3,205
Bioengineering	\$3,234	\$3,329	\$3,540	\$3,841	\$4,009	\$3,179
Clinical Trials and Supportive Activities 17/	\$3,155	\$3,221	\$3,136	\$3,476	\$3,630	\$2,830
Human Genome	\$2,473	\$2,701	\$2,891	\$3,200	\$3,344	\$2,638
Aging	\$2,429	\$2,556	\$2,698	\$3,150	\$3,651	\$2,503
Health Disparities 8/	\$2,722	\$2,734	\$2,825	\$3,093	\$3,210	\$2,500
HIV/AIDS 9/	\$2,898	\$2,978	\$3,000	\$3,000	\$3,000	\$2,471
Minority Health 8/	\$2,428	\$2,514	\$2,538	\$2,712	\$2,817	\$2,189
Mental Health	\$2,174	\$2,213	\$2,263	\$2,454	\$2,570	\$1,985
Emerging Infectious Diseases	\$1,804	\$1,930	\$2,053	\$2,336	\$2,421	\$1,830
Cardiovascular	\$1,964	\$1,950	\$1,991	\$2,108	\$2,169	\$1,701
Neurodegenerative	\$1,619	\$1,743	\$1,662	\$2,058	\$2,145	\$1,630
Biodefense 3/	\$1,692	\$1,746	\$1,736	\$1,951	\$1,983	\$1,374

[FIND PROGRAM OFFICIALS OR SIMILAR PROJECTS](#)

QUERY

BROWSE NIH

MATCHMAKER

SEARCH PUBLICATIONS ^{BETA}

SUBMIT QUERY

CLEAR QUERY

Fiscal Year (FY):
Current FY is 2018

Active Projects

SELECT

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
End Year

PROJECT DETAILS

Project Number/
Application ID:Format: 5R01CA012345-04/
8515397

Use '%' for wildcard in project number, e.g. %R21%

[Enter multiple project numbers/application IDs](#)

OR

1

R01

CA

811099

01

A1S1

Agency/Institute/Center:

☒ Admin ☐ Funding

SELECT

NIH Spending Category:

SELECT

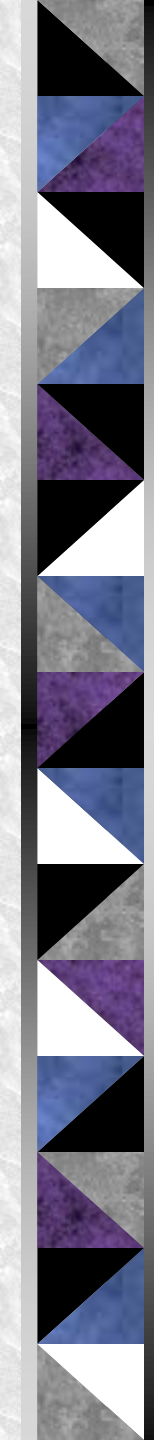
Funding Mechanism:

SELECT

Award Type:

SELECT

Program Officer (PO):



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](http://report.nih.gov/ReTools/competing_research_project.aspx)**

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