

NIDDK Extramural Funding Trends and Support of Guiding Principles

The NIDDK's guiding principles toward achieving its core mission include maintaining a vigorous investigator-initiated R01 research portfolio, supporting pivotal clinical studies and trials, promoting a steady and diverse pool of talented new investigators, and fostering exceptional research training and mentoring opportunities consistent with the vision of the NIDDK Director, Dr. Griffin P. Rodgers (see Message from the Director). To highlight its dedication to these principles, the NIDDK generates data and analyses of application and funding trends.

Maintaining Investigator-initiated Research

The NIDDK is committed to maintaining a strong investigator-initiated R01 research program, while also allowing appropriate flexibility for other priorities, such as training and career development of the next generation of scientists; infrastructure; key initiatives, including large clinical trials and consortia; and other efforts informed by input from various sources, including the scientific community. Historically, investigator-initiated research has been—and continues to be—the Institute's highest priority because it fosters ground-breaking and innovative research.

Supporting Clinical Studies and Trials

The NIDDK commits a substantial proportion of its research funding to the support of clinical studies, from preliminary clinical feasibility studies to large multi-center studies. As part of this clinical research effort, the NIDDK seeks to ensure substantial representation and participation of women, minorities, and other historically underrepresented populations. The Institute also continues to expand investigator access to these valuable research resources through ancillary studies and a central repository of data and samples.

Promoting a Steady and Diverse Pool of New Investigators

The NIDDK creates opportunities to help new investigators advance scientific discovery in their own laboratories. Each year, the NIDDK sets a more generous payline for Early Stage Investigators (ESIs) with the aim of enhancing ESI representation among new grant awardees. (ESIs are new investigators who completed their terminal research degree or medical residency within the past 10 years, and who have not yet competed successfully for a substantial, competing NIH research grant.)

Fostering Research Training and Mentoring

The NIDDK also continues to foster the growth of a diverse biomedical research workforce by providing training and mentoring opportunities for talented young investigators, including the NIDDK's fellowship (F), career development (K), and training (T) awards. These and other NIDDK-supported opportunities aim to promote a diverse research pipeline.

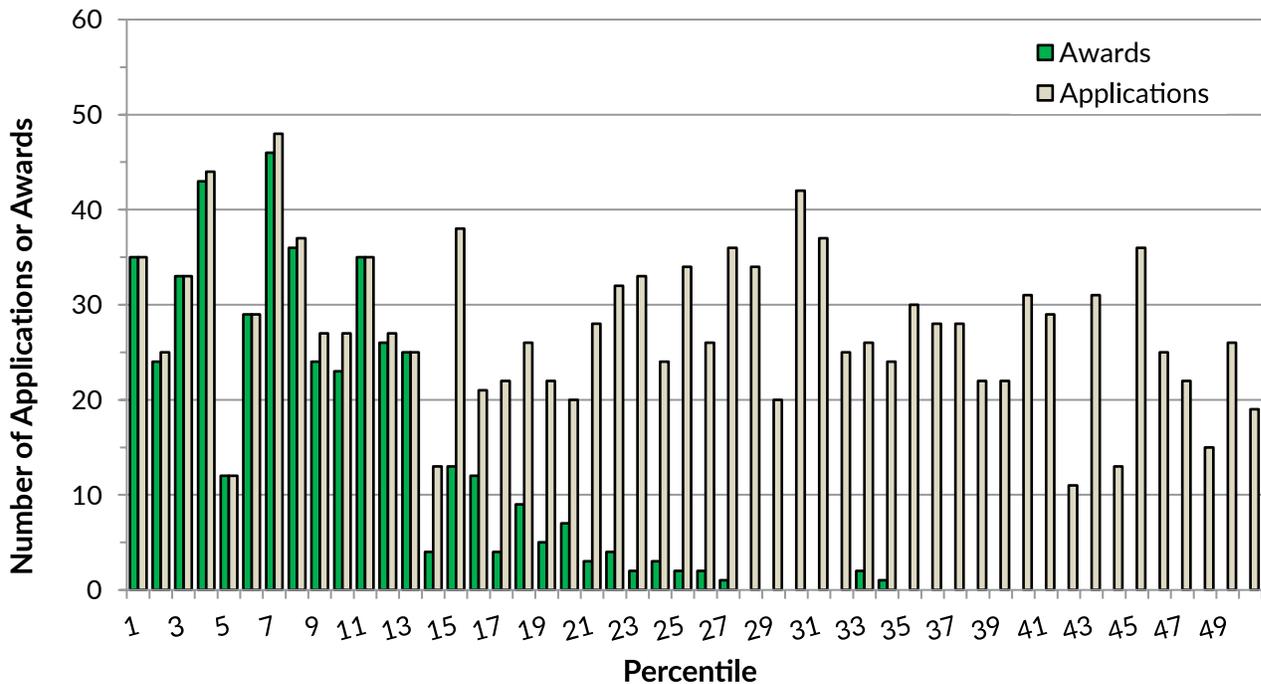
In support of these guiding principles, the NIDDK funds a wide range of research awards across its extramural research portfolio, including investigator-initiated grants (R01s/R37s); other R grants (e.g., SBIR/STTR and many other types of grants); awards made in response to initiatives such as Requests For Applications (RFAs), including most of the Institute's large clinical trials and consortia; collaborative grants (e.g., P01s); centers; career development awards; training grants; contracts and interagency agreements (e.g., some large clinical studies); and other research.

The data that the NIDDK generates on application and funding trends help the research community understand application and funding dynamics over recent years and demonstrate the NIDDK's commitment to research and programs associated with the guiding principles. The Institute posts these data on its public website and updates them

annually. The figures in this section were recently updated to include Fiscal Year (FY) 2019 and present some key examples from the posted data on funding trends that demonstrate the NIDDK's resource focus in each of these areas.¹ Please see the NIDDK website for additional funding trends analyses: <https://www.niddk.nih.gov/research-funding/funded-grants-grant-history/funding-trends-support-core-values>.

¹ With the exception of the figures titled "NIDDK Extramural Research Funded in FYs 2010-2019, by Funding Mechanism" and "NIDDK Research Project Grants Funded in FYs 2010-2019, by Activity Code" (which both include initiative data), the data in all charts exclude initiatives (i.e., Requests for Applications, or RFAs) and funds appropriated through the American Recovery and Reinvestment Act (ARRA). Figures do not include grants funded through the Special Statutory Funding Program for Type 1 Diabetes Research.

NUMBER OF NIDDK PAID AND UNPAID R01 APPLICATIONS IN FY 2019, BY PERCENTILE

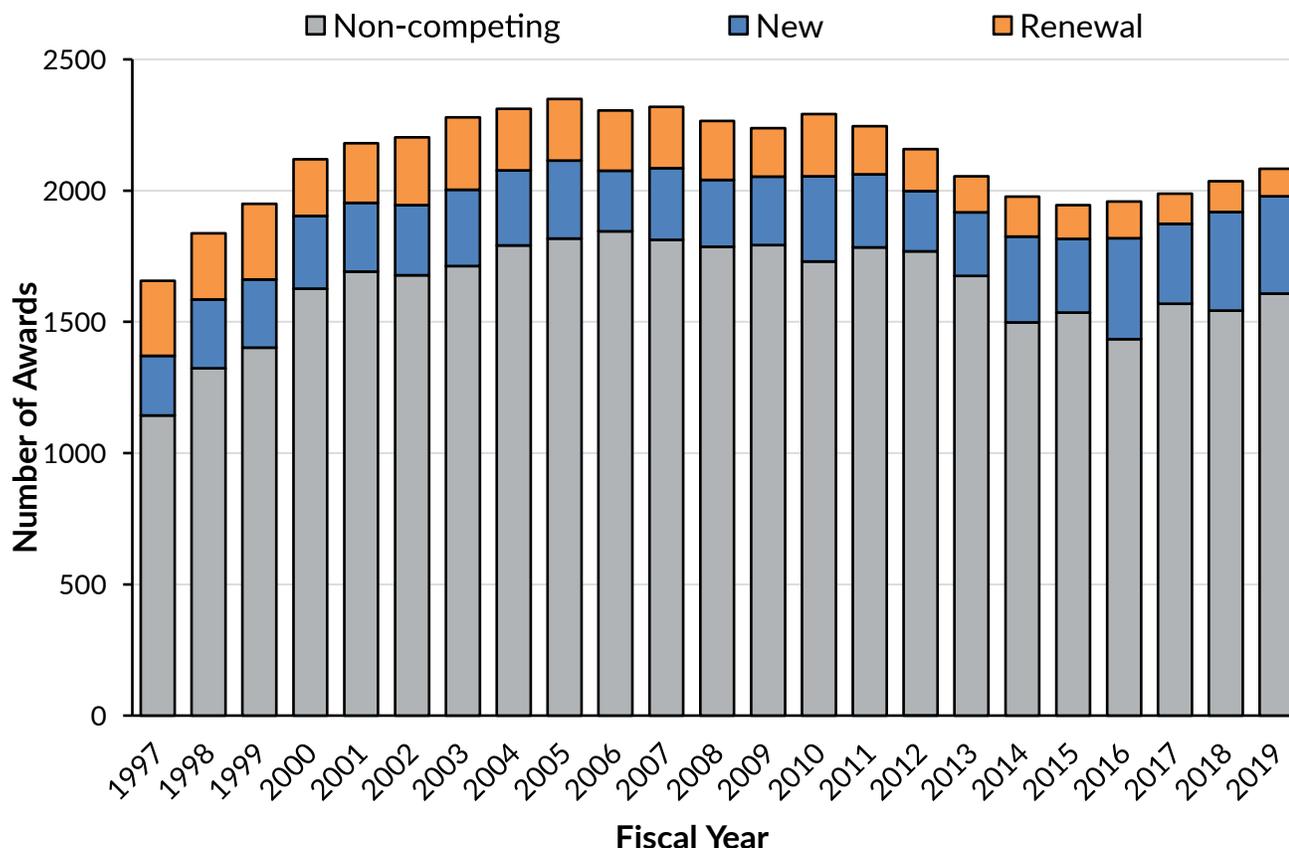


“Applications” shown in the chart above include all R01 applications that scored 50th percentile or better. Unscored applications, scored applications with no percentiles, and applications scoring above the 50th percentile are not shown. No unscored applications were funded in FY 2019.

The NIDDK general payline in FY 2019 for most R01 applications was the 13th percentile for established investigators and the 18th percentile for Early Stage Investigators (ESIs). The payline and additional programmatic scrutiny for R01 applications requesting \$500,000 or more in direct costs are substantially more stringent. These data show that the NIDDK adheres closely to its payline but does exercise discretion to include a limited number of programmatically important applications beyond the payline. The R01 paylines for FY 2010 through FY 2019 are shown in the table.

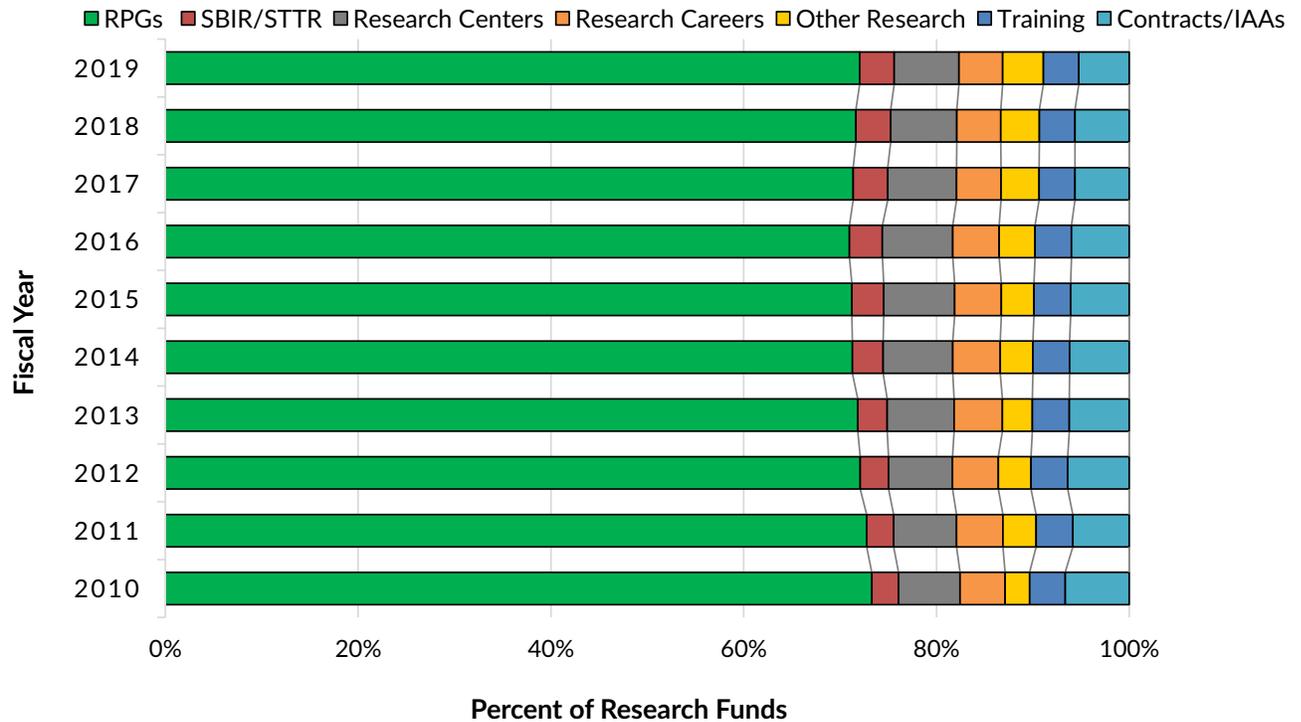
Fiscal Year	General Payline	≥\$500K Payline	New Investigator Payline	Early Stage Investigator (ESI) Payline	ESI First Competitive Renewal Payline
2010	17	11	19		
2011	15	10	17		
2012	13	9	13	18	
2013	11	7	11	16	
2014	13	8	13	18	
2015	13	8	13	18	15
2016	13	8	13	18	15
2017	12	7	12	17	15
2018	13	8	13	18	16
2019	13	8	13	18	16

NUMBER OF NIDDK R01 AND R37 GRANTS (COMPETING AND NON-COMPETING) FUNDED IN FYS 1997-2019



During the doubling of the NIH budget (FYs 1998-2003), the total number of R01/R37 grants funded by the NIDDK increased significantly. After leveling off following the doubling, the number of R01/R37 grants funded by the Institute from FY 2010 to FY 2015 declined. From FY 2016 to FY 2019, there has been a slight but steady increase in the number of NIDDK-supported R01/R37 awards. Prior to FY 2009, approximately half of the competing grants funded by the NIDDK were new (Type 1) awards in most FYs. However, in the last 10 years, the majority of competing awards were new: in FY 2019, 78 percent of competing NIDDK R01/R37 awards were new.

NIDDK EXTRAMURAL RESEARCH FUNDED IN FYS 2010-2019, BY FUNDING MECHANISM

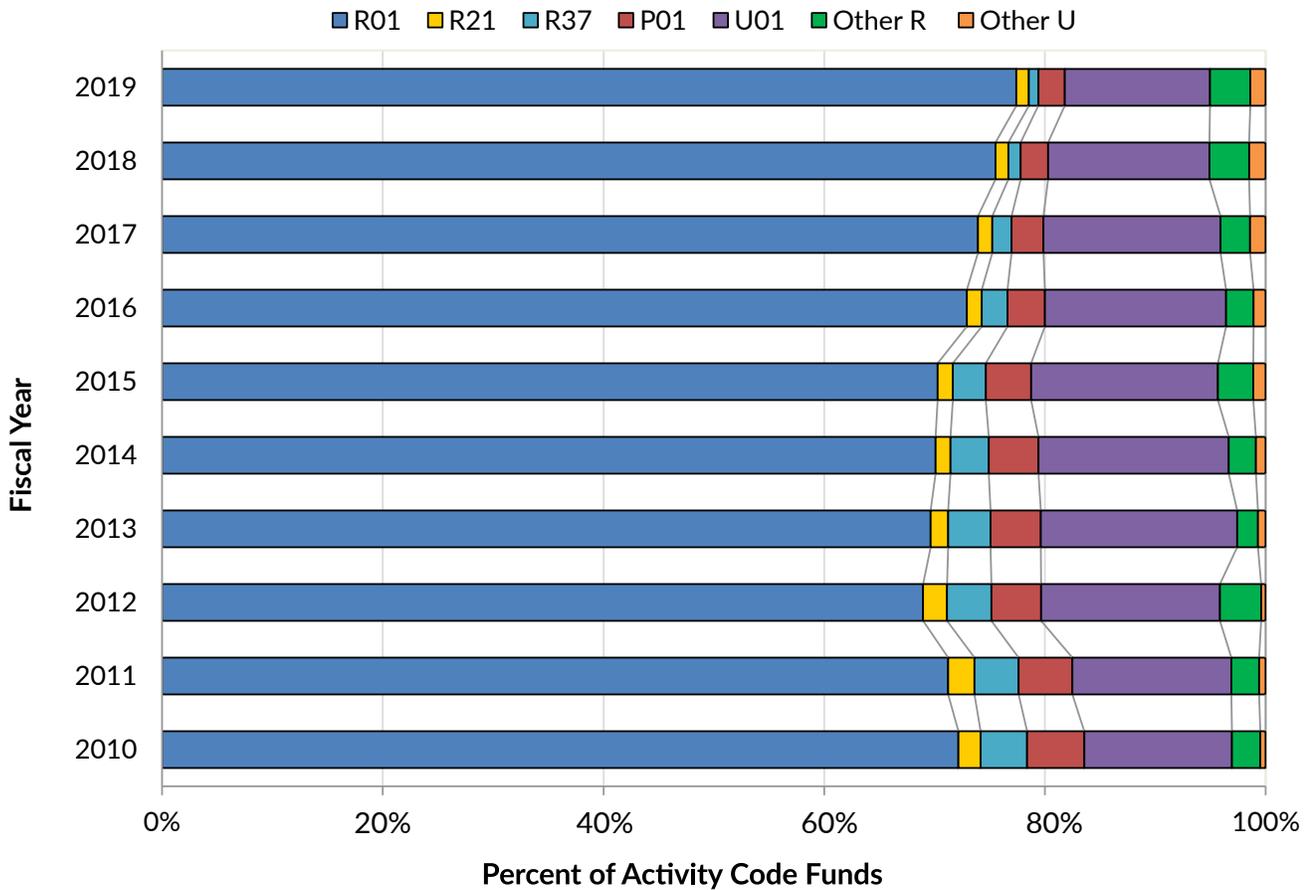


This figure shows that relative funding levels of most NIDDK extramural research funding mechanisms have remained fairly stable since FY 2010. The majority of the NIDDK's extramural research funding awards are Research Project Grants (RPGs), of which the largest portion goes to investigator-initiated research awards, particularly R01 grants.

NIDDK Funding Mechanisms:

- **RPGs** – Research Project Grants, including investigator-initiated R01, R03, R15, R21, and R56, as well as U01 and P01 awards
- **SBIR/STTR** – Small Business Innovation Research/Small Business Technology Transfer, including R41, R42, R43, and R44 awards
- **Research Centers** – Includes P20, P30, P50, U42, and U54 awards
- **Research Careers** – Includes all K awards (including K99/R00 awards)
- **Other Research** – Everything not captured in other mechanisms, including R13, R18, R24, R25, U24, and U2C awards
- **Training** – Includes all F and T activities
- **Contract and Interagency Agreements (IAAs)** – Includes some large clinical studies

NIDDK RESEARCH PROJECT GRANTS FUNDED IN FYs 2010-2019, BY ACTIVITY CODE



This figure shows the NIDDK Research Project Grants (RPGs) category from the previous figure, broken down by activity code. The figure illustrates that the relative funding levels of most of these subcategories of awards have remained fairly stable since FY 2010.

NIDDK Research Project Grant Activity Codes:

- **R01** - The most common type of Research Project Grant funded by the NIH
- **R21** - Exploratory/Developmental Research Grant
- **R37** - Method to Extend Research in Time (MERIT) Grant
- **P01** - Research Program Project Grant
- **U01** - Research Project Cooperative Agreement
- **Other R in RPGs** - Includes R00, R03, R15, R34, R56, RC2, and DP grants
- **Other U in RPGs** - Includes U34, UG3, UH3, and UM1 grants