

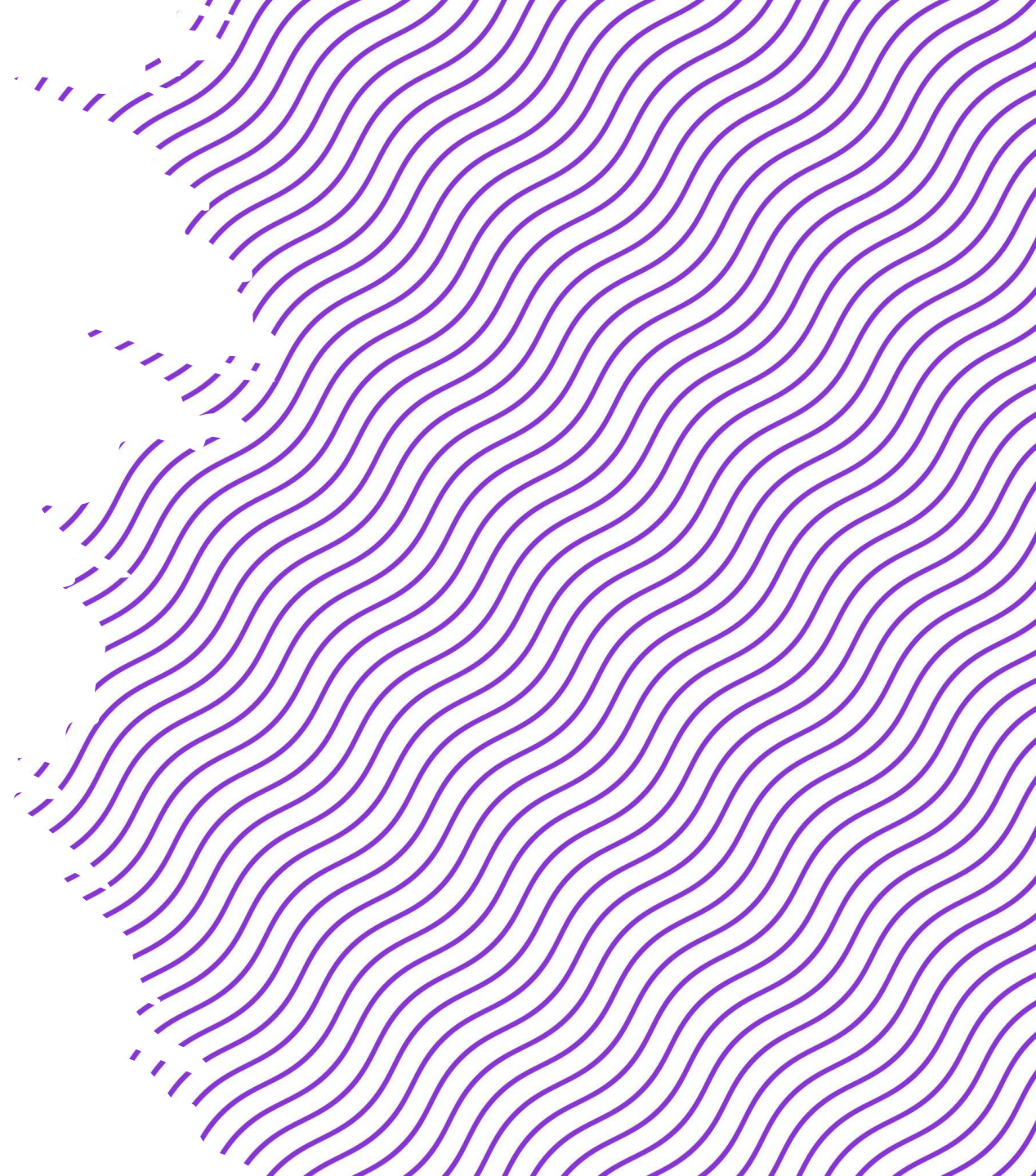
# **Using Agency Data for Research Development**

**Lou Hurst, M. A.**

**Proposal Development Officer,  
University of Kentucky**

**2024 Research Analytics Summit**

**March 12, 2024**





As a research development professional, you must help your institution and its investigators make decisions about pursuing external research funding.

You can use **agency-provided data** to inform and guide these decisions.

Funders provide this data in the interest of:

- Accountability and transparency
- Tracking mission-related performance



## **Questions Investigators have:**

- What are my chances of success?
- Where are my most likely funding prospects?
- What projects similar to mine have been funded?
- How often do investigators /institutions like mine get funded by this sponsor?

## Questions leadership have:

- What are trends in funding opportunities?
- What are trends in awards made?
- How can we interpret our internal metrics?
- How can we get more proposal submissions?
  - Highlighting opportunities
  - Targeting opportunities to the right investigators
  - Clearing up misconceptions



# Agency data can help you:

## Find

Find suitable  
funding  
opportunities

## Contextualize

Contextualize  
funding  
announcements

## Plan

Plan and position in  
light of emerging  
trends



# **What are some trends you've seen?**

- More limited-submission opportunities
- Shorter times between funding announcements and submission due dates
- More complex grant opportunities
- More opportunities for research on AI

# How do you access the data?



**Search and query tools**

**Raw data downloads & reports**

**Ready-made data products**

- Graphs and charts
- Maps
- Fact sheets
- Reports, briefs, publications

**Grants.gov**  
**and**  
**SAM.gov**

**Centralized and standardized**  
repositories of federal  
grant/contract opportunities

You can:

- Search forecasted, active, and archived opportunities
- Save and export search results
- Subscribe to searches



# Issues/problems with funding opportunity searches

Funding opportunities represent hypotheticals.

- Opportunities are not additive.

Funding opportunities are “not all equal.”

- Number of expected awards and award amounts is variable
- Eligibility may be questionable

Vetting opportunities requires textual analysis and interpretation.

- Can AI help?

# Data on federal spending

USA Spending

<https://www.usaspending.gov/>

HHS - Tracking Accountability in Government Grants System (TAGGS)

<https://taggs.hhs.gov/>

HRSA Data Warehouse

<https://data.hrsa.gov/>

Defense Technical Information Center

<https://discover.dtic.mil/>

## Advanced Search



## Filters

Learn which data elements are associated with certain search filters ⓘ

Submit Search

Reset search

## Keyword ⓘ

## Time Period ⓘ



Fiscal Year ⓘ

Date Range

- ☐ All Fiscal Years
- |   |                                  |
|---|----------------------------------|
| <input type="checkbox"/> FY 2024            | <input type="checkbox"/> FY 2015 |
| <input checked="" type="checkbox"/> FY 2023 | <input type="checkbox"/> FY 2014 |
| <input type="checkbox"/> FY 2022            | <input type="checkbox"/> FY 2013 |
| <input type="checkbox"/> FY 2021            | <input type="checkbox"/> FY 2012 |
| <input type="checkbox"/> FY 2020            | <input type="checkbox"/> FY 2011 |
| <input type="checkbox"/> FY 2019            | <input type="checkbox"/> FY 2010 |
| <input type="checkbox"/> FY 2018            | <input type="checkbox"/> FY 2009 |
| <input type="checkbox"/> FY 2017            | <input type="checkbox"/> FY 2008 |
| <input type="checkbox"/> FY 2016            |                                  |
- ☐ Show New Awards Only ⓘ

## Award Type

## Agency

## Treasury Account Symbol (TAS) ⓘ

2 Active Filters:

[Learn how active filters work](#) ⓘ

TIME PERIOD

PLACE OF PERFORMANCE

FY 2024

COUNTRY | UNITED STATES



TABLE



TIME



MAP



CATEGORIES

Prime Awards



Sub-Awards

## Spending by Geography

What's included in this view of the data?

Use the map below to break down spending by state, county, or congressional district.

[read more](#)

Place of Performance

Recipient Location

Countries

U.S. States & Territories

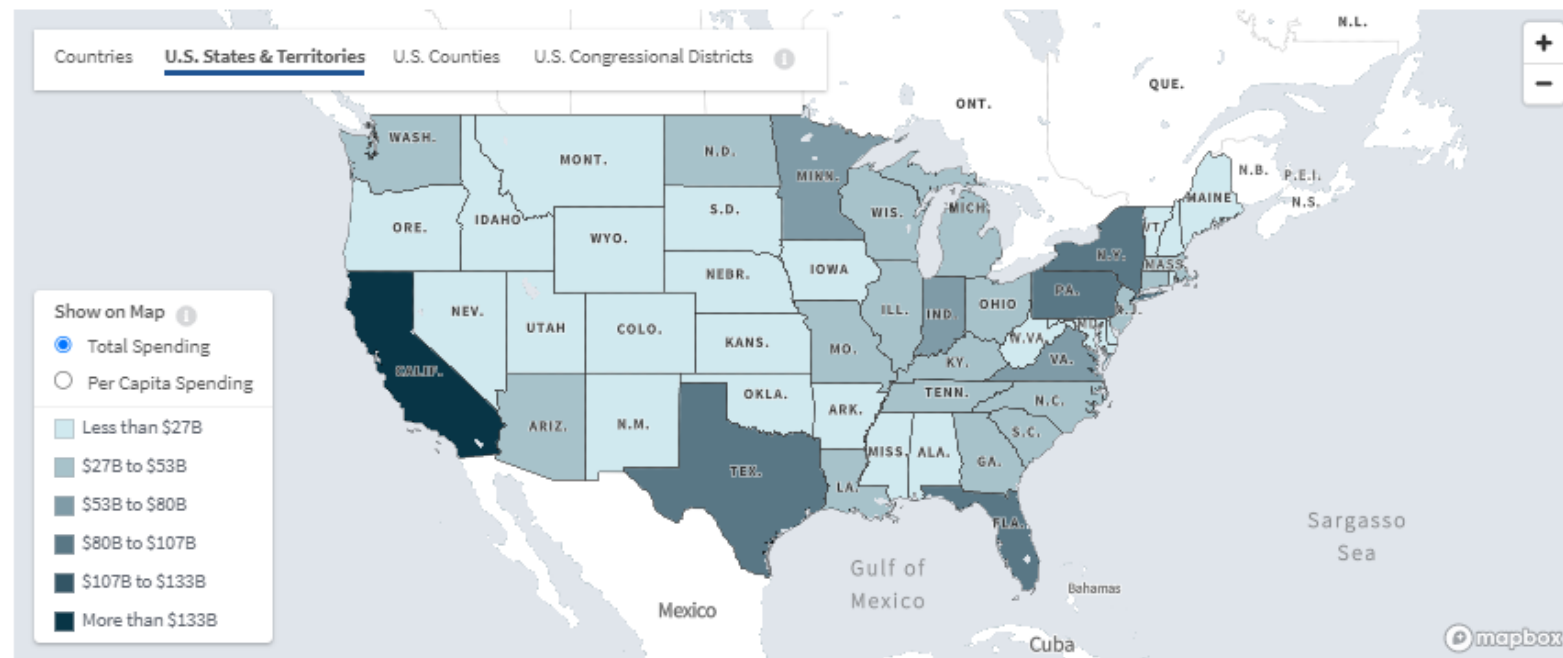
U.S. Counties

U.S. Congressional Districts ⓘ

Show on Map ⓘ

☒ Total Spending☐ Per Capita Spending

- ☐ Less than \$27B
- ☐ \$27B to \$53B
- ☐ \$53B to \$80B
- ☐ \$80B to \$107B
- ☐ \$107B to \$133B
- ☐ More than \$133B



## Filters

Learn which data elements are associated with certain search filters [i](#)

Submit Search

[Reset search](#)

> Keyword [i](#)

▼ Time Period [i](#)



Fiscal Year

Date Range

Action Date Start

Action Date End

01/01/2004



03/08/2024



01/01/2004 to 03/08/2024 [x](#)

☐ Show New Awards Only [i](#)

> Award Type

▼ Agency

Awarding Agency

Awarding Agency

Department of Defense (DOD) [x](#)

Funding Agency

Funding Agency

Department of Defense (DOD) [x](#)

2 Active Filters:

TIME PERIOD

PLACE OF PERFORMANCE

FY 2024

COUNTRY | UNITED STATES



TABLE



TIME



MAP



CATEGORIES

Prime Awards



Sub-Awards

## Spending by Geography

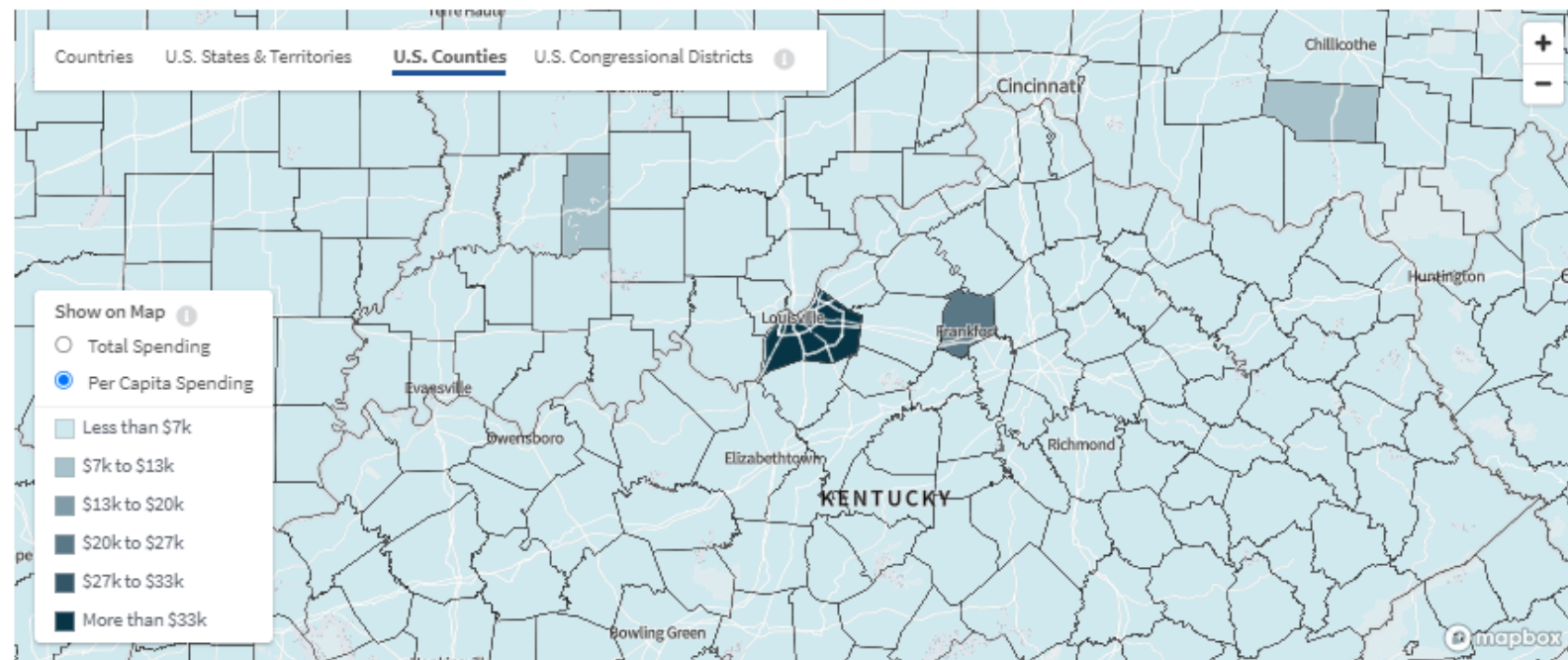
What's included in this view of the data?

Use the map below to break down spending by state, county, or congressional district.

[read more](#)

Place of Performance

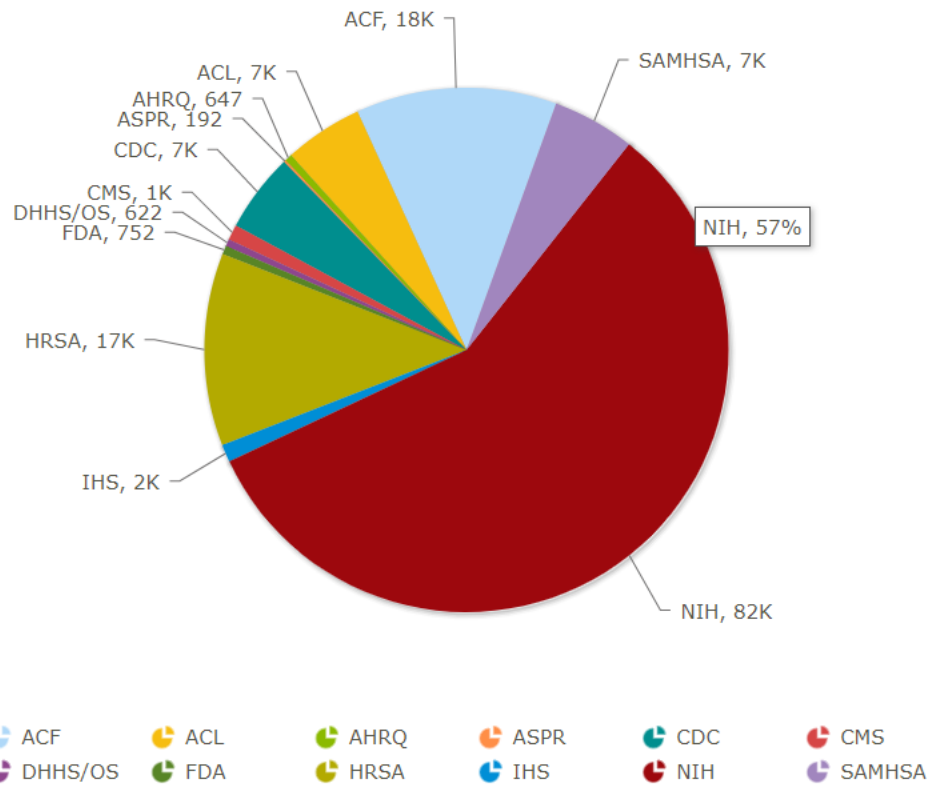
Recipient Location



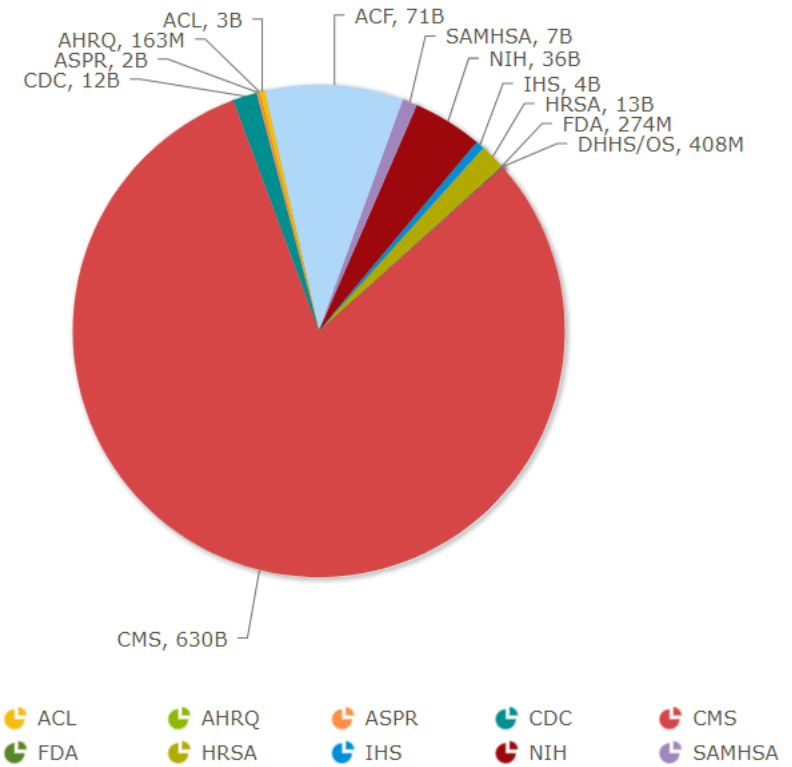
NOTE: Data reported by the Department of Health and Human Services (HHS) related to Medicare payments does not reflect the place where "the majority of the work" occurs, as required by USAspending's data model specifications. For more information, visit our [About Page](#).

# HHS-TAGGS


Number of Grant Awards by OPDIV for FY 2023




Grant Award Dollars by OPDIV for FY 2023









# HRSA Data Warehouse

 Health Resources & Services Administration

data.HRSA.gov

 [A-Z Index](#)





[Find Health Care](#)  [Data](#)  [Maps](#)  [Tools](#)  [Topics](#)  [Help](#) 



## Data by Geography

This tool provides an overview of HRSA's investments nationwide or by a geographic area, including: HHS region, state, county, and congressional district.

**SELECT A GEOGRAPHIC AREA BELOW**

[Nation](#) [HHS Region](#)  [State/Territory](#)  [County](#)  [Congressional District](#) 





# HRSA Fact Sheet

Health Resources & Services Administration

Powered by the HRSA Data Warehouse – [data.hrsa.gov](https://data.hrsa.gov)

Data as of 09/30/2023

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary federal agency that administers programs that provide equitable health care to people who are geographically isolated and economically or medically vulnerable.

## FY 2023 – Kentucky



Demographic	2022 Data
Population	4,502,935
Median Household Income	\$60,183
Low Income Population (Population in households with incomes below 2-times the U.S. poverty level)	323,150

Based upon U.S. Census American Community Survey (ACS) 2022 5-year estimate data as of 12/31/2022

## Total Awards

Program	FY 2023 Funding	Unique Awardees <sup>1</sup>	Total Awards <sup>2</sup>
Grants and Cooperative Agreements <sup>3</sup>	\$181,336,439	58	193
Loan Repayments and Scholarships	\$19,768,608	229	NA

## Breakdown of Investments

HRSA makes grants to organizations and individuals to improve and expand health care services for underserved people, focusing on the following program areas:



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PRESERVING KNOWLEDGE • CONNECTING PEOPLE • INSPIRING INNOVATION

Search this site, DoD S&T Reports, and more..

ENHANCED BY Google



DTIC is piloting two innovative search tools designed to provide you more robust search results for the close to 1 million records available on our public site.

Minsky and Dimensions are innovative search platforms using natural language processing tools to better analyze your specific search parameters. These powerful tools allow you to discover relevant connections and insightful information to analyze the DoD science and technical data available in new ways, giving you a more dynamic experience on our platform.



## Minsky [↗](#)

DTIC is pleased to provide access to its vast collection of Defense scientific and technical information through Minsky®. This Natural Language Processing platform allows for nuanced and expertise-specific processing of text data and provides new ways to explore DTIC's data collections, enabling users to:

- Use natural search terms as well as structured fields
- Discover connections and relevant material within varied datasets, through network maps
- Gain situational awareness of ongoing research across the S&T enterprise by exploring related information




## Dimensions [↗](#)

Through an innovative pilot collaboration between DTIC and Dimensions, we are enhancing search and discovery within DTIC's extensive collection of technical reports. By applying modern data engineering and state-of-the-art natural language processing, DoD documents will be more findable than ever before.

- Analyze funding impact: Explore publications, grants, and patents linked to DoD funding
- Discover more DoD insights: Access DoD Technical Reports and Presidential Budget Reports
- Make informed decisions: Assess research activities and visualize trends

# “Brain-machine interface”

 **DEFENSE TECHNICAL INFORMATION CENTER**  
PRESERVING KNOWLEDGE • CONNECTING PEOPLE • INSPIRING INNOVATION

brain-machine interface

×

Q

All time

⌵

...

**MINSKY**

Filter

1 applied

Clear

×

Search results

7

**Document type**

☒ DoD Grant Award 7

☐ Technical Report 7

☐ R2 Budgetary Justification 0

☐ Project 3

☐ Accomplishment 0

**ENTITIES**

**Organizations**

☐ United States Army 3

☐ Army Contracting Command 3

☐ United States Navy 2

☐ Office of Naval Research 2

☐ Harvard University 2




☐ United States Air Force 1

☐ Air Force Office of Scientific Research 1

DoD Grant Award ×

Clear all filters

**DoD Grant Award**

**The molecular and electrophysiologic response to chronic intraneural silicone electrode implantation**

Jan 12, 2017

[Show similar documents](#)

**Abstract**

The objective of this proposal is to quantify changes in gene expression subsequent to implantation and long-term presence of silicone multielectrode recording arrays and to correlate those molecular events with electrophysiological performance and tissue reactivity. Tasking to achieve the goals of ... brain-machine interface studies. Simultaneously, bipolar EMG electrodes will be implanted in the gastrocnemius and soleus muscles to asses neuromuscular input from the sciatic nerve. Implanted rodents will be allowed to recover for 14 days to permit healing and stabilization of the electrodes and pedestal before recording ...

**Associated with this document**

2 Organizations

2 Readers

**Organizations**

Office of the Secretary of Defense

Army Contracting Command

2015

2016

2017

2018

# NIH RePORTER

## Quick Search

Search

Enter just about anything in the RePORTER Quick Search box above (text, PI names, project numbers, fiscal year, agency) or launch the Advanced Search to precisely configure searches using separate search fields.

Advanced Search

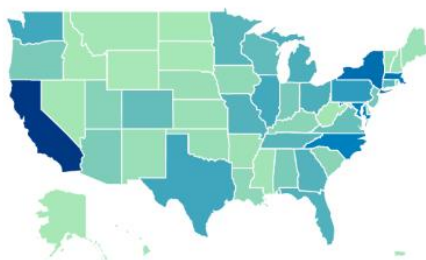
## Welcome to the NIH RePORTER

Each award supported by NIH promotes efforts to seek fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

[Guided Tour](#)

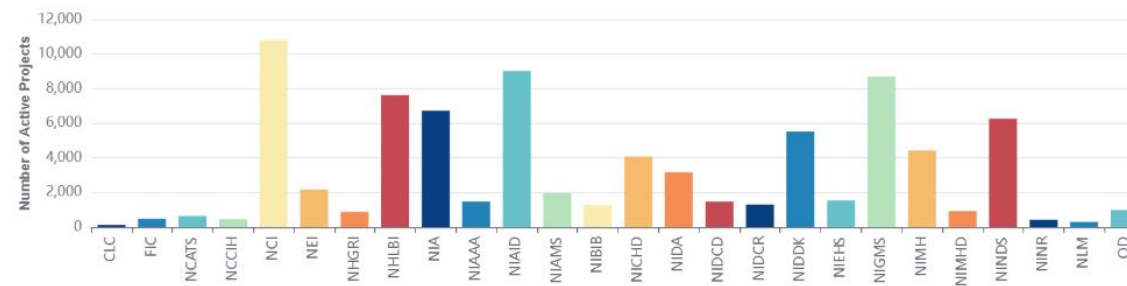
## Active Funding by State

Select a state to view projects



## Active Projects by Institute/Center

Select a bar to view projects for an Institute/Center



## Advanced Projects Search

Reset

Search

### Researcher and Organization

Fiscal Year ?

Active Projects

Current FY is 2024

City ?

Principal Investigator (PI) ?

PI Names or Profile IDs, semicolon ";" separated

Organization ?

Enter at least 3 characters to search

State ?

Country ?

Congressional District ?

Please select a state first

Department Type ?

Organization Type ?

### Text Search

Text Search (Logic) ?

☒ AND ?

☐ OR ?

☐ Advanced ?

2,500 characters left

Limit Project search to ?

☒ Project Title

☒ Project Terms

☒ Project Abstracts

### Project Details

Agency/Institute/Center ?

NIH Spending Category ?

Funding Mechanism ?

## Matchmaker

Find potential Program Officials, ICs, and review panels for your research.

Get Started >

## Publications Search

Find publications associated with extramural or intramural funded projects using PubMed IDs (PMID) or PubMed Central IDs (PMC ID).

Get Started >



Search Results

609 Projects

Save...

Edit Search Criteria

Export

Share

Search Criteria Fiscal Year: Active Projects

Projects Publications Patents Clinical Studies News & More

List

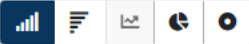
Charts

Map

Filters

- ☐ MD (3364)
- ☐ IL (2825)
- ☐ OH (2506)
- ☐ MI (2357)
- ☐ WA (2178)
- ☐ FL (2051)
- ☐ GA (1882)
- ☐ MO (1857)
- ☐ CT (1791)
- ☐ TN (1627)
- ☐ MN (1566)
- ☐ CO (1548)
- ☐ VA (1314)
- ☐ WI (1261)
- ☐ IN (1036)
- ☐ NJ (974)
- ☐ AL (923)
- ☐ OR (919)
- ☐ UT (801)
- ☐ AZ (781)
- ☐ RI (691)
- ☐ SC (660)
- ☒ KY (609)

Chart Type

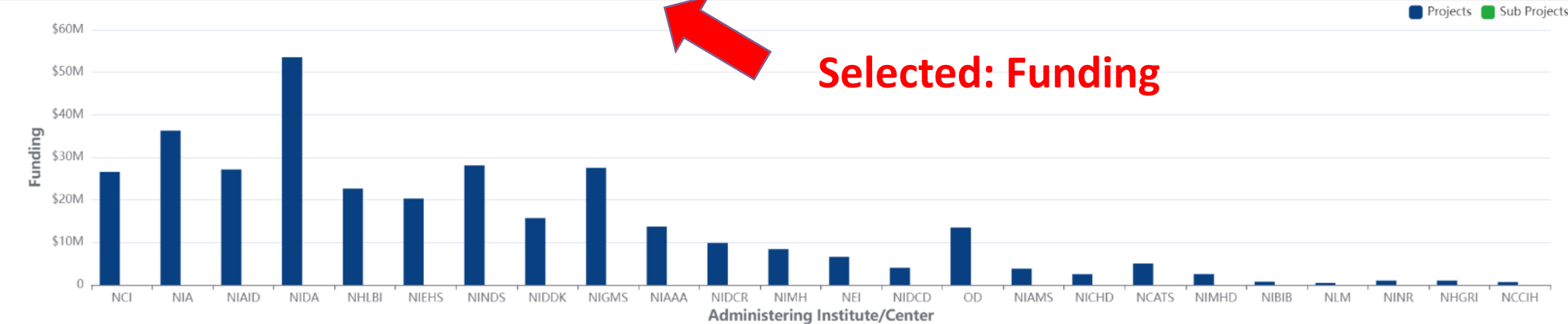


Summary By (Chart X Axis)

Administering Institute/Center

Plot By (Chart Y Axis)

Projects Funding



Selected: Funding

Note: Please note that if the hit list contains both a subproject and its parent grant, the subproject funding is already included in the parent project funding amount.  
\* Funding data available only for NIH, CDC, FDA, AHRQ, and ACF.

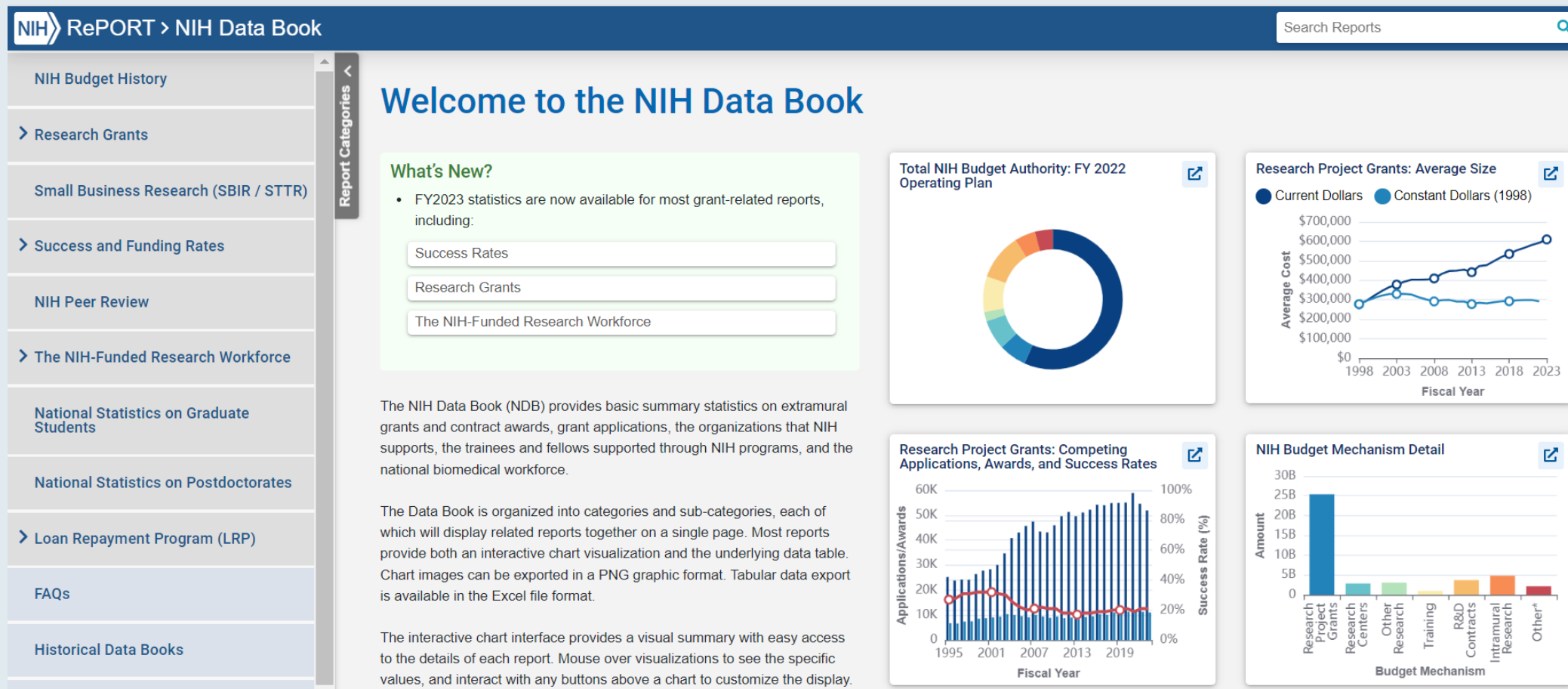
Administering Institute/Center	Projects	Total Funding	Sub Projects	Sub Project Funding
NLM	2	\$451,451		
NCCIH	1	\$658,973		
NIBIB	3	\$773,837		
NINR	2	\$996,798		
NHGRI	2	\$998,333		
NICHD	9	\$2,507,071		
NIMHD	4	\$2,538,735		

Thank you for your feedback!

Selected: Kentucky



# NIH Data Book



# Research Project Grants: Success Rates of New (Type 1) Competing Applications for Targeted and Untargeted Research by Institute or Center (IC)

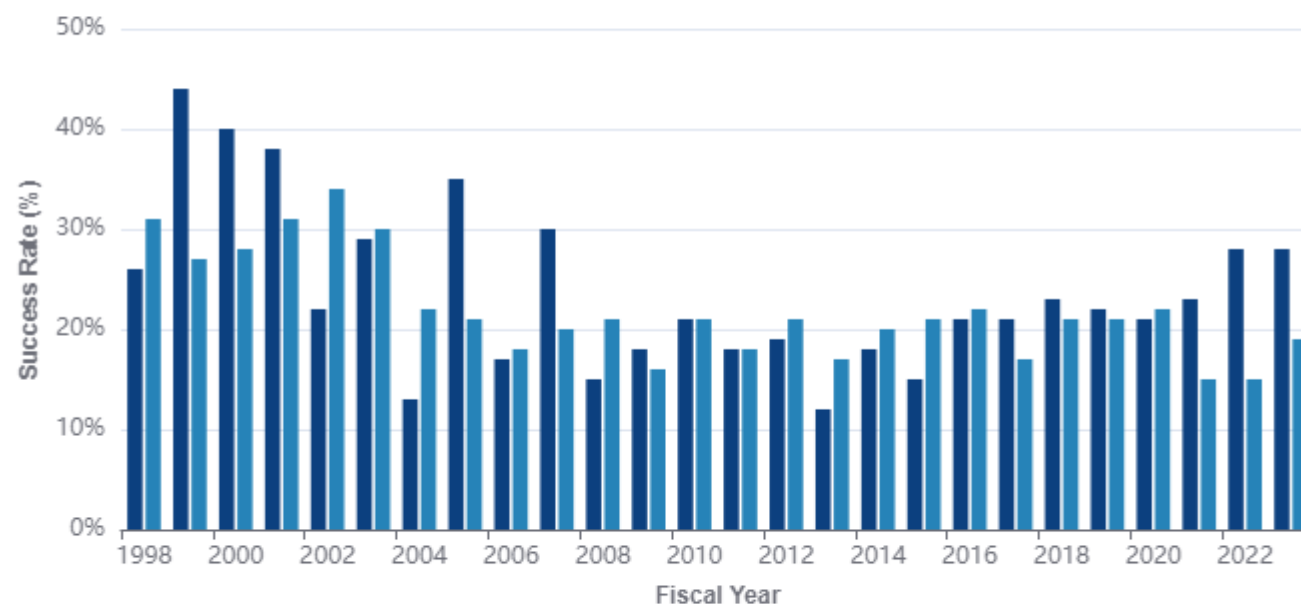
NIH Data Book Report ID: 157 [Share](#)

NIAID

Data

Export

Success Rate of Targeted Success Rate of Untargeted



FY 2009 and 2010 exclude awards made under the American Recovery and Reinvestment Act of 2009 (ARRA) and all ARRA solicited applications and awards.

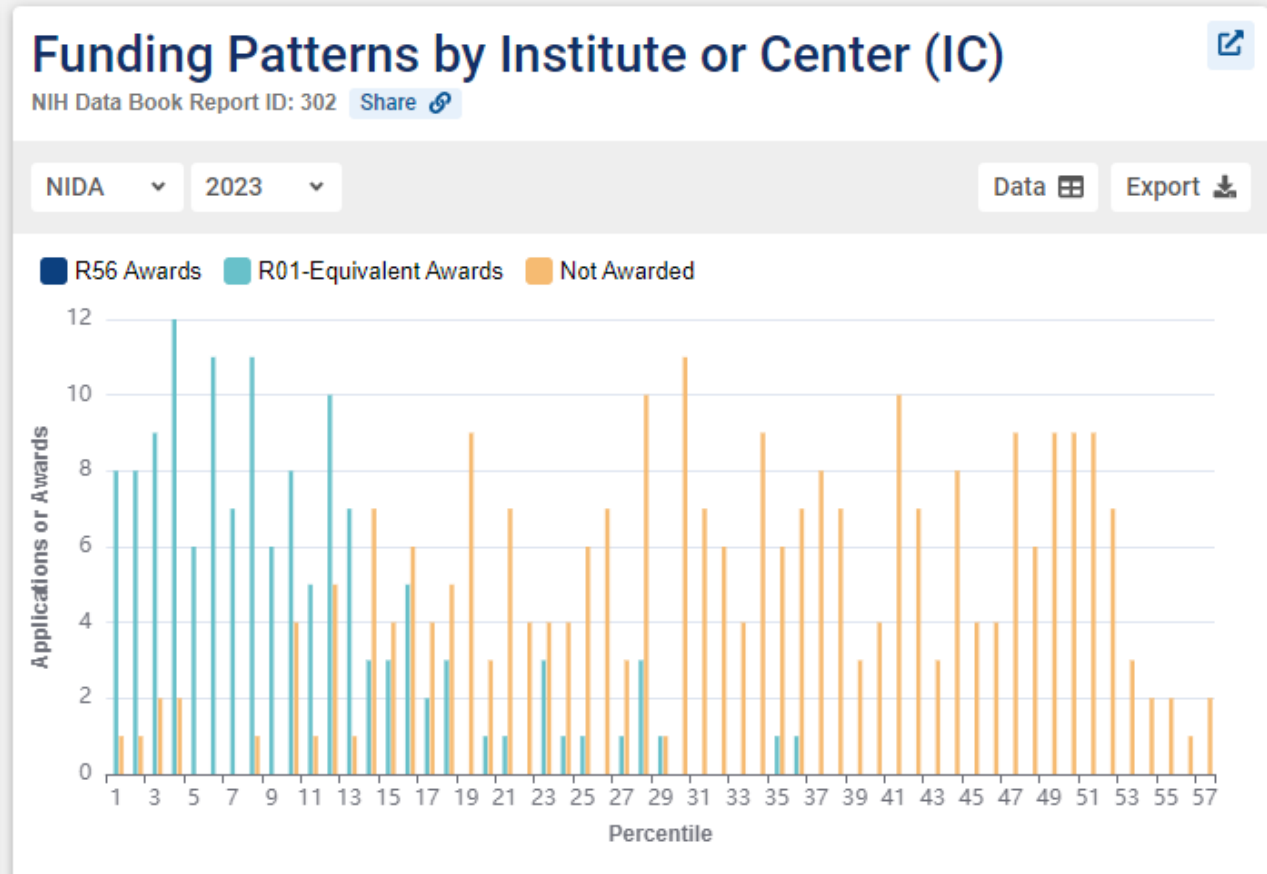
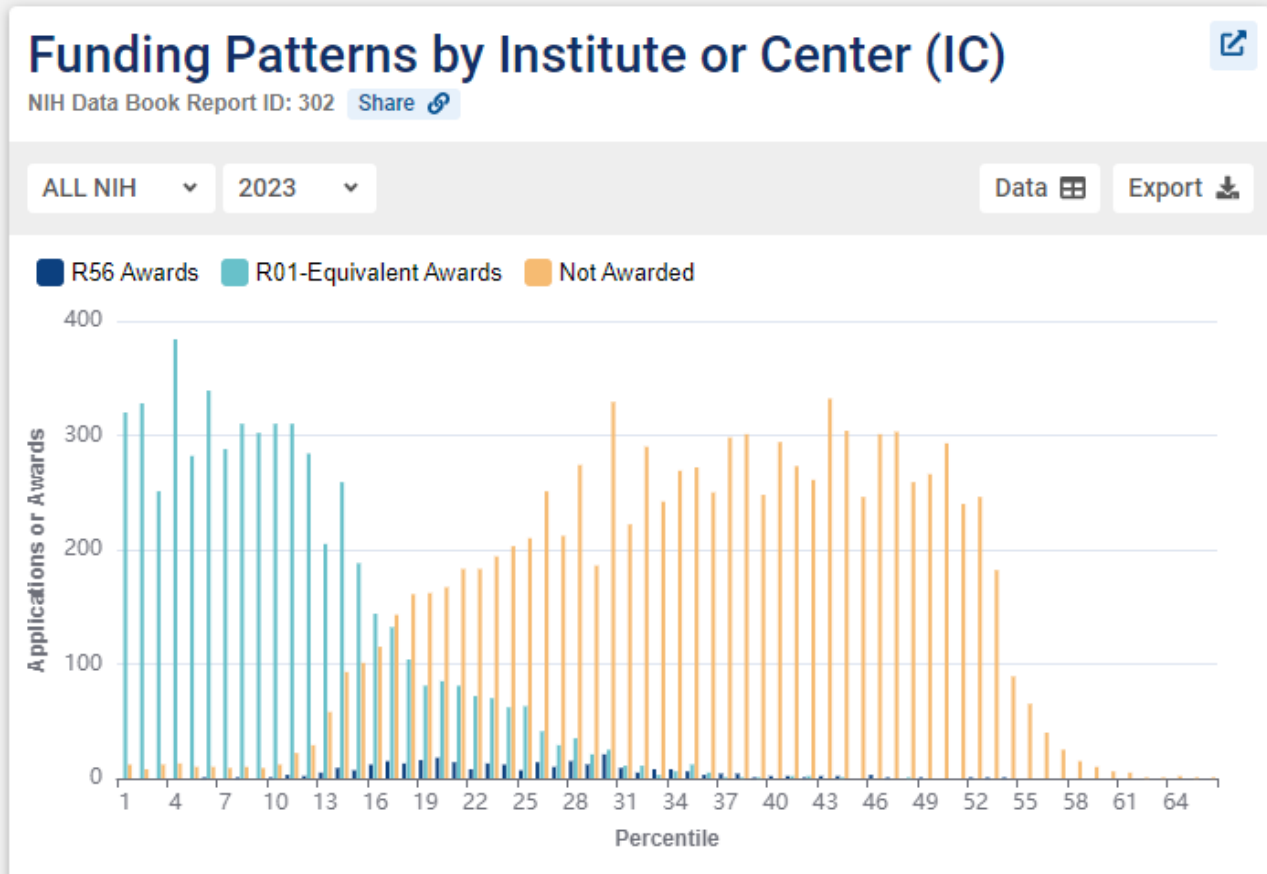
\*Excludes awards issued under supplemental Coronavirus (COVID-19) appropriations.

Last Updated: January 2024

[View More](#)

# All NIH

# NIDA



# R01-Equivalent Investigators, New (Type 1): Funding Rates, by Career Stage of Investigator

NIH Data Book Report ID: 166

Share



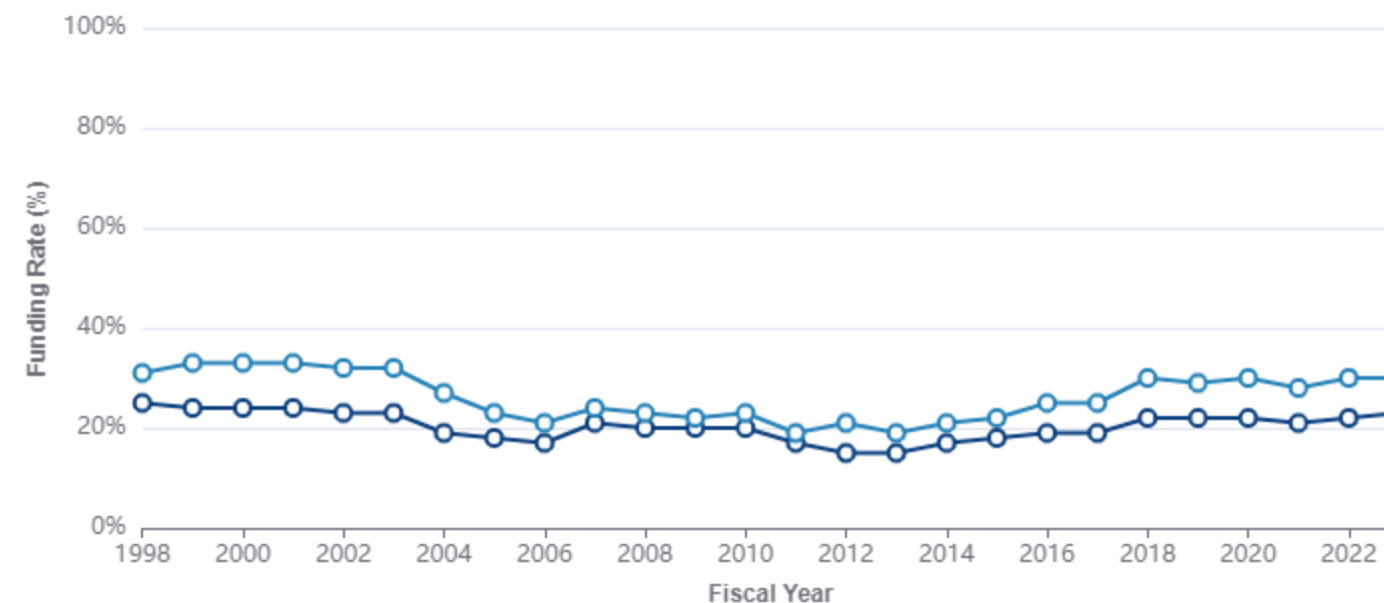
Data



Export



First-Time Established



FY 2009 and 2010 exclude awards made under the American Recovery and Reinvestment Act of 2009 (ARRA) and all ARRA solicited applications and awards.

*Award includes: Grant/Project Invention (GPI) and Multiple Project Invention (MPI).*

Last Updated: January 2024

[View More](#)

# NCSES's Survey of Federal Funds for Research and Development

- <https://www.nsf.gov/statistics/fedfunds/>



The screenshot displays the NSF website's navigation and content for the NCSES Federal Funds for R&D page. The top navigation bar includes the NSF logo, the text "U.S. National Science Foundation", a search bar, and links for "Find Funding & Apply", "Manage Your Award", "Focus Areas", "News & Events", and "About". A left sidebar lists categories under "Social, Behavioral and Economic Sciences (SBE)", including "Home", "Behavioral and Cognitive Sciences (BCS)", "National Center for Science and Engineering Statistics (NCSES)", "About NCSES", "Explore Data", "Surveys & Analysis", and "Topics". The main content area features a breadcrumb trail "Home > Research Areas > SBE > NCSES", links for "Email", "Print", and "Share", and the title "Federal Funds for R&D". A descriptive paragraph states: "This series reviews current and historical trends in Federal obligations and funding for research and development in science and engineering." Below this, a link to the "Interactive Data Tool" is provided. Two tabs, "Products" and "Sources", are visible. The "Most recent data year" section highlights a report: "Federal Funding to University Affiliated Research Centers Totaled \$1.5 Billion in FY 2021", dated "JANUARY 16, 2024" and marked as "NEW".

U.S. National Science Foundation

Search

Find Funding & Apply ▾ Manage Your Award ▾ Focus Areas ▾ News & Events ▾ About ▾

Home > Research Areas > SBE > NCSES

Email Print Share

## Federal Funds for R&D

This series reviews current and historical trends in Federal obligations and funding for research and development in science and engineering.

Data related to this publication series may be accessed through the [Interactive Data Tool](#)

Products Sources

Most recent data year

 Federal Funding to University Affiliated Research Centers Totaled \$1.5 Billion in FY 2021  
OTHER | NSF 24-315 | JANUARY 16, 2024 **NEW**

# Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions Survey

Filter (Dimensions)

State x

Detailed Institution Type x

Customized Chart

Data Summary

Chart Data Table

INFLATION ADJUSTMENT ⓘ

Current Dollars v

UNITS

Thousands of Dollars v

Color

Labels

Zoom

Export

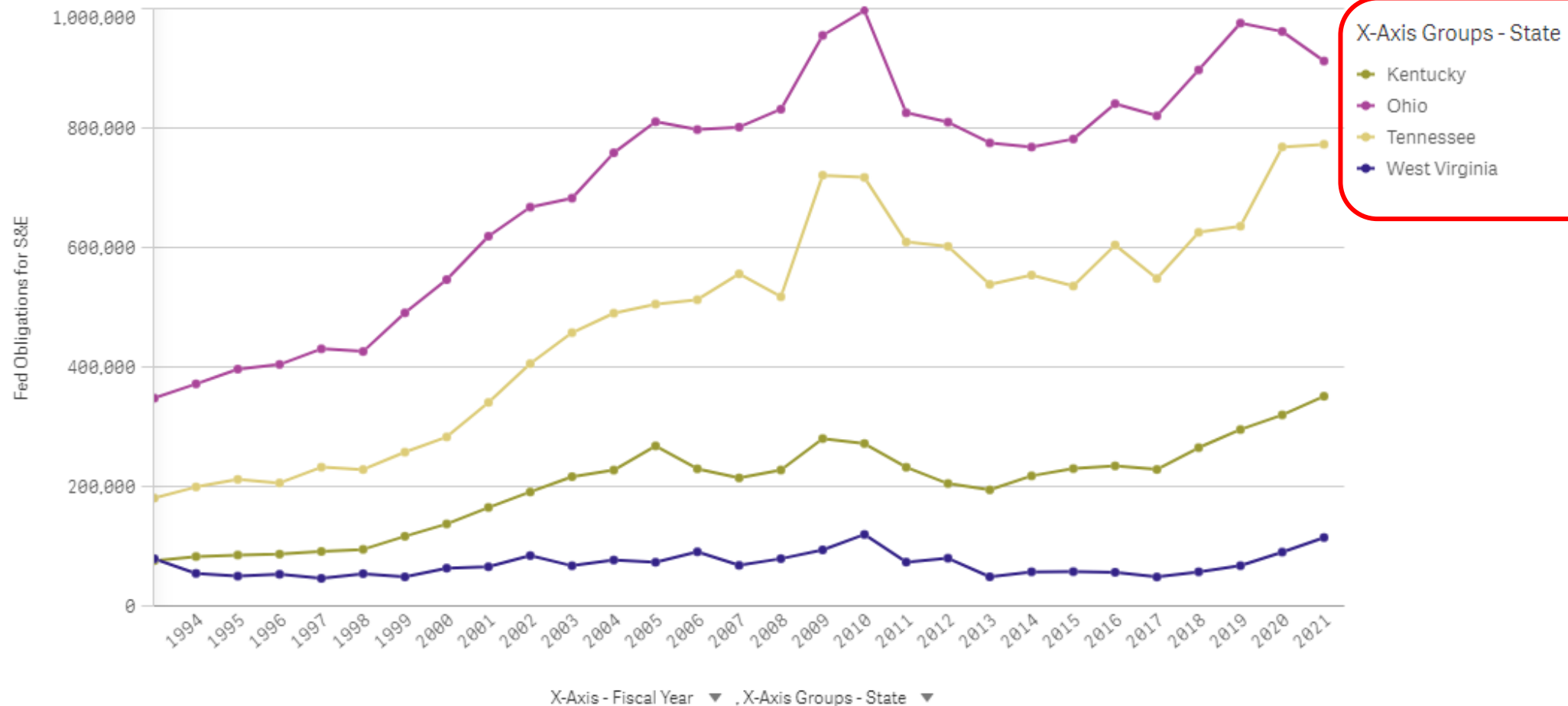
Sort

Data Markers

Convert to Table

Line

Bar v



SOURCE: National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions.



# Caveats about using awards/spending data

The same data can be used to tell multiple stories.

- Patterns observed can't always reveal causes and effects.

The data may give a false sense of security/certainty.

- Use the data as part of a larger conversation.

The past doesn't always predict the future.

- Funders may be looking for novelty!

**Subscription  
funding  
databases/  
directories**

**Pivot-RP**

**Candid (Foundation Center)**

# Case 1

---

Professor A just had an email forwarded to him about a new grant program from the Whosis Foundation. He has never heard of them and wonders whether they would be likely to fund his project about mental health intervention for college students. If it's not a good fit, he would like to know what alternative funders exist for this research.

## Case 2

---

Dr. B has just been appointed Associate Dean of Research in her college. In meetings with faculty in the college, she finds that many have become apathetic or discouraged about pursuing funding. She would like to stimulate interest in proposals by letting faculty know what opportunities are out there.

## Case 3

---

Dr. C has submitted seven proposals to NIH over the last few years and has not yet been funded. He wonders whether his experience is typical for someone at his career stage, and he should consider tailoring his project to target a different NIH institute.



# Case 4

---

Several faculty in your institution are thinking of establishing a new multidisciplinary research unit. They want to know if they can make the case to university leadership that such a unit would be competitive for funding.



# **How Agency Data Adds Value to Research Development**

- Curation of funding opportunities
- Determination of sponsor fit
- Advice on funding agency trends
- Comparison, combination and triangulation with internal institutional data

**Questions?  
Comments?  
Ideas?**

**Lou Hurst**  
**[lou.hurst@uky.edu](mailto:lou.hurst@uky.edu)**