

# NIH CAREER DEVELOPMENT (K) AWARDS:

## WHICH ONE(S) ARE RIGHT FOR YOU?

K01 to K99  
Awards

**\*\*Slides will be made available to everyone who signs in today**



# **UPCOMING POSTDOC CAFÉ:**

**Tuesday, September 13**

**Grant Writing Resources at Vanderbilt**

# A FEW QUESTIONS FOR THE AUDIENCE...

- Year in postdoc
- Type of doctoral degree
- Citizenship status
- Type of career development award under consideration

# TRAINING AND CAREER TIMETABLE

## Stage of Research Training / Career

## Award Types

**GRADUATE/  
MEDICAL  
STUDENT**

← Predoctoral Institutional Training Grant (T32)

← Predoctoral Individual Fellowship (F30/F31)

**POST  
DOCTORAL**

← Postdoctoral Institutional Training Grant (T32)  
Postdoctoral Individual Fellowship (F32)

← Institutional Career Development Award (K12)

} Mentored Career Development Award (K01, K99...)

**EARLY**

**MIDDLE**

**SENIOR**

**Independent Scientist**

} Independent Scientist Research Grants  
(R01, P01, U01...)

**GOAL OF  
CAREER DEVELOPMENT  
AWARDS:**

**FACILITATE YOUNG INVESTIGATORS IN  
PREPARING TO TRANSITION TO A STABLE  
INDEPENDENT RESEARCH POSITION**

# ELIGIBILITY: WHO CAN APPLY FOR K AWARDS?

- **Degree:** Doctoral Degree (generally)
  - Some (K08, K23) require clinical degree
- **Citizenship:** different requirements for different award types



*Read the Eligibility Section of the Funding Opportunity Announcements (FOAs) carefully!*

# NIH TRAINING WEBSITE

U.S. Department of Health & Human Services > National Institutes of Health

OER HOME ABOUT GRANTS FUNDING FORMS & DEADLINES GRANTS POLICY ERA NEWS & EVENTS ABOUT OER


**NIH** National Institutes of Health  
Research Training and Career Development

SEARCH  Search

Intramural | Contact Us

Home Career Path Programs Institute/Program Matrix Resources

Select your educational or career level to find a funding opportunity to support your training or career development goals



Undergraduate Education

Predocctoral Training/Clinical Doctorate

Postdoctoral Training/Clinical Residency

Early Research Career Development

Mid-Career Research Development and Mentoring

Senior Career Research Development and Mentoring


EDUCATION AND TRAINING CAREER

<https://researchtraining.nih.gov/>

# NIH TRAINING WEBSITE: FUNDING FOR POSTDOCTORAL/RESIDENCY STAGE

[Undergraduate](#) [Graduate/Doctorate](#) [Postdoctoral/Residency](#) [Early Career](#) [Mid Career](#) [Senior Career](#)

## Postdoctoral Training/Clinical Residency



[RTCD Home](#) > [Career Path](#) > [Postdoctoral/Residency](#)

The postdoctoral and clinical residency periods are intended to further develop the independence of a newly trained doctorate recipient. This is a temporary period that transitions the individual from a trainee to an independent researcher. The mentor(s) at this stage are essential to career planning and transition to independence.

### NIH Programs for Postdoctoral Researchers and Clinical Residents

You apply for Individual Awards:

**F32**


**Ruth L. Kirschstein Postdoctoral Individual National Research Service Award**

The purpose of the Kirschstein-NRSA postdoctoral fellowship is to enhance the research training of promising postdoctoral candidates who have the potential to become productive, independent investigators in scientific health-related research fields relevant to the missions of the participating NIH Institutes and Centers.

**K01**

**Mentored Research Scientist Career Development Award**

The purpose of this program is to provide support and protected time for an intensive, supervised career development experience in the biomedical, behavioral, or clinical sciences leading to research independence. Some NIH Institutes use the K01 to



### FAQs

- What is the purpose of the Ruth L. Kirschstein National Research Service Awards (Kirschstein-NRSA)?
- How do Kirschstein-NRSA awards differ from other NIH awards?
- Do recipients of Kirschstein-NRSA awards incur any obligation?
- Can fellowship or training grant Kirschstein-NRSA funds be rebudgeted?
- What activity codes are considered Kirschstein-NRSA grants?

<https://researchtraining.nih.gov/career/postdoctoral-residency>



# OVERVIEW: TYPES OF NIH K AWARDS FOR POSTDOCS/JUNIOR FACULTY

- Institutional K Award: **K12**
- PhD scientists: **K01, K22, K25**
- Physician-scientists: **K08, K23**
- PhD or Physician-scientists: **K99/R00**

More about K12...

# K12: INSTITUTIONAL MENTORED RESEARCH SCIENTIST DEVELOPMENT PROGRAM



- Purpose: Enhance research career development for junior investigators training for careers in specific research areas.
  - Individuals are selected by the institution
  - Programmatic approach

# VANDERBILT K12 PROGRAMS (INTERNAL & EXTERNAL FUNDING)

- **BIRCWH:** Building Interdisciplinary Careers in Women's Health
- **VFRS:** Vanderbilt Faculty Research Scholars
  - Two previous programs merged: VCTRS & VPSD
- **VCORCDP:** Vanderbilt Clinical Oncology Research Career Development Program
- **PCOR:** The Vanderbilt Patient Centered Outcomes Research Career Knowledge, Education and Training Program
- **Pediatrics K12 Mentored Research Scholars Program**

<https://my.vanderbilt.edu/edgeforscholars/money/>

# K01: MENTORED RESEARCH SCIENTIST DEVELOPMENT AWARD

- For: Individuals with a research (non-clinical) doctorate
- Requires postdoctoral research experience
- Not an extension of postdoctoral training
- Varied NIH IC participation
  - Enhance diversity in the workforce
  - Re-entry to workforce
  - Pursuit of new research area

# **K08: MENTORED CLINICAL SCIENTIST DEVELOPMENT AWARD**

- **For: Individuals with a Clinical Doctorate**
- **Ideal for individuals planning a career in basic or early translational research**

# K22: RESEARCH CAREER AWARD FOR TRANSITION TO INDEPENDENCE

- For: Research or Clinical Doctorate
- Varied NIH IC participation
  - Some Institutes /Centers have phased out this award & use K99/R00 mechanism instead
  - Some institutes / Centers use to fund intramural research
  - NINDS uses K22 to promote diversity in Neuroscience Research
- Might include both mentored and independent phases (depends on Institute / Center)

# K23: MENTORED PATIENT-ORIENTED RESEARCH DEVELOPMENT AWARD

- For: Clinical Doctorate
- Clinically trained professionals with a commitment to focus on patient-oriented research
  - Patient-oriented research = research in which the investigator directly interacts with human subjects
- Must have completed all clinical training prior to start of award

# K25: MENTORED QUANTITATIVE RESEARCH DEVELOPMENT AWARD

- For: those with Research Doctorate in Quantitative/Engineering Disciplines
- Scientists from quantitative and engineering backgrounds interested in pursuing health-related research
- Postdocs and any level faculty are eligible to apply



# K99/R00: NIH PATHWAY TO INDEPENDENCE AWARD

- For those with Research Experience at the Postdoctoral Level
  - **K99:** Mentored research experience (up to 2 years)
  - **R00:** Transition to independence as jr. faculty (up to 3 years)
- **\*\* Applicants: no more than 4 years of postdoctoral research experience at the time of final application**



- **\*\* no citizenship requirement**

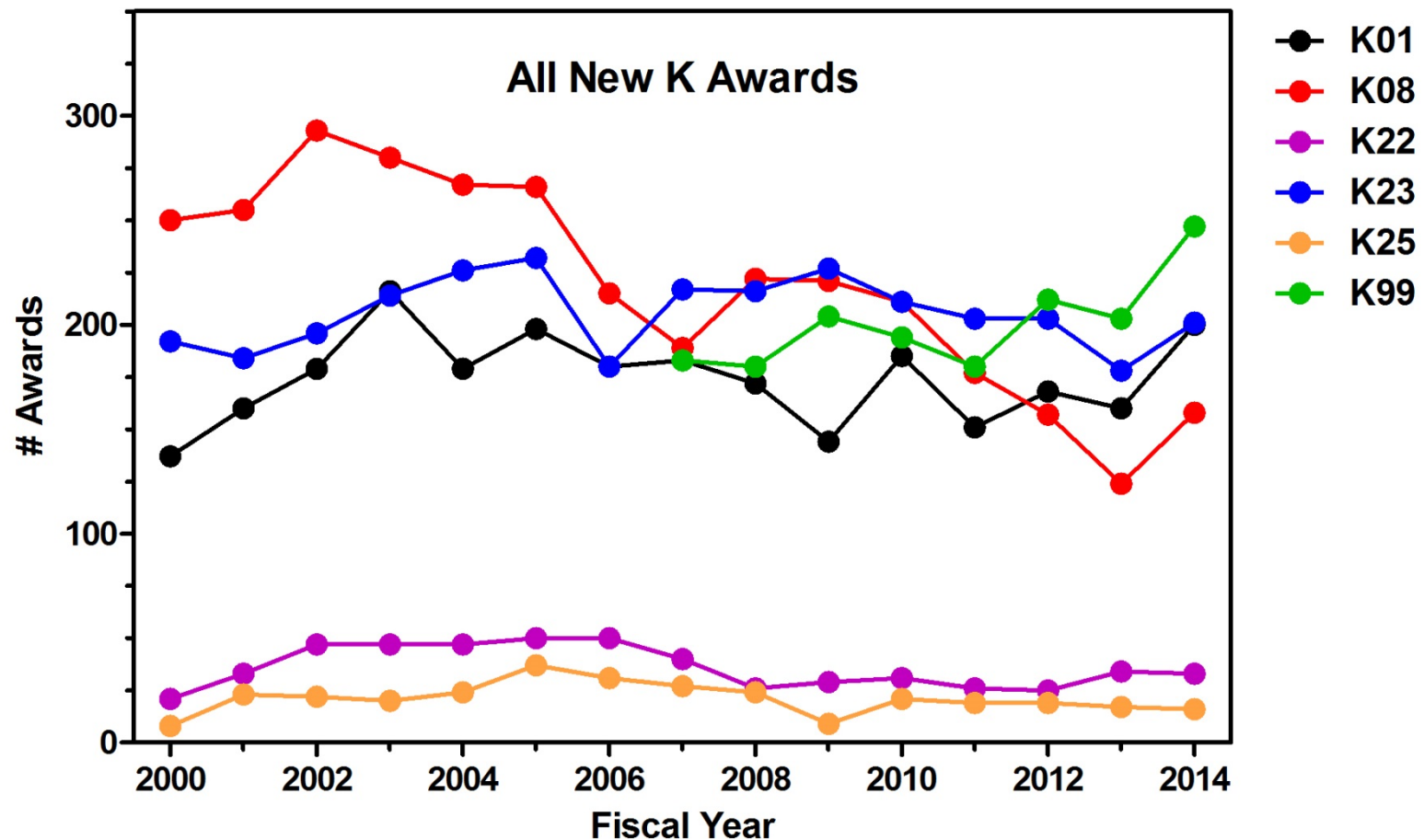
[http://grants.nih.gov/grants/guide/contacts/parent\\_K99\\_R00.html](http://grants.nih.gov/grants/guide/contacts/parent_K99_R00.html)

# K99/R00: NIH PATHWAY TO INDEPENDENCE AWARD

HOME	ABOUT GRANTS	FUNDING	POLICY & COMPLIANCE
<a href="#">Home</a> » <a href="#">Funding</a> » NIH Pathway to Independence Award (Parent K99/R00) (PA-16-193)			
<b>NIH Pathway to Independence Award (Parent K99/R00) (PA-16-193)</b>			
<b>PA-16-193</b>			
Table of IC-Specific Information, Requirements and Staff Contacts			
Release Date: April 15, 2016			
Expiration Date: January 8, 2018			
NIH Institute or Center Contacts	Institute/Center Specific Information		
<b>National Cancer Institute (NCI)</b>  <b>Scientific Program Contact:</b> Michael Schmidt, Ph.D. Email: <a href="mailto:mschmidt@mail.nih.gov">mschmidt@mail.nih.gov</a>  Sergei Radaev, Ph.D. <a href="mailto:sradaev@mail.nih.gov">sradaev@mail.nih.gov</a>  <b>Grants Management Contact:</b> Sean Hine Email: <a href="mailto:hines@mail.nih.gov">hines@mail.nih.gov</a>	<b>NCI-Specific Information:</b>  The NCI accepts K99/R00 applications in all areas of cancer research.  Additional NCI-specific information/requirements can be found at: <a href="http://www.cancer.gov/grants-training/training/funding/K99">http://www.cancer.gov/grants-training/training/funding/K99</a>  <b>Salary Support:</b> Up to \$100,000 plus fringe benefits per year. <b>Research Support:</b> Up to \$30,000 per year.		
<b>National Eye Institute (NEI)</b>  <b>Scientific Program Contact:</b> Neeraj Agarwal, Ph.D. Phone: (301) 451-2020 Email: <a href="mailto:agarwalnee@mail.nih.gov">agarwalnee@mail.nih.gov</a>  <b>Grants Management Contact:</b> William W. Darby Phone: (301) 451-2020 Email: <a href="mailto:wwd@nei.nih.gov">wwd@nei.nih.gov</a>	<b>NEI Specific Information:</b>  NEI will accept applications for funding that are responsive to programmatic priority areas for research within vision and ophthalmology as detailed in the National Plan for Eye and Vision Research found at <a href="http://www.nei.nih.gov">www.nei.nih.gov</a> .  <b>Salary Support:</b> NEI will provide salary support commensurate with the applicant institution's salary structure for persons of equivalent qualifications, experience, and rank. <b>Research Support:</b> Up to \$25,000 per year.		
<b>National Heart, Lung, and Blood Institute (NHLBI)</b>  <b>Scientific Program Contact:</b> <i>Extramural programs:</i> Helena O. Mishoe, Ph.D., MPH Phone: (301) 451-5081 Email: <a href="mailto:mishoe@nhlbi.nih.gov">mishoe@nhlbi.nih.gov</a>  <i>Intramural programs:</i> Herbert Geller, Ph.D. Phone: (301) 451-9440	<b>NHLBI Specific Information:</b>  Please refer to <a href="http://www.nhlbi.nih.gov/training/index.htm">http://www.nhlbi.nih.gov/training/index.htm</a> for specific information on NHLBI programs and career development policies.  <b>Salary Support:</b> Up to \$75,000 plus fringe benefits per year. <b>Research Support:</b> Up to \$25,000 per year.		

[http://grants.nih.gov/grants/guide/contacts/parent\\_K99\\_R00.html](http://grants.nih.gov/grants/guide/contacts/parent_K99_R00.html)

# # CAREER DEVELOPMENT AWARDS (NATIONAL DATA)



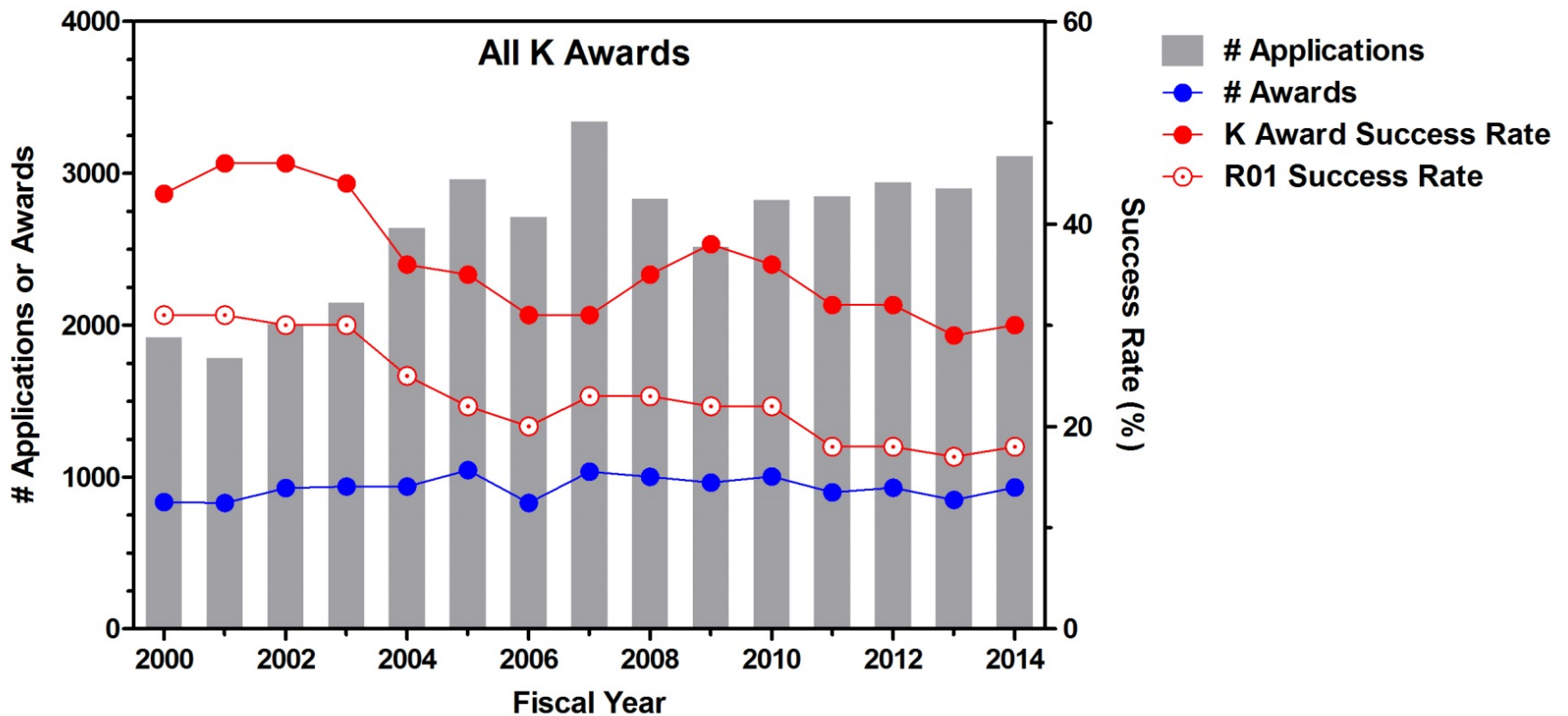
# MENTORED K AWARDS: SCORED REVIEW CRITERIA

- **Candidate**
  - Career development plan
  - Plans to evaluate progress
- **Mentor**
  - Letters of Reference and Mentor(s) statements
- **Research plan**
- **Environment & Institutional Commitment to the Candidate**

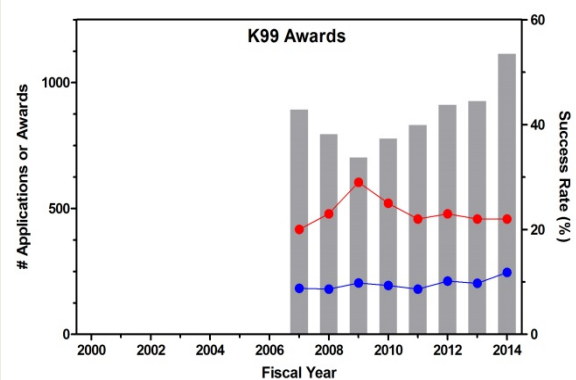
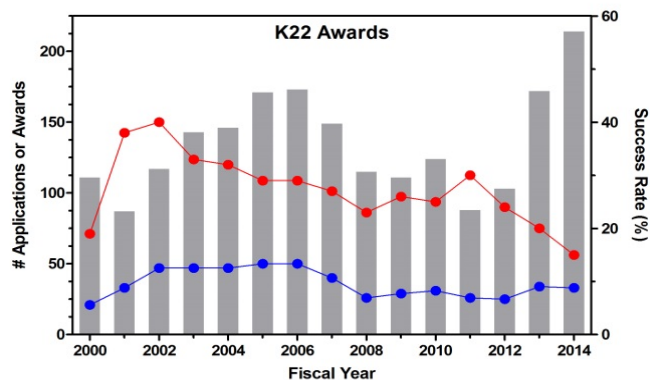
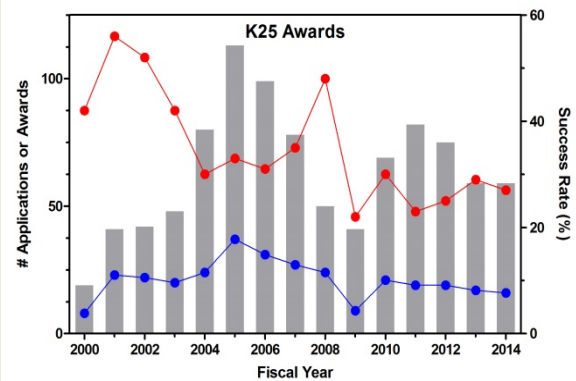
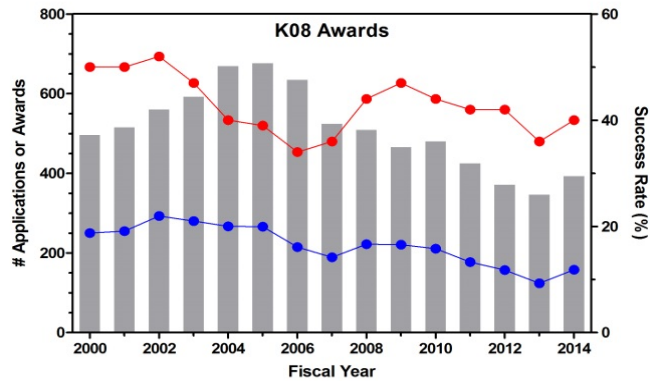
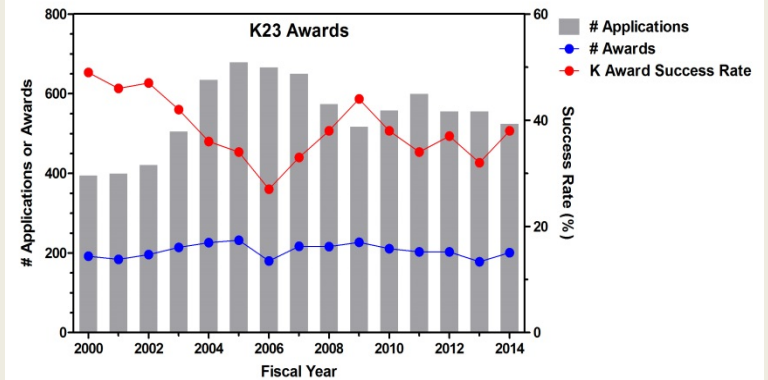
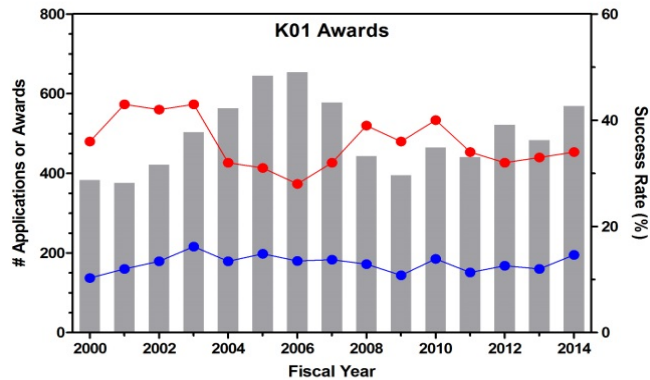
# MENTORED K AWARDS: ADDITIONAL REVIEW CRITERIA

- Additional Review Criteria
  - **Training in the Responsible Conduct of Research**
  - Protection for Human Subjects
  - Inclusion of Women, Minorities, and Children
  - Vertebrate Animals
  - Biohazards
  - Resubmission, Renewal, Revision factors
- Additional Review Considerations
  - Select Agents Research
  - Resource Sharing Plans
  - Budget & Period of Support

# THE GOOD NEWS: FUNDING SUCCESS RATES ARE *HIGHER* FOR K AWARDS THAN R01 AWARDS



# SUCCESS RATES FOR INDIVIDUAL K AWARDS



# SUCCESS RATES FOR INDIVIDUAL K AWARDS

DIVISION OF PLANNING, EVALUATION AND ANALYSIS - DATA PRODUCED BY THE STATISTICAL ANALYSIS AND REPORTING BRANCH - OERStats@mail.nih.gov



Table #204

## NIH CAREER DEVELOPMENT (K) GRANTS<sup>1</sup>

Competing Applications, Awards, Success Rates and Total Funding  
by NIH Institutes/Centers and Activity Code  
Made with Direct Budget Authority Funds  
Fiscal Years\* 2006 - 2015

\*\*Excludes awards made with American Recovery and Reinvestment Act (ARRA) funds.

Select AutoFilter to view totals or change display criteria.

Fiscal Year	Activity Code	NIH Institute / Center	Number of Applications Reviewed	Number of Applications Awarded	Success Rate <sup>2</sup>	Total Funding <sup>3</sup>
2006	K99	NIMH	1	1	100%	\$90,000
2007	K99	NIMH	33	8	24%	\$629,050
2008	K99	NIMH	46	10	22%	\$863,742
2009	K99	NIMH	50	13	26%	\$1,194,509
2010	K99	NIMH	45	13	29%	\$1,186,789
2011	K99	NIMH	51	14	27%	\$1,218,955
2012	K99	NIMH	53	14	26%	\$1,243,866
2013	K99	NIMH	53	12	23%	\$1,072,184
2014	K99	NIMH	66	17	26%	\$1,703,134
2015	K99	NIMH	57	14	24.6%	\$1,424,849

- You can look up K success rates:
  - K award type
  - Institute / Center
  - Fiscal Year

<http://report.nih.gov/DisplayRePORT.aspx?rid=551>



# COMMON FEATURES

- **Duration:** 3-5 years
  - Depends on type of award and research progress
- **Mentor:** Require a mentor, multiple mentors are OK
- **Independent Support:** Mentored K awardees are encouraged to apply for independent support (R01 or equivalent) during K award

# COMMON FEATURES: APPOINTMENT & EFFORT

- **Appointment:**

- Individual must have a full-time appointment at institution

- **Level of Effort:**

- Mentored awards require full-time effort (defined as at least 9 person months (i.e. 75%) on research and the rest on other career development related activities)

***At the time of application and initial award, all candidates must meet the full-time appointment requirement as well as the minimum 75% effort requirement.***

# COMMON FEATURES: COSTS

Some costs vary widely across NIH ICs.

## ■ Salary/fringe benefits:

- Salaries capped between **\$50,000** and legislatively mandated cap (currently **\$183,300**)
- Fringe benefits are over & above any salary cap

## ■ Research/development costs:

- Generally **\$25,000** to **\$50,000**
- Commonly used for: supplies, equipment, technical personnel, travel to research meetings or training, tuition/fees, computational services

# COSTS CAN VARY BY INSTITUTE

## (EXAMPLE: K99)

Award Type	Institute	Salary cap (max)	R&D costs (max)
K99	NCI	\$100,000	\$30,000
	NEI	institution-specific	\$25,000
	NHLBI	\$75,000	\$25,000
	NHGRI	institution-specific	\$30,000
	NIA	\$75,000	\$25,000
	NIAAA	\$90,000	\$50,000
	NIAID	\$75,000	\$25,000
	NIAMS	\$50,000	\$20,000
	NIBIB	\$50,000	\$20,000
	NICHD	\$75,000	\$25,000
	NIDCD	\$75,000	\$25,000
	NIDCR	\$100,000	\$25,000
	NIDDK	\$75,000	\$25,000
	NIDA	\$90,000	\$50,000
	NIEHS	\$60,000	\$20,000
	NIGMS	\$60,000	\$20,000
	NIMH	\$75,000	\$20,000
	NIMHD	\$75,000	\$25,000
	NINDS	\$50,000	\$20,000
	NINR	\$50,000	\$20,000
	NLM	\$50,000	\$20,000
	NCCIH	institution-specific	\$20,000
	ORIP	\$75,000	\$20,000

# COMMON FEATURES

**Take Home:**

**K Awards fund the scientist and not the science**

# COMMON FEATURES: CHANGES

- Change of Institution or Mentor:

**Requires prior approval in writing of the NIH award,  
so contact NIH staff ASAP**

# APPLICATION PROCEDURES

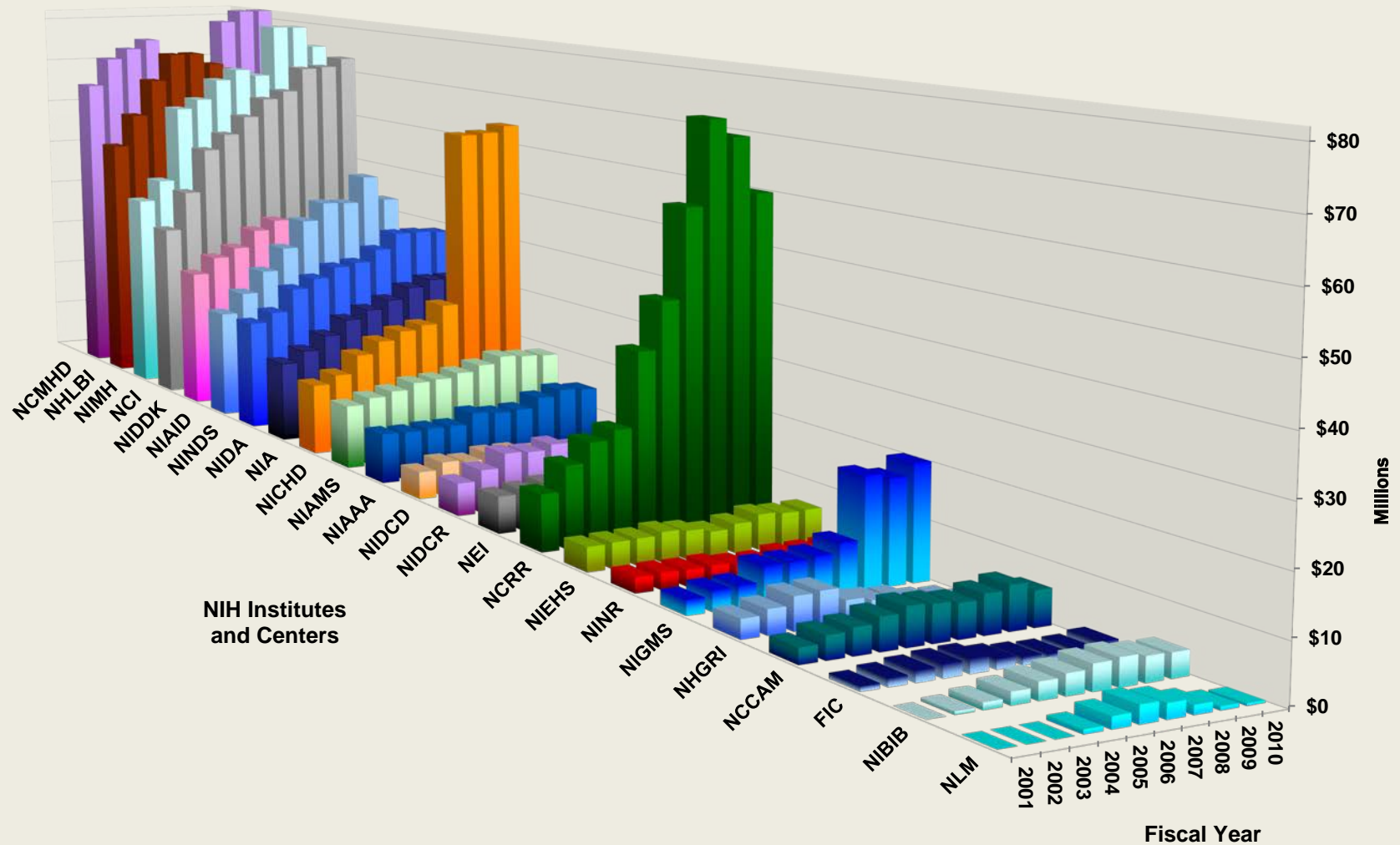
- K awards are electronically submitted
- Submission Dates:

Grant Type	Cycle 1	Cycle 2	Cycle 3
K Awards - new	Feb. 12	June 12	Oct. 12
K Awards – renewal, resubmission, revision	March 12	July 12	Nov. 12

- Institute / Center use of Career Awards varies

**Read the FOA carefully; call the NIH awarding component with any questions**

# FUNDING OF INDIVIDUAL K AWARDS VARIES BY INSTITUTE / CENTER





# SOME EXAMPLES OF NON-NIH CAREER DEVELOPMENT AWARDS

- VA Career Development Award
- Dermatology Foundation Career Development Award
- NASPGHAN-CDHNF Fellow to Faculty Transition Award
- Robert Wood Johnson Faculty Development Award
- Foundation for Anesthesia Education and Research  
Mentored Research Grant
- Doris Duke Clinical Scientist Development Award
- American Epilepsy Society Early Career Physician  
Scientist Award
- American Diabetes Association Young Investigator Award

***Ask your mentor, peers, professional societies***

# HOW TO FIND NON-NIH FUNDING OPPORTUNITIES

The screenshot shows the Pivot website interface. At the top, the Pivot logo and "Vanderbilt University" are on the left, while "Announcements", "Log in", "Sign up", and "About COS Pivot" are on the right. A navigation bar below the header includes "Funding" and "Profiles" tabs, with a search bar on the right. The left sidebar lists categories: "Funding Insights", "Most Popular" (10), "Editor's Pick" (5), "Health Science Funding News" (4), and "Humanities and Social Science Funding News" (4). The main content area is titled "Search by text | Search by sponsor" and features a search bar with the placeholder "Search funding opportunities", a "Search Pivot" button, and a "View Tutorial" link. Below this, a section titled "Health Science Funding (4)" with the date "09/14/2015 - 09/27/2015" lists four funding opportunities:

- American Academy of Neurology to Award Potamkin Prize for Research in Pick's, Alzheimer's, and Related Diseases**  
This award recognizes major contributions to the understanding of the causes, prevention, treatment, and cure for Pick's, Alzheimer's, and related diseases. The applicant must be in any of the following biological... [more »](#)
- Debbie's Dream Foundation and AACR Offer Career Development Award for Gastric Cancer Research**  
The Debbie's Dream Foundation and American Association for Cancer Research (AACR) are jointly offering a career development award for gastric cancer research, to encourage and support junior faculty to establish a... [more »](#)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Opens Applications for Advanced Clinical Trials to Test Artificial Pancreas Device Systems in Type 1 Diabetes**  
This FOA will support the conduct of advanced clinical trials designed to test the outpatient clinical safety and efficacy of artificial pancreas (AP) device systems in type 1 diabetes with the objective of improving... [more »](#)
- NLM Presents Funding Opportunity to Publish Scholarly Works**  
NLM Grants for Scholarly Works in Biomedicine and Health are awarded for the preparation of book-length manuscripts and other scholarly works of value to U.S. health professionals, public health officials, biomedical... [more »](#)

<http://www.vanderbilt.edu/osp/pages/view/page/communityofscience>

# NIH LOAN REPAYMENT PROGRAMS

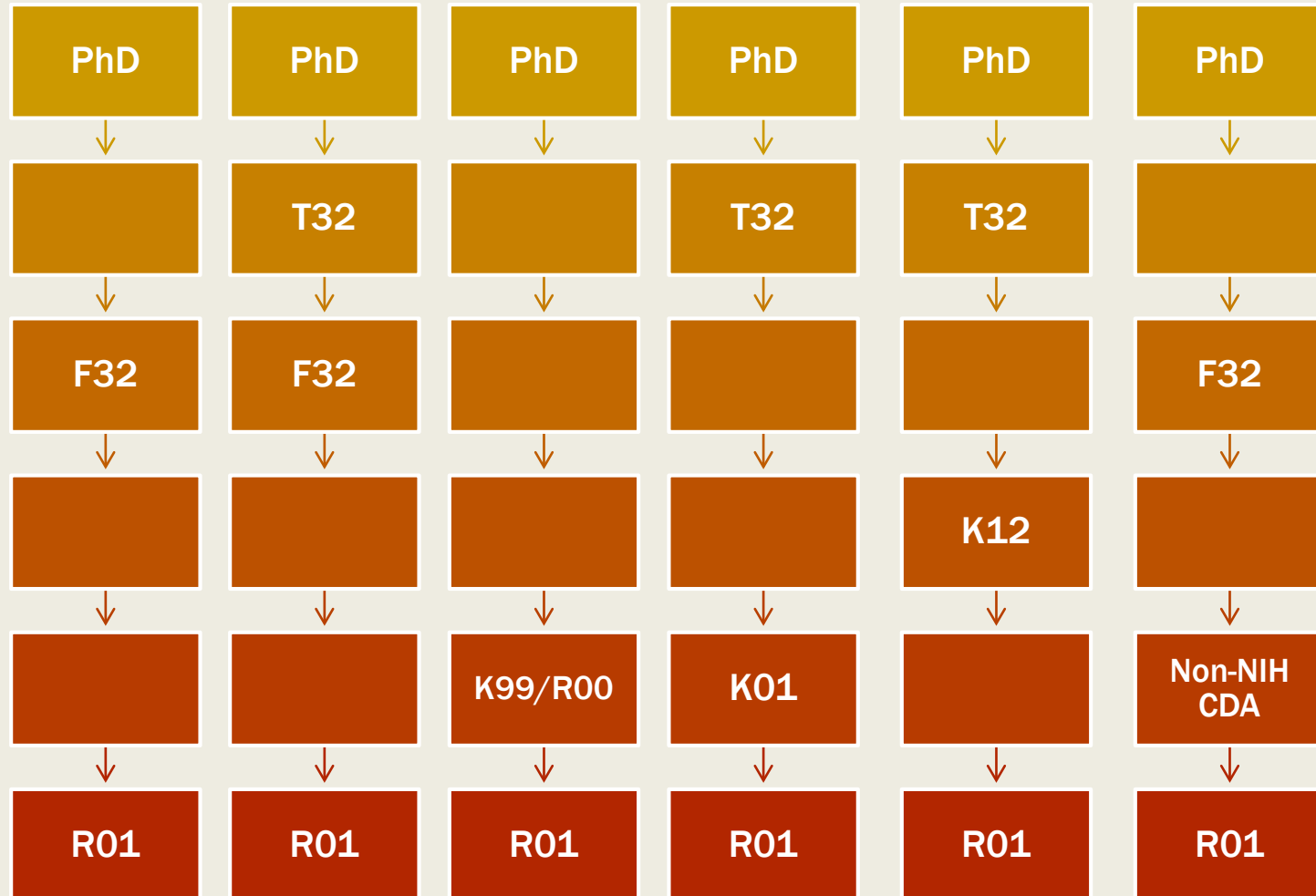
**Research Outside NIH (Extramural)**

- Clinical Research**  
For clinical investigators interacting with human patients in an inpatient or outpatient setting.  
[Show Details](#)
- Pediatric Research**  
For investigators conducting research directly related to diseases, disorders, and other conditions in children.  
[Show Details](#)
- Health Disparities Research**  
For investigators conducting research that focuses on one or more of the minority health disparity populations defined by NIMHD and the Agency for Healthcare Research and Quality.  
[Show Details](#)
- Contraception and Infertility Research**  
For investigators conducting research in conditions that impact on the ability of couples to either conceive or bear young.  
[Show Details](#)
- Clinical Research for Individuals from Disadvantaged Backgrounds**  
For clinical investigators coming from an environment that inhibited the individual from obtaining the knowledge, skill, and ability required to enroll in, and graduate from, a health professional school, or from a family with an annual income below low-income thresholds.  
[Show Details](#)

- For educational loan debt that equals or exceeds 20 percent of the applicant's institutional base salary
- Eligible applicants:
  - US citizen / permanent resident
  - Doctoral degree
- Must complete a minimum 2- 3 year service obligation

[http://www.lrp.nih.gov/about\\_the\\_programs/clinical.aspx](http://www.lrp.nih.gov/about_the_programs/clinical.aspx)

# EXAMPLE PATHWAYS TO INDEPENDENCE: (ONE SIZE DOES NOT FIT ALL)



**QUESTIONS?**