



National Advisory Council for Nursing Research: Research Training Analysis and Next Steps

January 14, 2020

National Institutes of Health, Bldg. 45 (Natcher) Room D

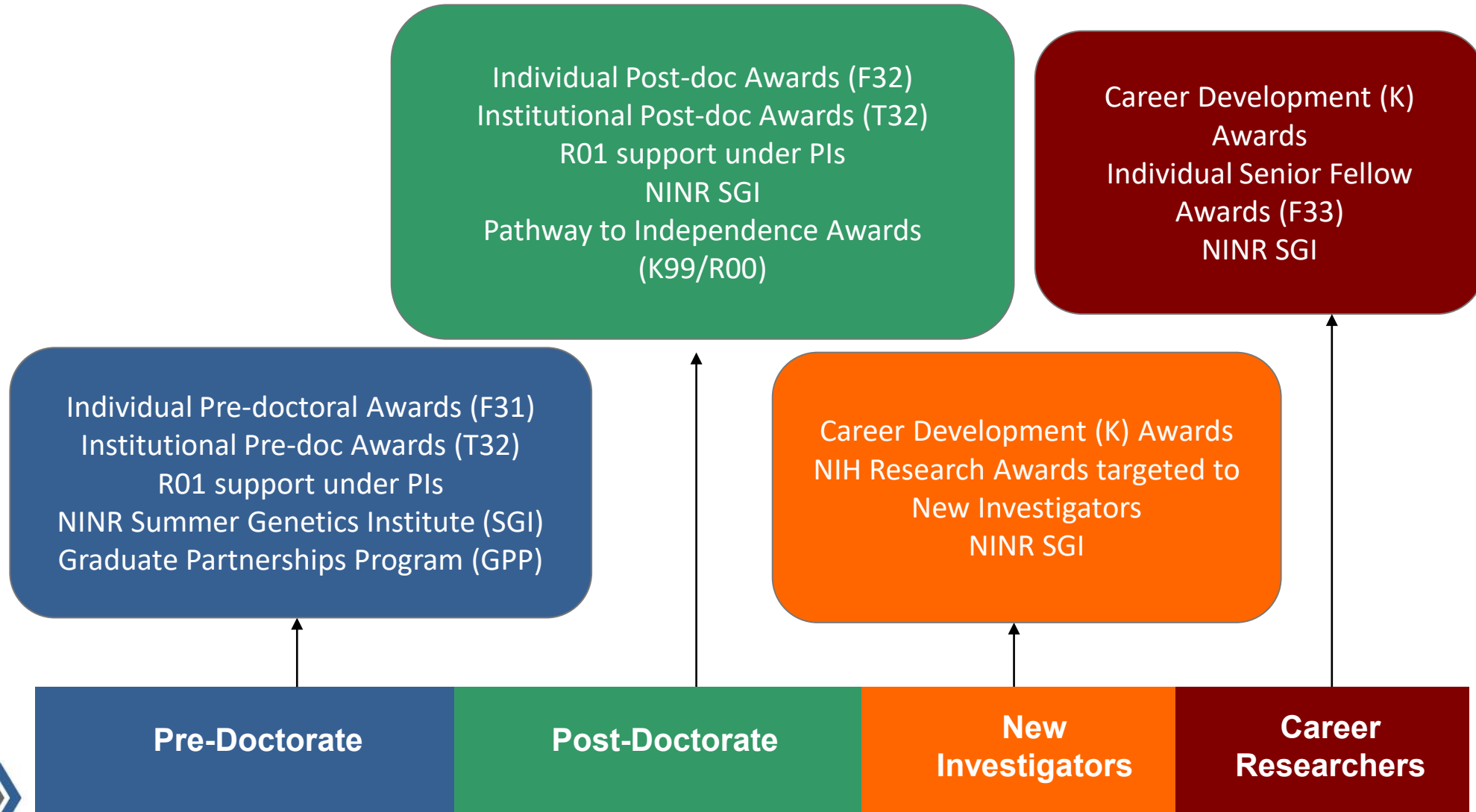


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What do we support?

- **Ruth L. Kirschstein Institutional National Research Service Award (T32)**
- **Ruth L. Kirschstein Individual National Research Service Awards (F series – F31, F32)**
- **Research Career Development Award (K series – K01, K23, K24, K99/R00)**
- **Loan Repayment & Diversity supplements**

Extramural Training Program Overview



Extramural-Intramural Collaborative Programs

NINR Methodologies Boot Camps

Intensive 1-week research training course designed to increase the research capability of graduate students, faculty, and clinicians. Planned by collaborative intramural-extramural team



Summer Genetics Institute (SGI)

Participants in the SGI increase their knowledge of molecular genetics for use in research, teaching, and clinical practice



National Institute
of Nursing Research

Graduate Partnerships Program (GPP)

- Doctoral fellowship training program for PhD students attending a school of nursing
- Combines the academic environment of a university and the breadth and depth of research at NIH

Overview of NINR Extramural Training Awards and Outcomes ~2000-2019

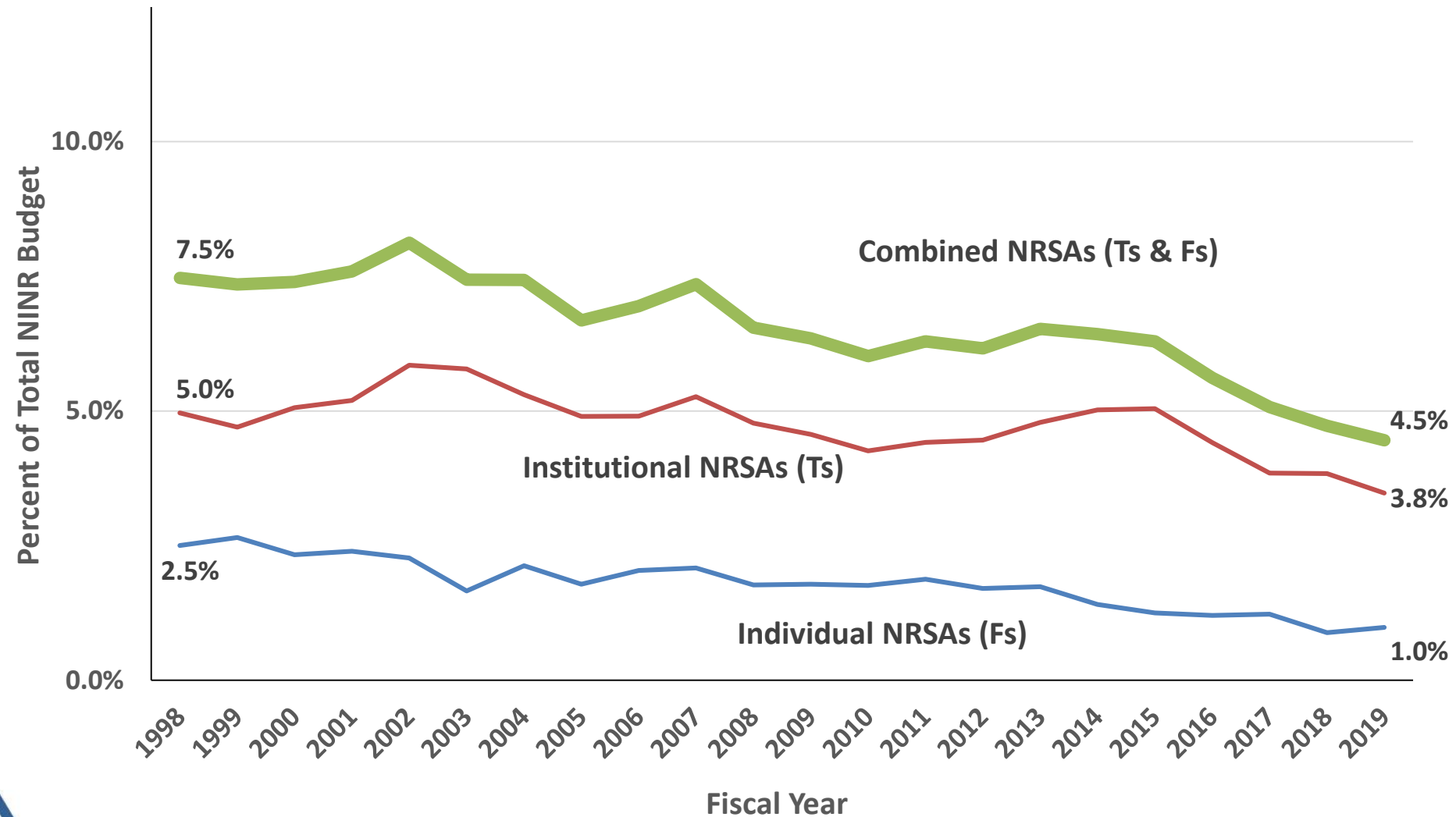
*Purpose: A Quick (and non-exhaustive)
Overview of NINR Training and Career Development
Applications, Awards, and Outcomes*

FY2019 Investment in Training

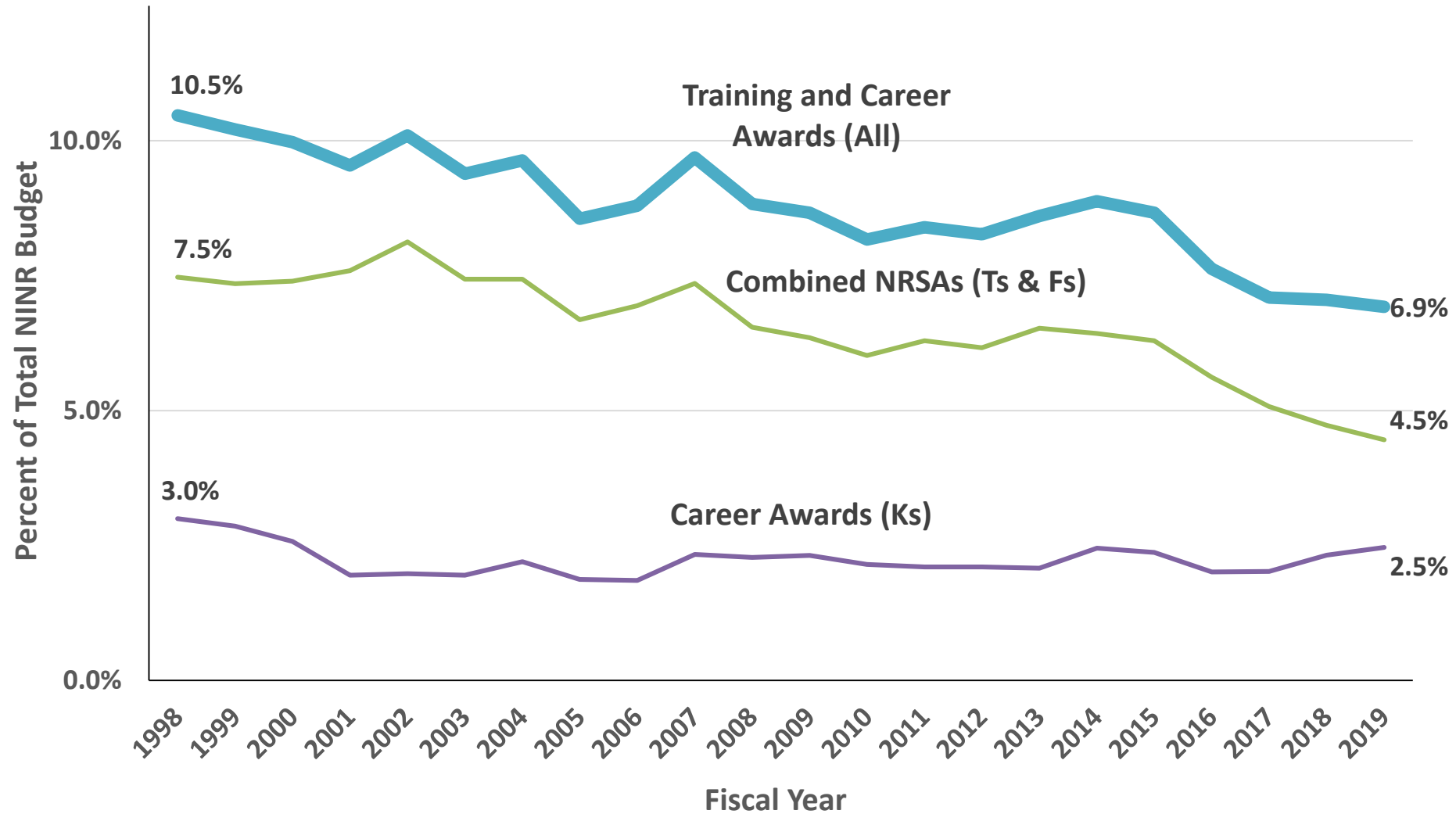
- About **4.5%** of NINR's budget in FY2019 was dedicated to the support of extramural research training (F's and T's).
- That places NINR second at NIH in its support of research training.
- The NIH average is around **2.3%**.



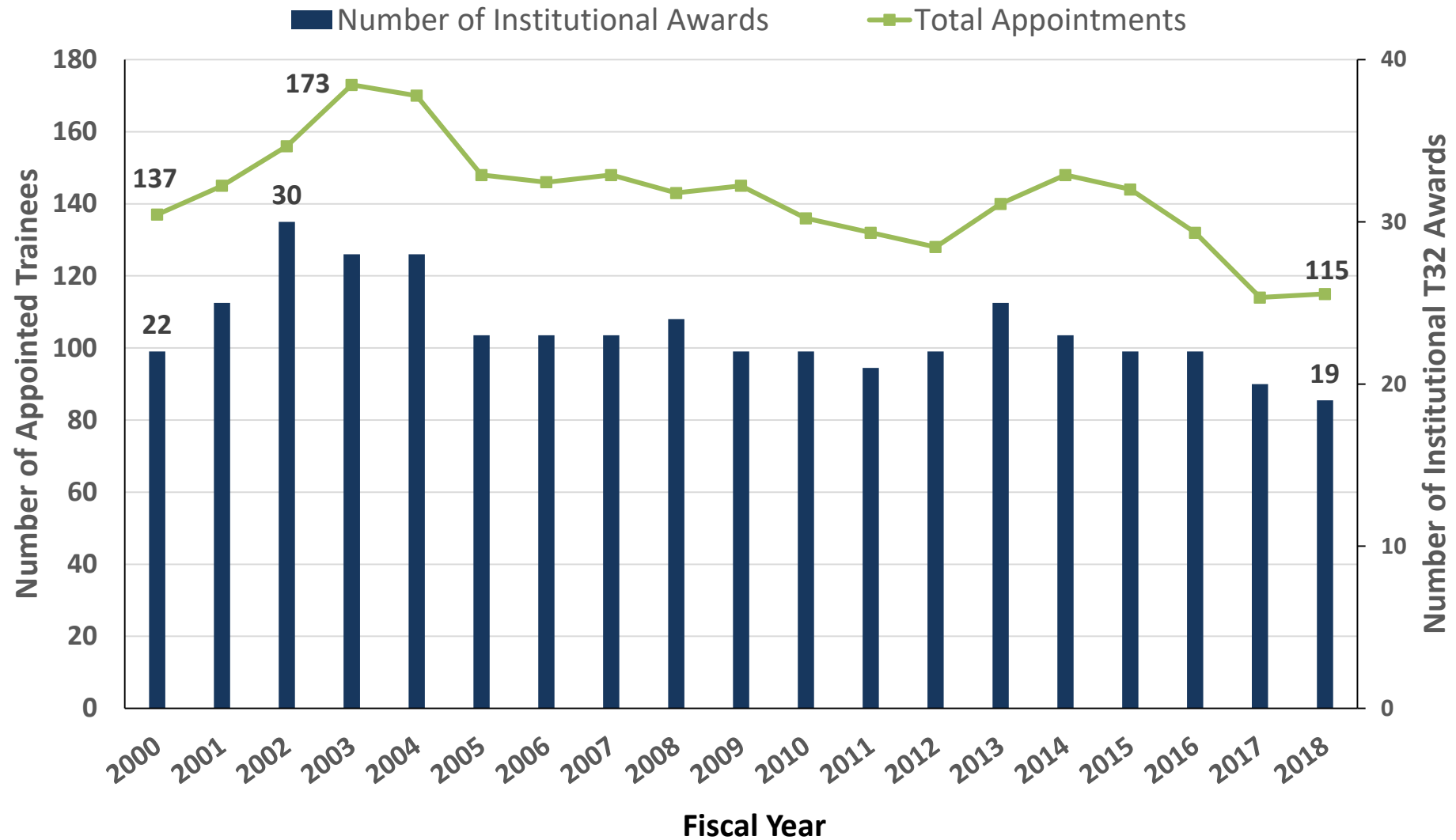
NINR Training Investment Overview 1998 - 2019



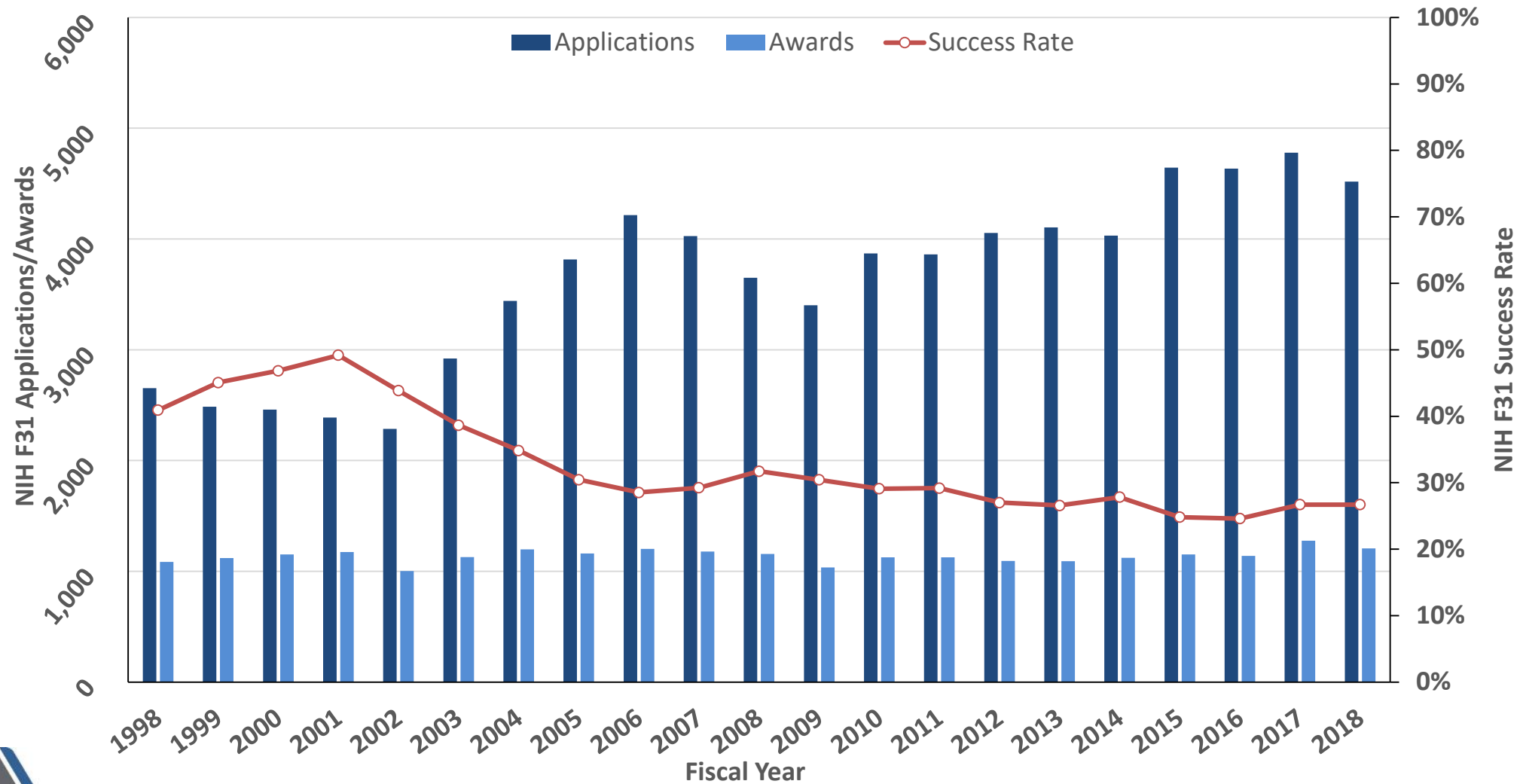
NINR Career Development Investment Overview 1998 - 2019



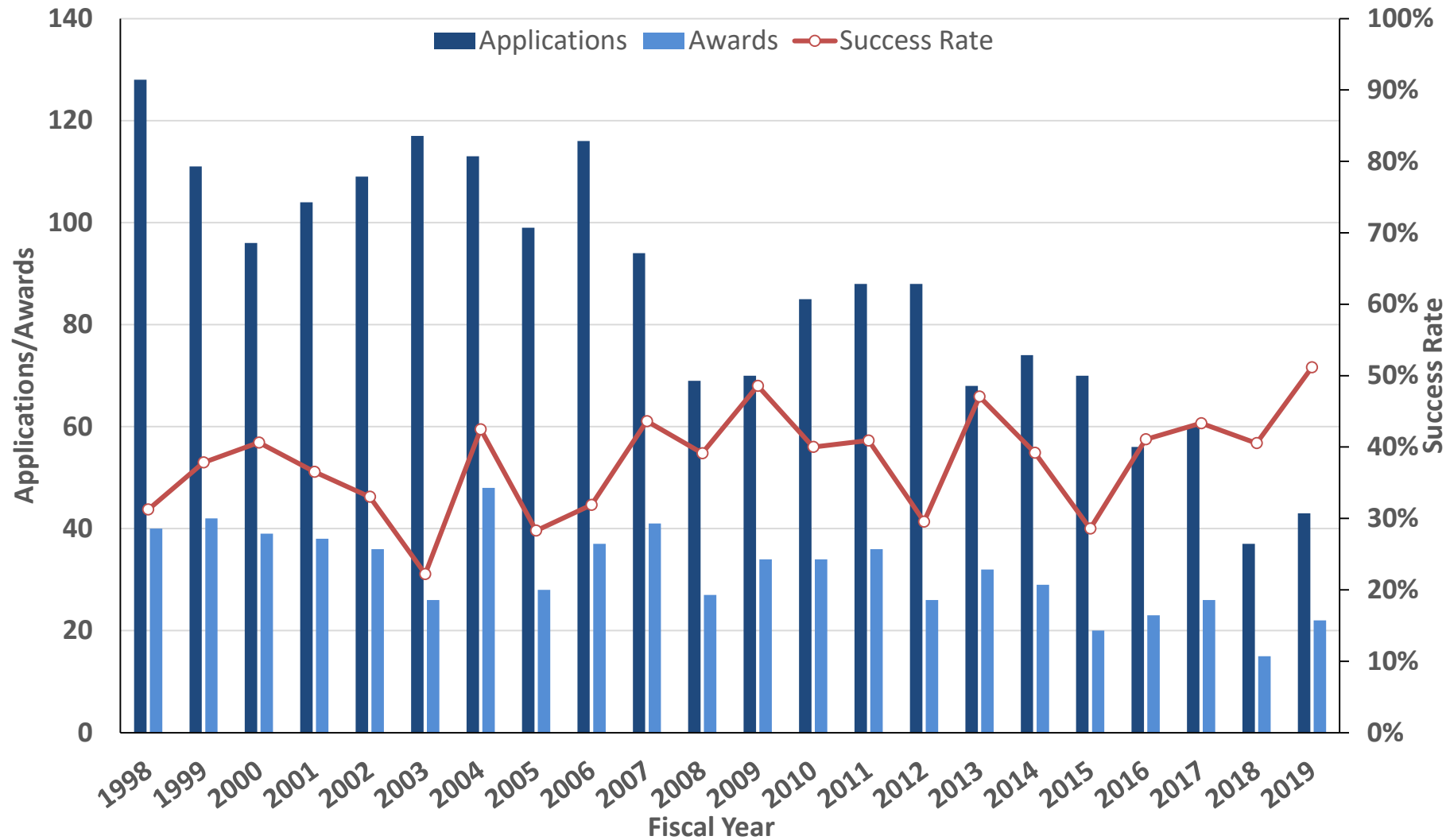
NINR Institutional NRSA Appointments (Pre and Post-Doc) - 2000-2018



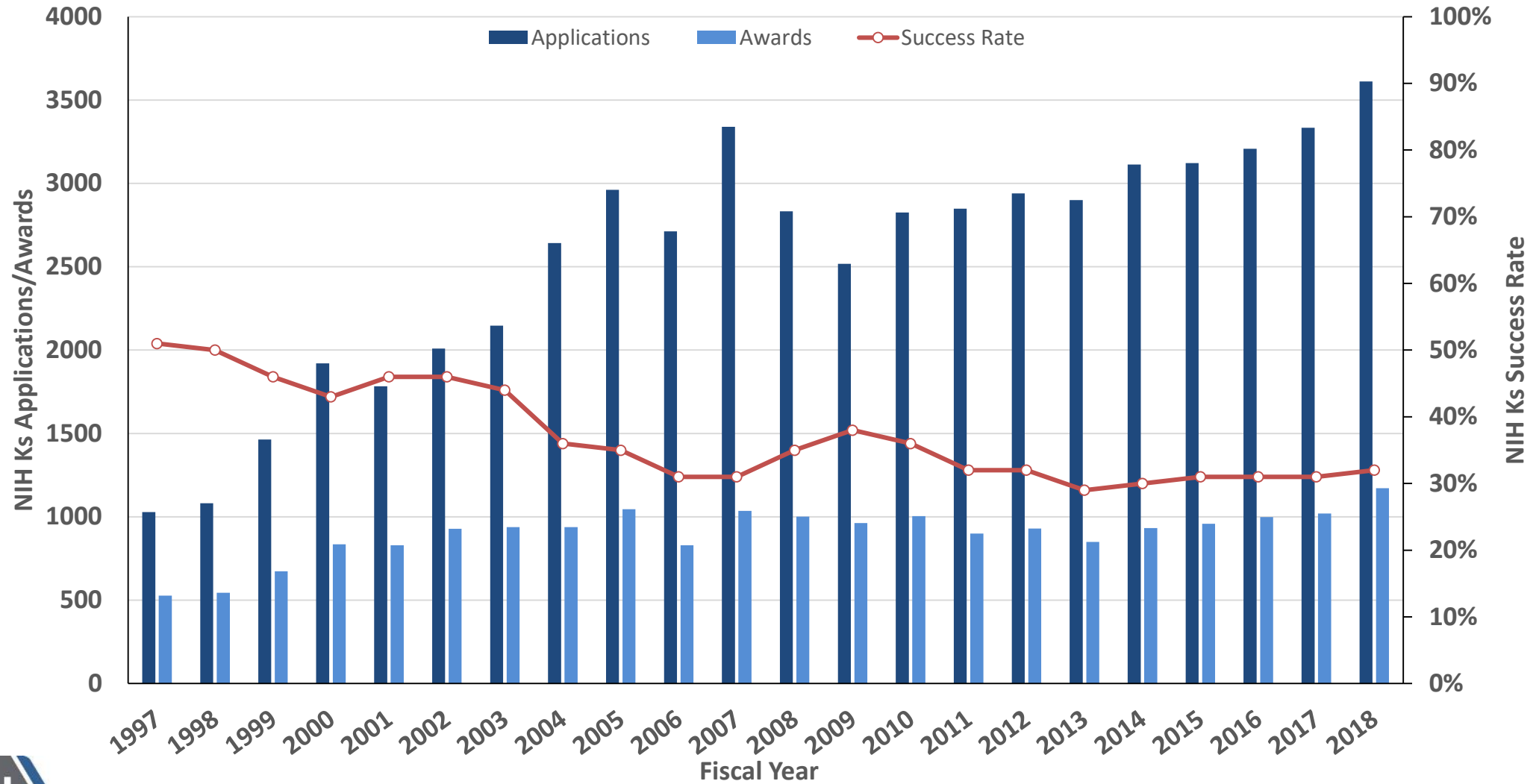
NIH: NRSA Individual Pre-Doc Fellowships (F31s): Competing Applications, Awards, Success Rates 1998-2019



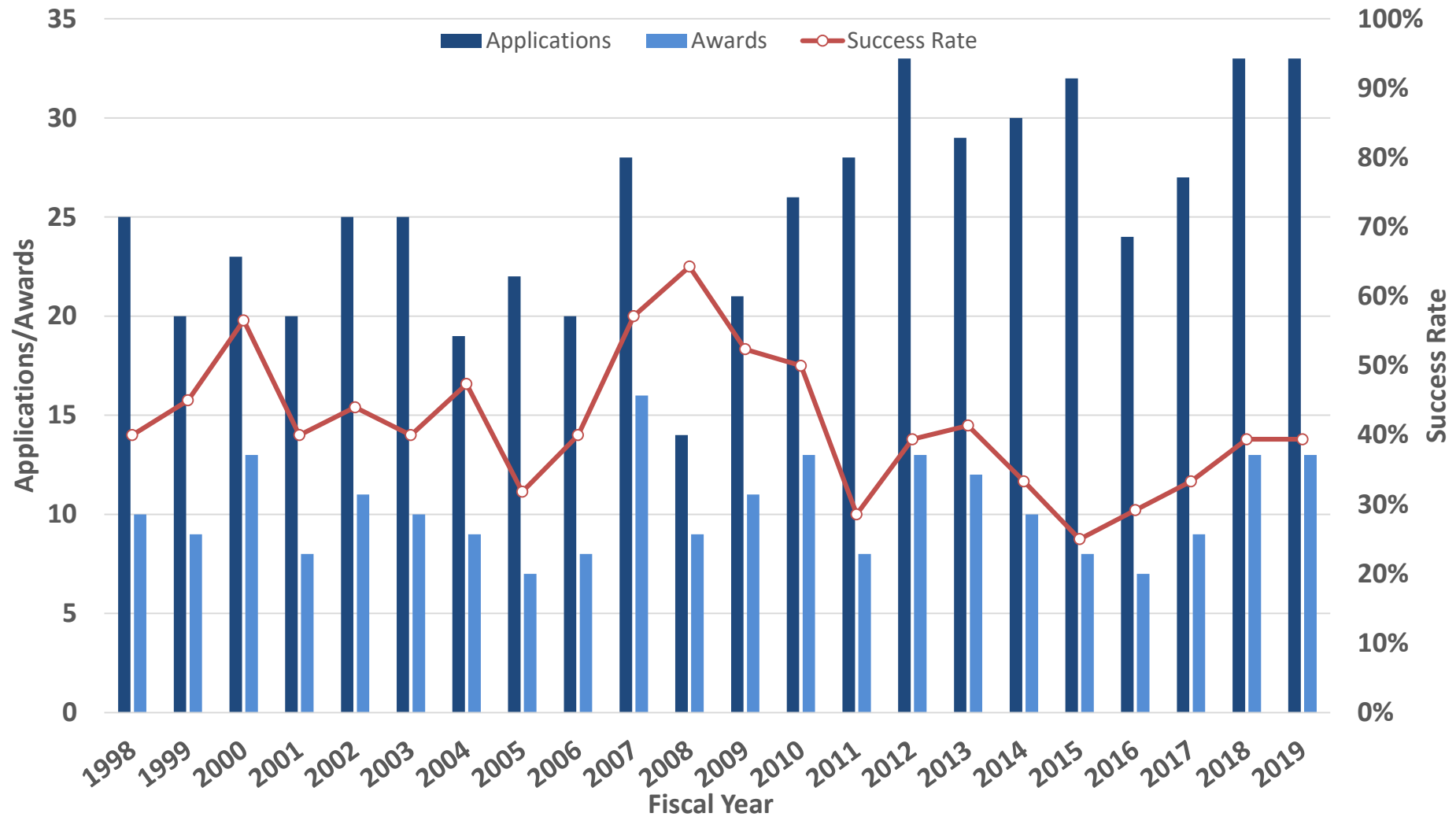
NINR: NRSA Individual Pre-Doc Fellowships (F31s): Competing Applications, Awards, Success Rates 1998-2019



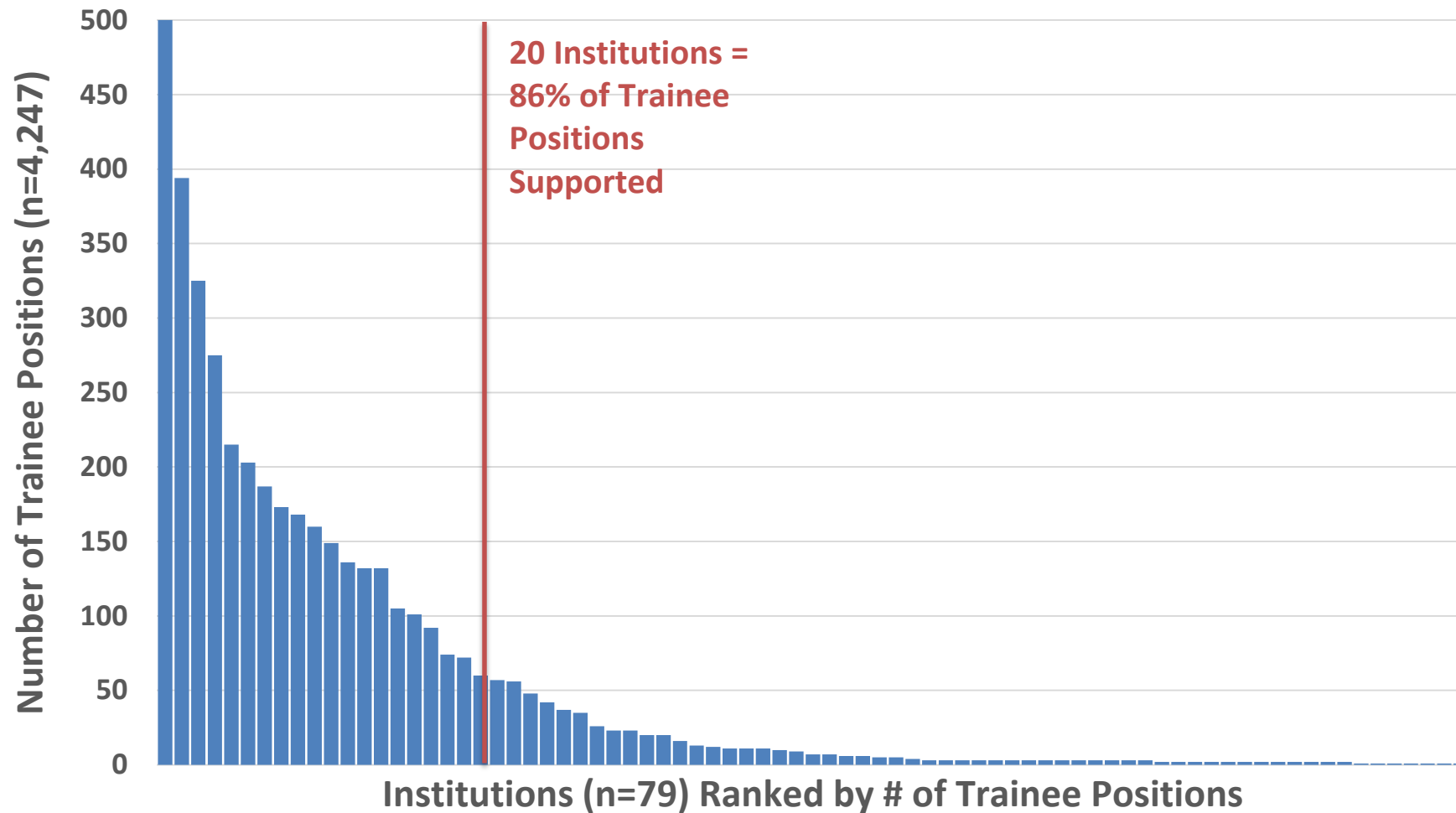
NIH: Career Development (K series): Competing Applications, Awards, Success Rates 1997-2018



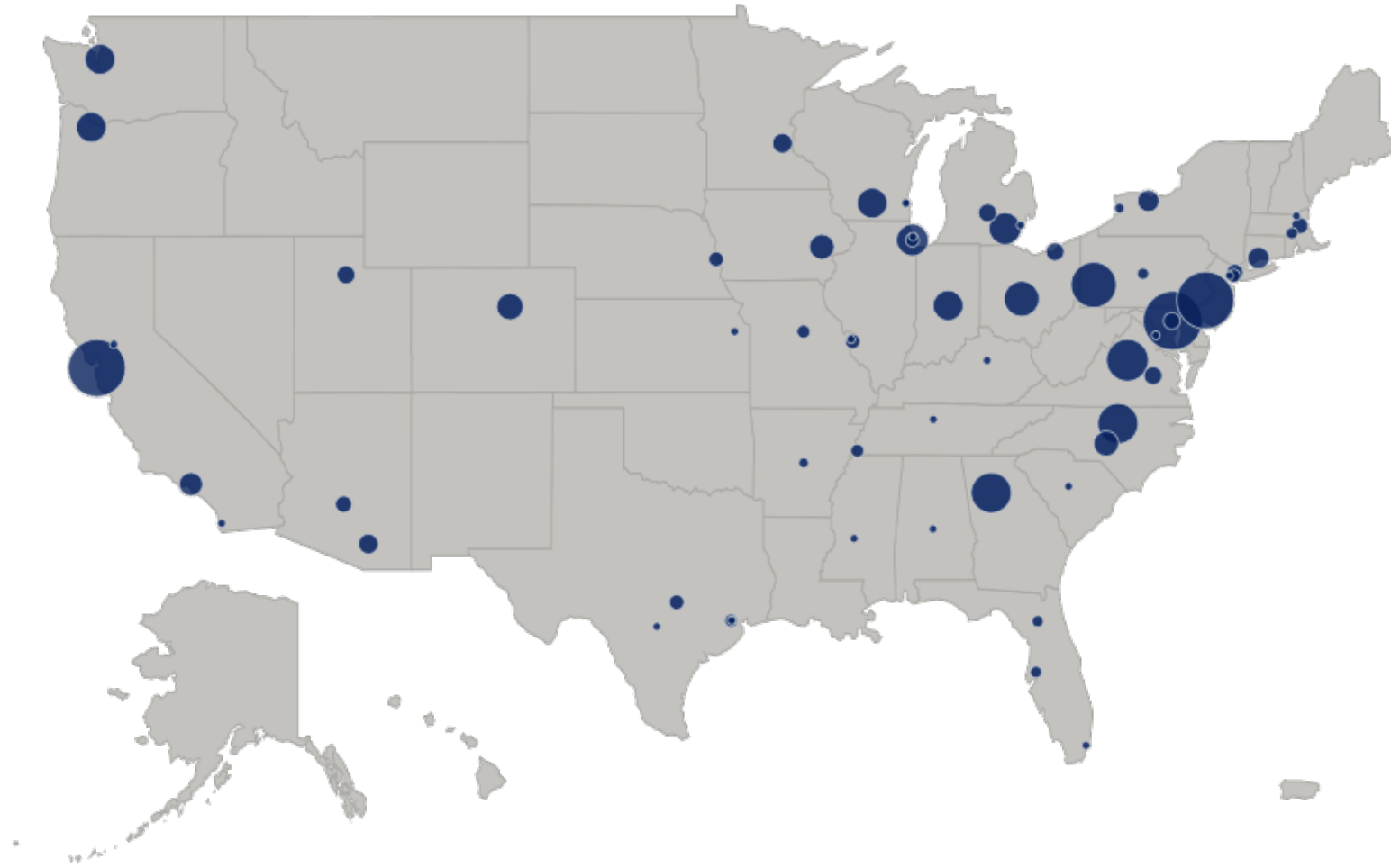
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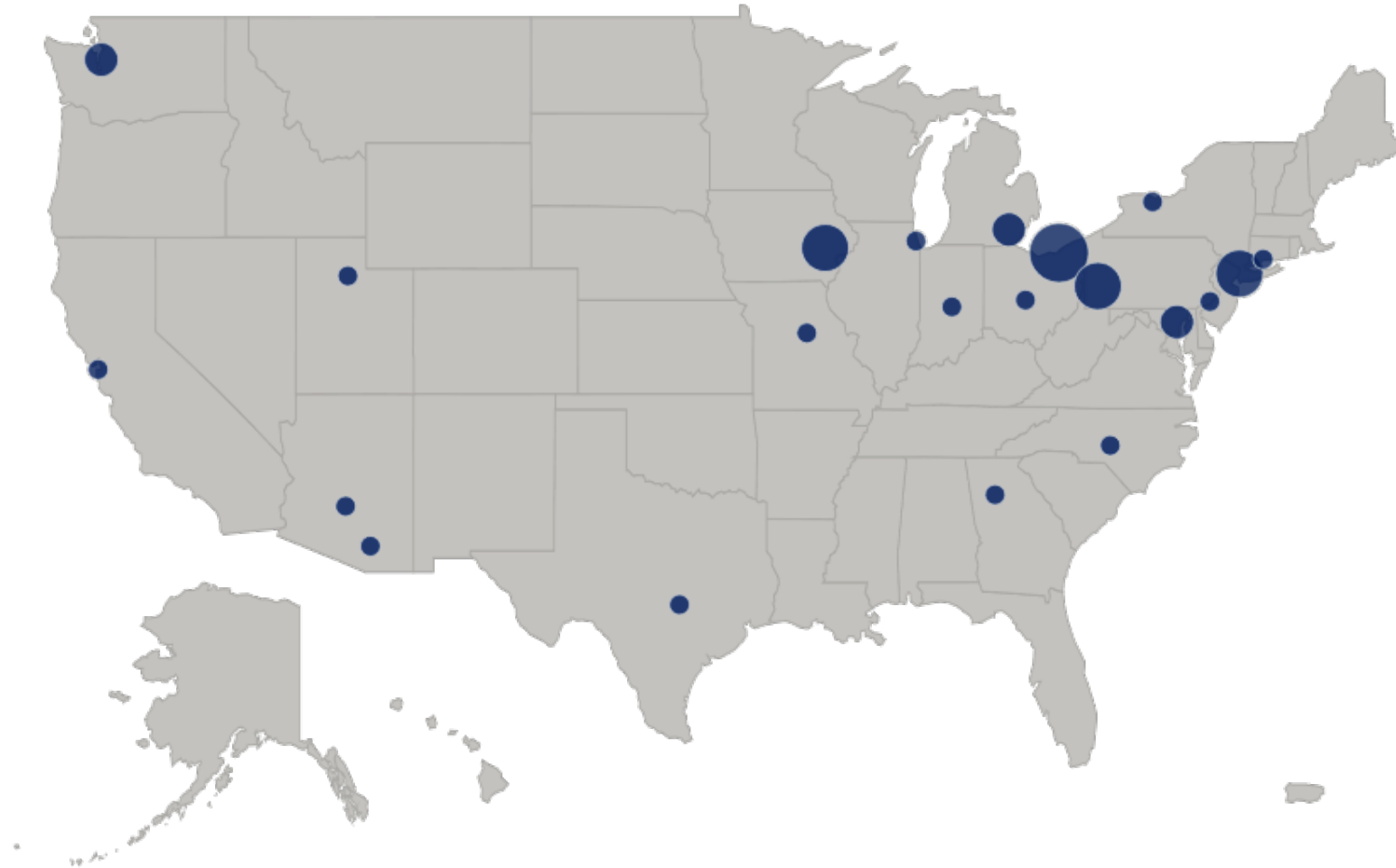
Cumulative NINR NRSA Trainee (Individual and Institutional) Positions by Institution 2000-2019



NINR Individual Training Awards 2001-2019



NINR Institutional Training Awards 2001-2019

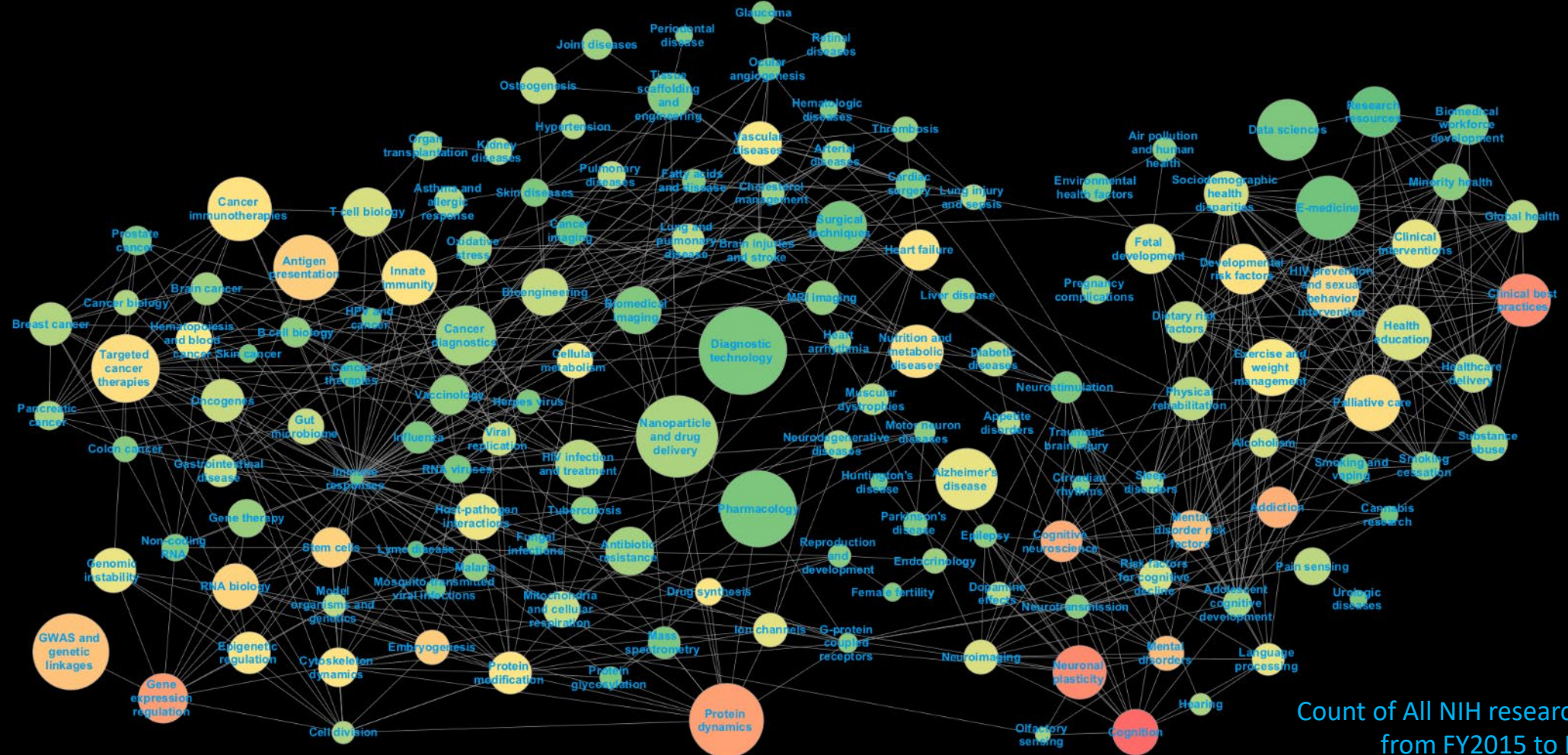


NINR-supported Trainees
Research Areas of Interest

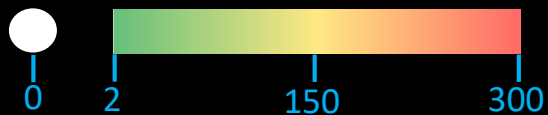


National Institutes of Health
Office of Portfolio Analysis

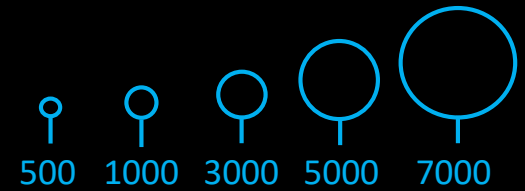
All NIH-funded training from FY2015 to FY2019



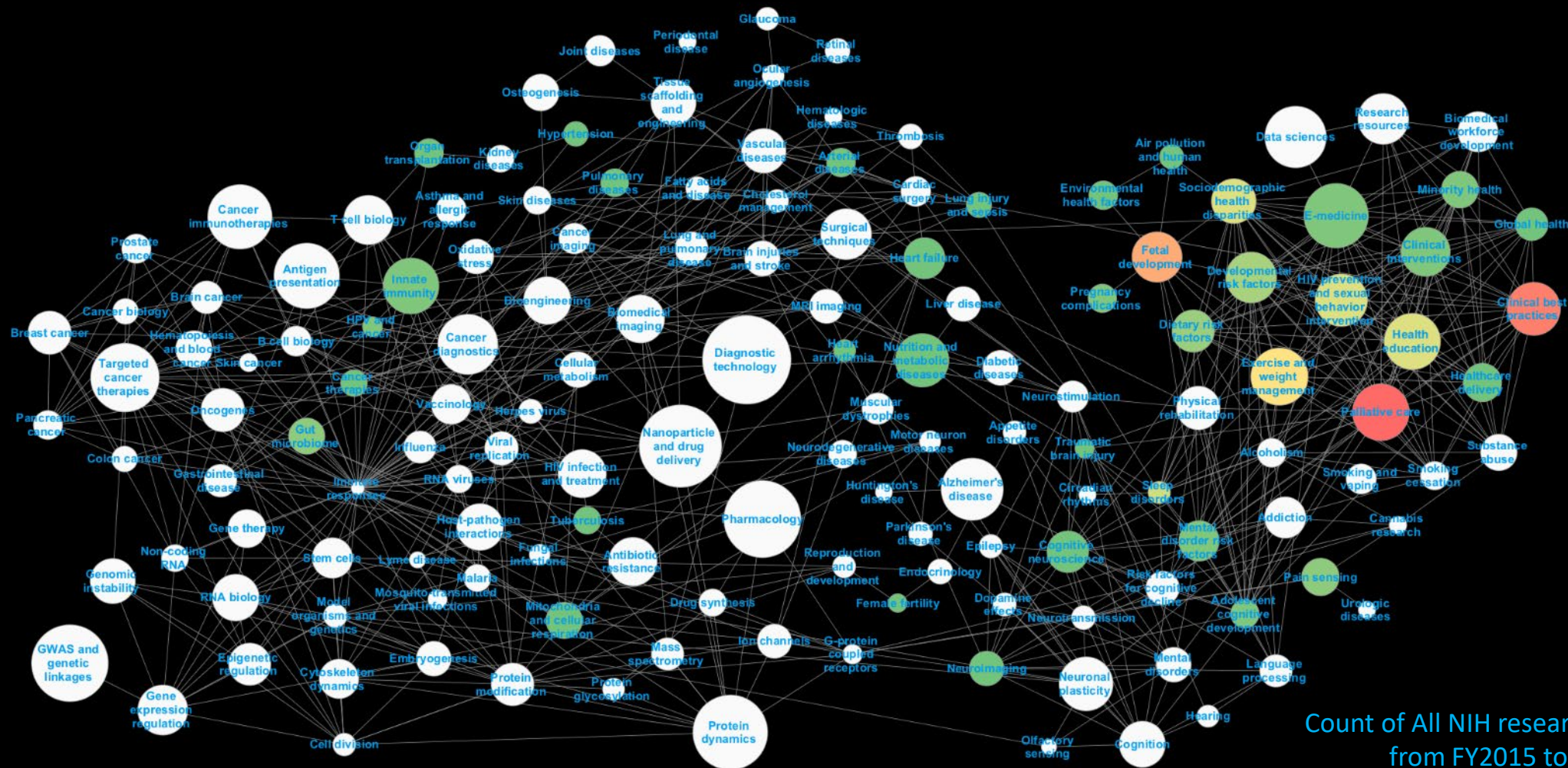
Count of All NIH training awards from FY2015 to FY2019



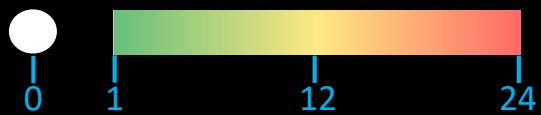
Count of All NIH research applications from FY2015 to FY2019



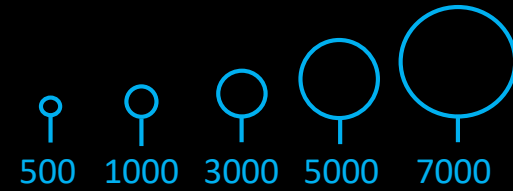
NINR-funded training from FY2015 to FY2019



Count of NINR training awards
from FY2015 to FY2019



Count of All NIH research applications
from FY2015 to FY2019



Top ten training topics funded by All NIH and NINR FY2015 to FY2019

| All NIH training topics | | NINR training topics | |
|--------------------------------|---------------------|---|------------------|
| Topic | All NIH award count | Topic | NINR award count |
| Cognition | 299 | Palliative care | 23 |
| Neuronal plasticity | 260 | Clinical best practices | 21 |
| Clinical best practices | 258 | Fetal development | 17 |
| Gene expression regulation | 239 | Exercise and weight management | 12 |
| Protein dynamics | 235 | HIV prevention and sexual behavior intervention | 9 |
| Cognitive neuroscience | 221 | Health education | 9 |
| Addiction | 217 | Sociodemographic health disparities | 9 |
| Mental disorders | 202 | Sleep disorders | 8 |
| Mental disorder risk factors | 198 | Developmental risk factors | 5 |
| GWAS and genetic linkages | 194 | Dietary risk factors | 4 |

Trainee Outcomes: Subsequent RPGs

- About one-third of those trained under an NINR NRSA award between 1998 and 2018 subsequently applied for an RPG
- Of those who applied, nearly 40% were awarded funding.



Strengthening the Nurse Scientist Pipeline

Recent Efforts and Discussion

Increasing Opportunities for Nurse Scientists

- Limited Competition for NIH Nurse Scientist Scholars (K to R01 Transition award)
 - **PAR-19-256**
- MOSAIC K99/R00 - Postdoctoral Career Transition Award to Promote Diversity
 - **PAR-19-343**
- Advanced Data Analytics for Behavioral and Social Sciences Research - T32
 - **RFA-OD-19-011**



Discussion topics:

- How can we best leverage the T32 program as a tool to help reverse the decline in individuals pursuing a research doctorate in nursing?
- T32 program to address recruitment/retention of diverse candidates
- Utility of Individual Development Plan (IDPs) for nurse scientist training

Supporting K Scholars Becoming Independent Investigators

Research Career (“K”) Development Workshop

March 13-14, 2019

(NIAID & NINR)

- Understand Perceived Challenges to Transitioning to Research Independence
- Provide Information on Funding Opportunities and on how to Transition to Research Independence



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Discussion Questions

- How can NINR training programs better prepare nurse scientists to compete successfully for NIH funding?
- Why are fewer pre-docs applying for training fellowships, while K application/award numbers remain consistent?
- How should NINR adapt its training programs to accommodate evolving models of nursing education?
- How can we explain and address the high subsequent RPG application rate, but relatively low success rate of NINR trainees?

