# Awards to Support Trainees: Funding for Training the Next Generation of Cancer Researchers

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**NIH › NATIONAL CANCER INSTITUTE**

DCB New Grantee Workshop
January 11, 2023

**Access our flyer for Cancer Training Funding Opportunities!** https://www.cancer.gov/grants-training/training/funding/cancer-training-funding-opportunities

# NCI Extramural Funding for Cancer Training

## Cancer Training Branch
## Center for Cancer Training (CCT)

*Awards intended for all cancer researchers*

- Institutional Training Grants
- Research Education Grants
- Individual Career Development Awards
- Transition Awards
- Fellowships

Chief: Nas Zahir, PhD

https://www.cancer.gov/grants-training/training/funding

## Diversity Training Branch
## Center to Reduce Cancer Health Disparities

*Awards intended for underrepresented minorities and individuals with disabilities*

- Research Education Grants
- Individual Career Development Awards
- Transition Awards
- Fellowships
- Research Supplements to Promote Diversity

Chief: Behrous Davani, PhD

https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure

## Center for Global Health

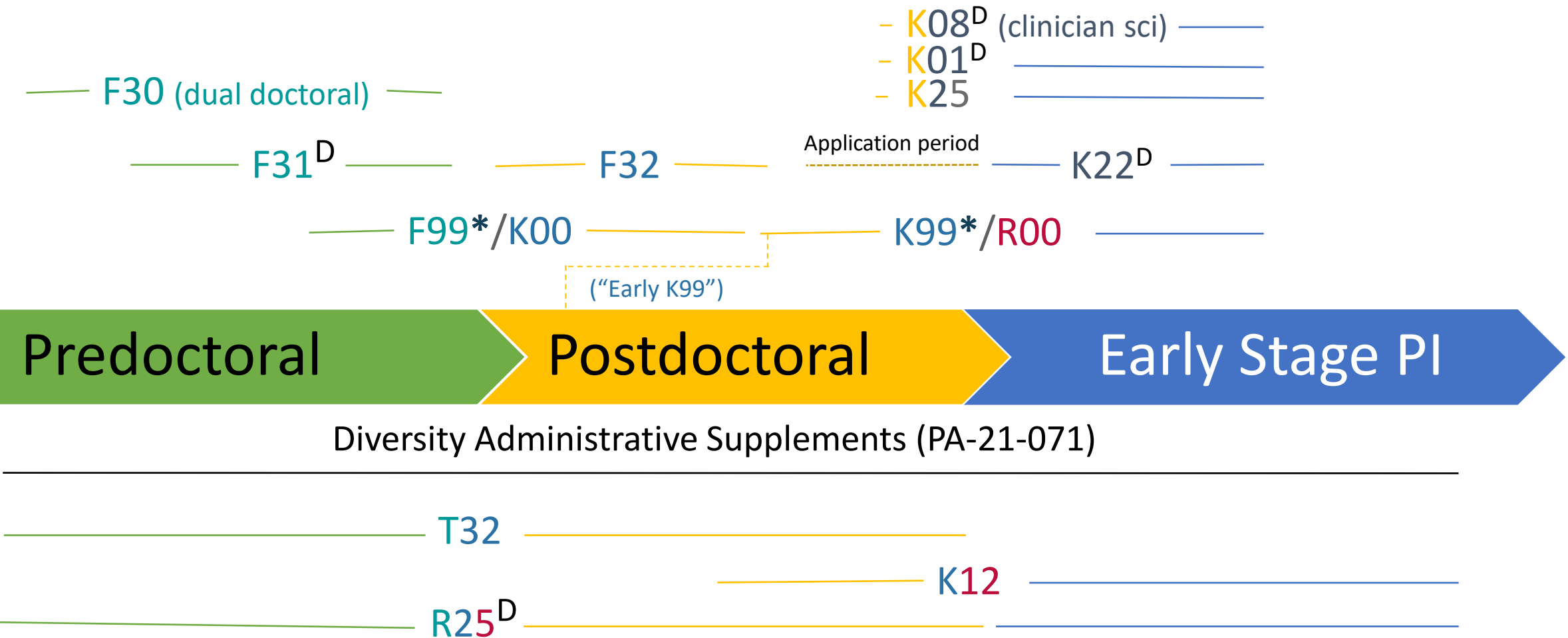*Awards intended for mentored training in global cancer research*

- Institutional Capacity Building and Mentored Training
- International Research Scientist Development Award

Program Director: Sudha Sivaram, DrPH, MPH

https://www.cancer.gov/about-nci/organization/cgh/research-training

# NCI Supports Cancer Training at Multiple Career Stages

Loan Repayment Programs (LRP) https://www.lrp.nih.gov/

K08[D] (clinician sci)
K01[D]
K25

F30 (dual doctoral)

F31[D]

F32

Application period

K22[D]

F99*/K00

K99*/R00

("Early K99")

| Predoctoral | Postdoctoral | Early Stage PI |
| --- | --- | --- |

Diversity Administrative Supplements (PA-21-071)

T32

K12

R25[D]

F33 K18  K38

*Open to Applicants with U.S. Visas
[D] Diversity FOA available CRCHD

• https://www.cancer.gov/grants-training/training/funding
• https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure

# Newly Launched Chat Bot to Find Funding Opportunities

https://www.cancer.gov/grants-training/training/funding

# NCI CRCHD's CURE Funding Mechanisms



CRCHD: Center to Reduce Cancer Health Disparities
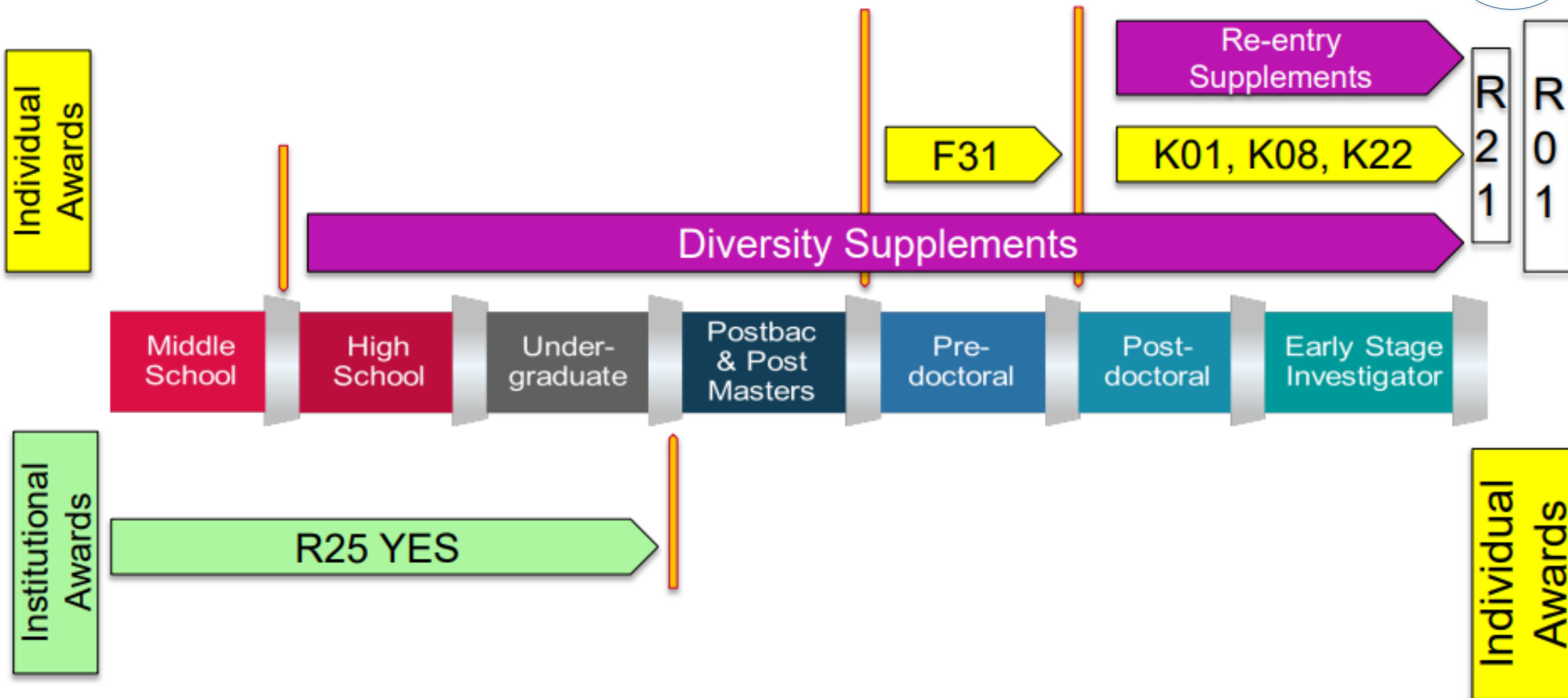
# Supplements within the CURE:
# Diversity and Re-Entry/Re-Integration

- Each supplement supports research experience of one **identified** trainee

- Parent grant must have **at least two years** of active status at the time of supplement application; some exceptions are granted by CRCHD

- A **bridge** for candidates to progress to next academic/career level

- Application receipt: **Oct 1 – Dec 1** and **Feb 1 – Mar 31**

Contact

Dr. Belem Lopez

CUREsupplements@nih.gov



- https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure#individuals
- https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/ds-guidelines.pdf

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# Diversity and Re-Entry/Re-Integration Supplements Overview

| FOA | Participants |
|-----|-------------|
| Research Supplements to Promote Diversity in Health-Related Research (PA-21-071)<br><br>• https://grants.nih.gov/grants/guide/pa-files/PA-21-071.html<br>• http://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/DSGuidelines | • Underrepresented populations<br>• High school students through to investigators |
| NOSI: Research Supplements to Promote Re-Entry and Re-Integration into Health-Related Research Careers (NOT-OD-21-134)<br><br>• https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-134.html<br>• https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/reentry-supplements-guidelines | • All populations<br>• Re-entry supplement:<br>  ➢ On hiatus from research for 1-8 years hiatus from research<br>  ➢ Postdoctoral fellow or faculty before hiatus<br>• Re-integration supplement:<br>  ➢ Graduate students and postdocs<br>  ➢ Individuals adversely affected by unsafe or discriminatory environments due to unlawful harassment who need to make a rapid transition |

# F99/K00 Predoc to Postdoc Fellow Transition Award



**Eligibility**

- Open to 3$^{rd}$ and 4$^{th}$ year health-related Ph.D. students.
- International students and F31 applicants/awardees are eligible
- 1 nominee per institution

**Funding**

**1-2 years of support for completing PhD dissertation (F99)**

- Stipend, Tuition, and Training Related Expenses similar to F31

**Up to 4 years of support for postdoc training (K00) at a US institution**

- Salary with annual increases

**There is only one application due date (November) per year for this Funding Opportunity Announcement**

# F99 Applications, Awards and Success Rates



- 5-year average success rate 35%
- Higher than F31 average success rate of 25%
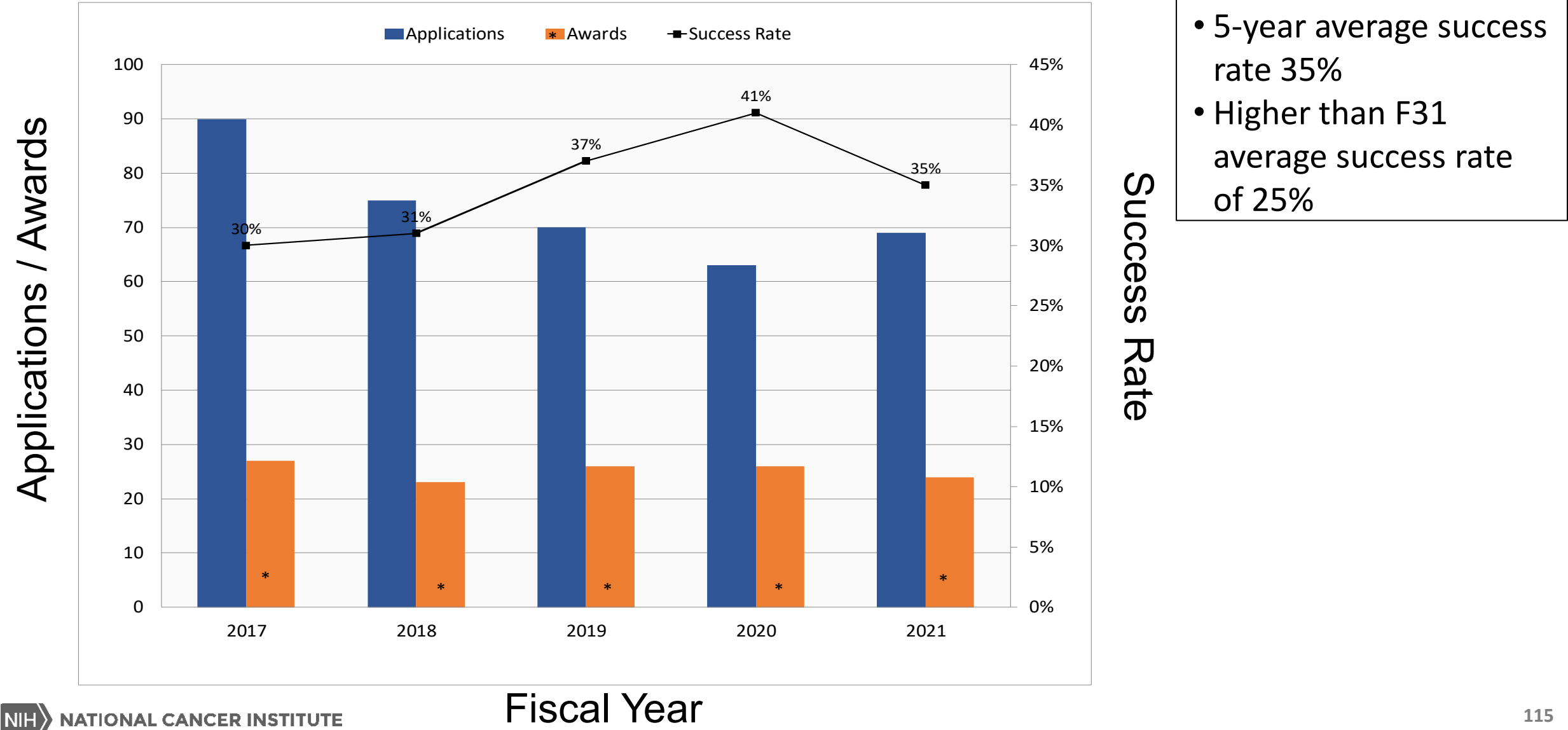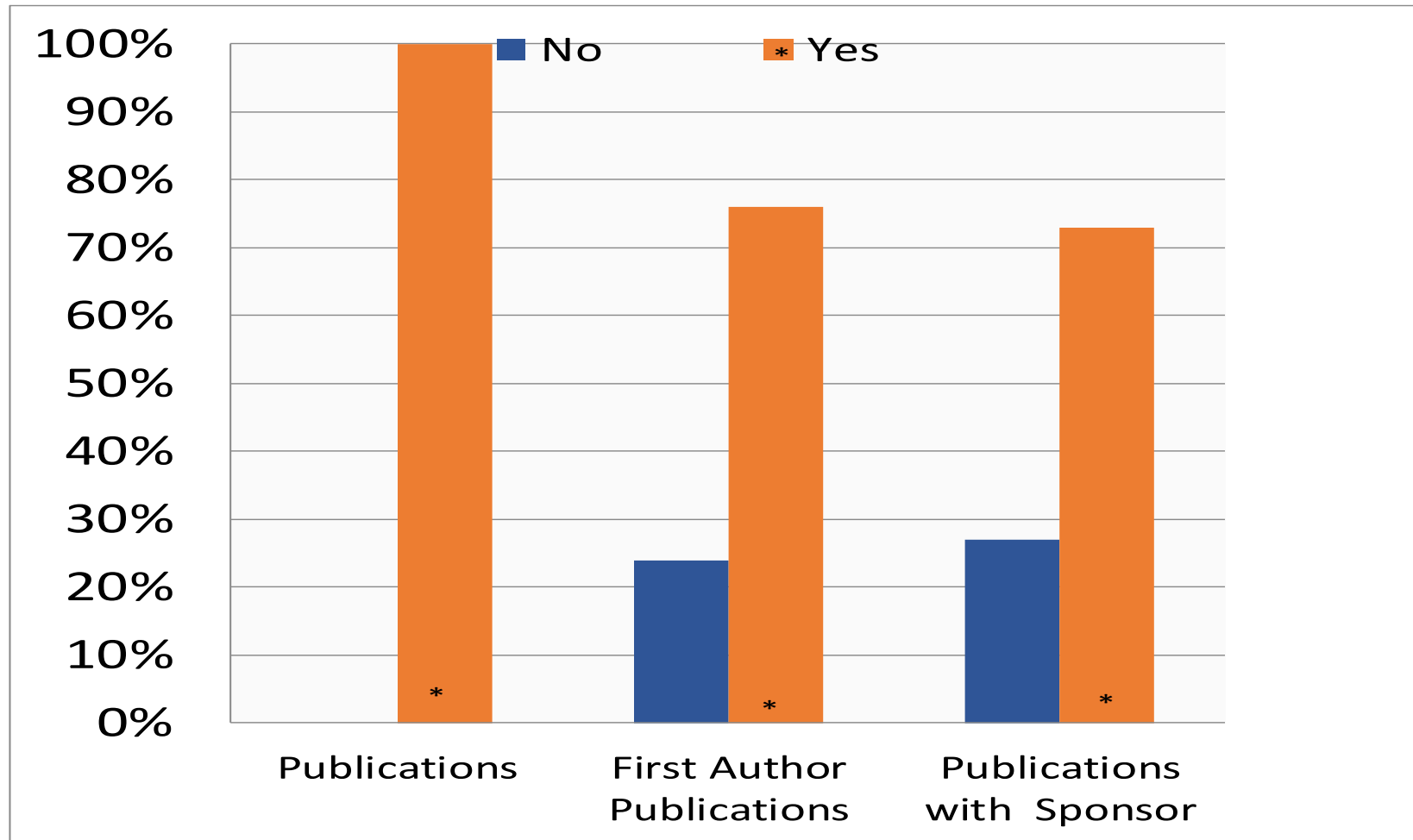
# F99 Awardee Profiles



- F99 awardees are typically in the 4th year of the PhD program
- Many of them were F31 fellows
- F31 awardees generally have fewer publications (39% have 1st author pubs and 43% have pubs with their sponsor)

# Ruth L. Kirschstein National Research Service Award (NRSA) *Individual Fellowships*

## F30 Predoc

- Support predocs during clinical & graduate training leading to a **combined** doctoral degree (e.g., MD/PhD, DDS/PhD, DVM/PhD, AuD/PhD,DO/PhD)
- Enrolled in a **dual degree clinical program no more than 48 months prior to initial application** & must have identified a dissertation project & sponsor
- At least 50% of the award period must be devoted to full-time graduate research training leading to the research doctoral degree

Learn more

## F31 Predoc

- **F31** supports PhD research candidates who have identified a mentor & will be performing dissertation research
- **Diversity F31**: supports both dual degree and PhD only predocs from diverse groups under-represented in the biomedical or behavioral sciences
- Typical time to apply for an F31 is when a thesis proposal has been approved

Learn more

## F32 Postdoc

- Supports mentored postdoctoral training under the guidance of a faculty sponsor
- Fellows must have a research or clinical doctoral degree from an accredited US or foreign institution
- Integrated program of research & mentored training to enhance potential to develop into an independent researcher
- Currently limited to total of 3 years but extensions can be requested

Learn more

**All fellowships require references from individuals *other* than primary mentor(s)**

# Fellowship Applications: Factors to Consider

- NCI requires that the sponsor have research funding (R01 or equivalent) because fellowships do not fund the research project

- Research training that has a clear cancer focus

- Typical timing of submission
  - F30: year 4 of a dual-degree program

  - F31: year 3 of a PhD program

  - F99/K00: year 4 of PhD program

  - F32: 1st (30%) or 2nd (60%) year of postdoctoral fellowship

- NCI expects the applicant to have intellectual input in the project

# Individual Research Career Development Awards (Ks)

*Fostering the <u>transition</u> of new investigators <u>to research independence</u>*

| | "Early" K99/R00 (data sci, cancer control sci) | Parent K99/R00 | K01 Diversity (NCI-CRCHD) | K22 and K22 Diversity | K08 and K08 Diversity |
|---|---|---|---|---|---|
| **Mentored vs non-mentored (independent)** | Mentored phase / Non-mentored phase | Mentored phase / Non-mentored phase | Mentored | Non-mentored | Mentored Clinical Scientist |
| **Citizenship** | U.S. citizens or non-U.S. citizens | U.S. citizens or non-U.S. citizens | U.S. citizens or permanent residents | U.S. citizens or permanent residents | U.S. citizens or permanent residents |
| **Eligibility** | ≤ 2 years postdoc training | ≤ 4 years postdoc training | 2 – 5 years postdoc training | 2 – 8 years postdoc training | Postdoc and early career |
| **Duration of Award** | 1-2 years K99 1-3 years R00 | 1-2 years K99 1-3 years R00 | Support for 3 – 5 years protected time | Support for 3 years activated when independence begins | Support for 3 – 5 years protected time |
| **Budget** | Salary up to $100K Fringe benefits Research $30K (K99 portion) | Salary up to $100K Fringe benefits Research $30K (K99 portion) | Salary up to $100K Fringe benefits Research $30K | Salary up to $100K Fringe benefits Research $50K | Salary up to <u>legislative cap</u> Fringe benefits Research $50K |

# K99 Awardee Profile
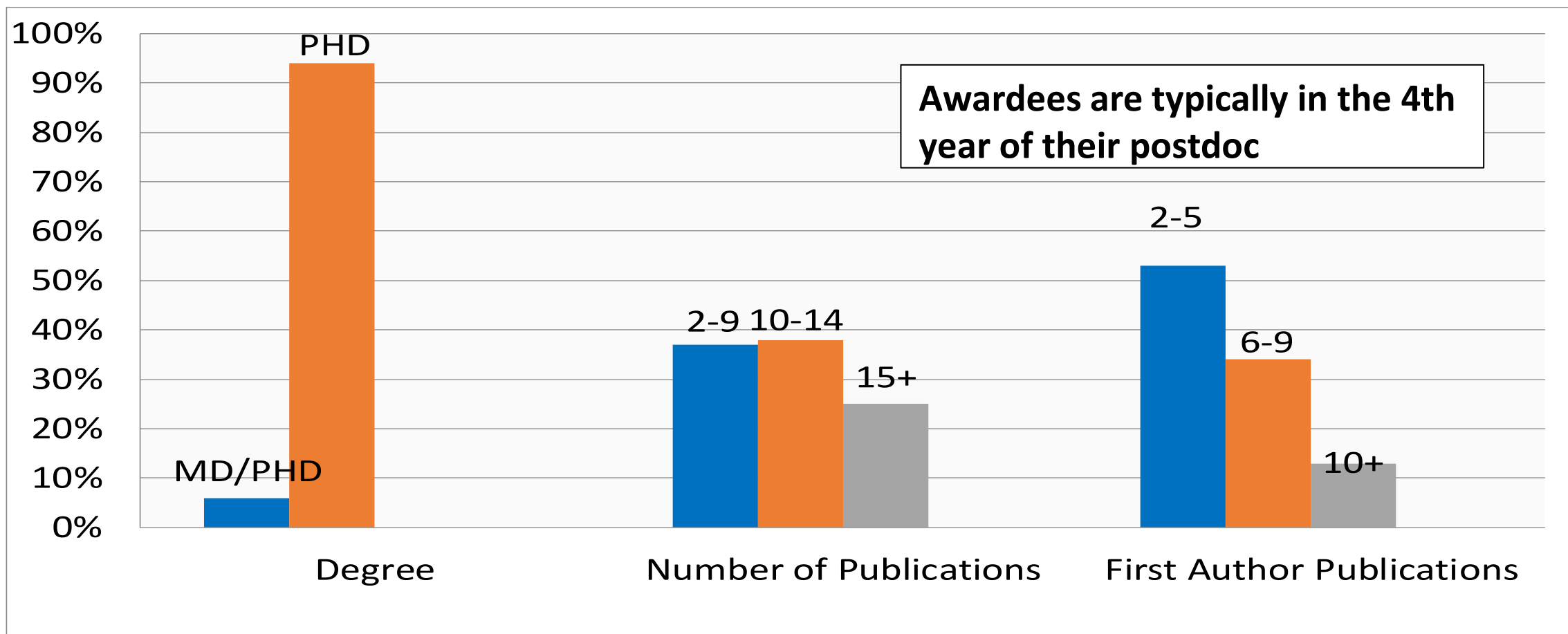
# Criteria for Successful Mentored Career Award Applications

- Candidate: motivated, well-trained, productive

- Mentor(s): strong mentoring and funding track record, highly qualified, committed to support the candidate

- Career development/ training plan: meaningful training in research and professional development

- Research plan: innovative, good training platform/ vehicle for transition to independence (high feasibility/ high impact; niche for applicant's own lab)

- Convince reviewers that: the research qualifications are appropriate (training/experience); there is potential for independence (collaborations, teaching, mentoring); there is potential to make important contributions to the field

# Tips for Mentors/Sponsors on Career Award Applications

- Identify co-mentor(s)/ co-sponsor(s)

- Co-mentor(s) should have a clearly defined role in the application

- Develop a training plan/career development plan that is tailored to the needs of the applicant/candidate.

- Be actively involved in the grant preparation process
  - ➢ grantsmanship issues = poor mentoring

- Avoid scientific overlap + no text duplication from R01

# Funding Rates 5 Year Averages (FY18-FY22)

| Program | # of Applications/yr | # of Awards/yr | Success Rate |
|---|---|---|---|
| F30 | 164 | 63 | 39% |
| F31 | 389 | 88 | 23% |
| F32 | 198 | 42 | 21% |
| F99 | 66 | 25 | 39% |
| K08 | 156 | 50 | 32% |
| *Early K99* | 44 | 12 | 28% |
| K99 | 199 | 32 | 16% |
| K22 | 115 | 16 | 14% |
| K12 | 11 | 5 | 51% |
| R25 | 30 | 10 | 36% |
| T32 | 75 | 33 | 46% |
| | ~1500 | ~400 | |

*program active for 3 years*

# For early-stage investigators whose research productivity has been impacted by COVID-19 during their NIH ESI period

- Submit a request for an extension to NIH ESI status and describe the nature of the disruption to research productivity in the request.

- Link in the Education section of the PI's Personal Profile in eRA Commons.

- NIH will consider requests to extend the ESI status period for reasons that can include the following, as determined on a case-by-case basis at the sole discretion of NIH.

  - Medical concerns
  - Disability
  - Family care responsibilities
  - Natural disasters
  - Active-duty military service
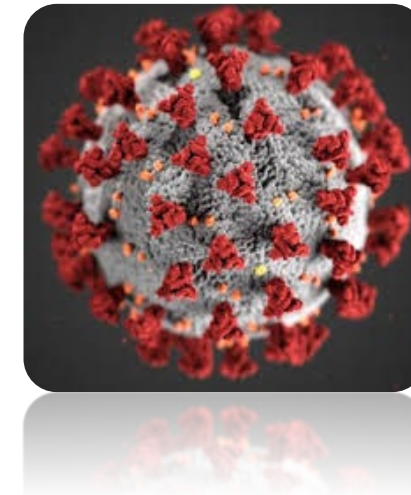
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# Thank you for your attention

Email: nas.zahir@nih.gov

Twitter: @NCI_Training

@nas_zahir | @nc_____ler



Visit our website for more information on funding mechanisms and for our contact information

*cancer.gov/CCT*

www.cancer.gov          www.cancer.gov/espanol

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