NCI Research Training and Career Development Awards

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DCB New Grantee Workshop
02/05/2020
Research Training and Career Development Awards

**Predoc**
- **F30** Predoctoral NRSA for MD/PhDs
- **F31** Predoctoral NRSA - research degree
- **F99/ K00** Predoctoral to Postdoctoral Fellow Transition Award
- **F32** Postdoctoral NRSA

**Postdoc**
- **K08** Mentored Clinical Scientist Research CDA
- **K99/R00** Pathway to Independence Award
- **K22** NCI Transition Career Development Award
Cancer Training at the NCI

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

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

1,208 awards
$171.3 M

Diversity Training Branch (DTB) Center to Reduce Cancer Health Disparities (CRCHD)

Awards intended for underrepresented minorities and individuals with disabilities

- Individual Career Development Awards
- Transition Awards
- Fellowships
- Research Supplements to Promote Diversity
Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship

- Stipend (full-time effort required)
  - Predocs (F30 or F31): $24,816 per year for up to 5 or 6 years
  - Postdocs (F32): $50,004—$61,308 per year for up to 3 years

- Partial tuition and fees
  - 60%, up to $16,000 (in a degree program) or $4500 (postdocs)

- Funds for training-related expenses (mostly health insurance)
  - $4200 for a predoc trainee; $10,850 for a postdoc trainee
F31 Applications, Awards and Success Rates

![Graph showing applications, awards, and success rates from 2015 to 2019. The success rate varied from 28% in 2015 to 23% in 2017 and 25% in 2018. The number of applications ranged from approximately 250 to 400 across the years.]
F31 Pre-doctoral Fellow Characteristics

Enrolled in research doctoral degree (e.g., PhD) programs
US Citizens or Permanent Residents

70-75% of applicants have a pub, 30% have 1st author pub

Typically submit in the 3rd year of the PhD program
F32 Applications, Awards and Success Rates

Fiscal Year

Applications / Awards

Success Rate

Applications Awards Success Rate

2015 18%
2016 19%
2017 25%
2018 21%
2019 24%

Applications / Awards

0 50 100 150 200 250 300

Success Rate

0% 5% 10% 15% 20% 25% 30%

NATIONAL CANCER INSTITUTE
F32 Post-doctoral Fellow Characteristics

US Citizens or Permanent Residents
Typically submit during the 1st (30%) or 2nd (60%) year of postdoc.
NCI Career Development (K) Award Applications

- Ensure that a diverse pool of highly trained scientists is available in appropriate scientific disciplines to address the Nation's biomedical, behavioral, and clinical research needs.

- K08: provide "protected time" (3-5 years) to support didactic study and/or mentored research for individuals with clinical doctoral degrees.

- K22 and K99/R00: help outstanding mentored, non-independent investigators in transitioning to research independence.
Objective: To help outstanding postdoctoral researchers complete needed, mentored career development and transition in a timely manner to independent, tenure-track or equivalent faculty positions.

Eligibility:
- U.S. citizens and non-U.S. citizens (@domestic institutions)
- Less than 4 years of postdoctoral research training
- Cannot have held an independent faculty or tenure-track position

Award:
- Mentored Phase (K99) (1 - 2 years):
  salary: up to $100K/year; fringe benefits; research support: 30K/ year
- Independent Scientist Phase (R00) (up to 3 years):
  salary, fringe benefits, research support: $249K/ year (total cost)
K99 Applications, Awards and Success Rates

Fiscal Year

- **Applications / Awards**
  - 2015: 23%
  - 2016: 32%
  - 2017: 18%
  - 2018: 20%
  - 2019: 12%

- **Success Rate**
  - 2015: 23%
  - 2016: 32%
  - 2017: 18%
  - 2018: 20%
  - 2019: 12%

Bar chart showing applications, awards, and success rates for fiscal years 2015 to 2019.
K99 Awardee Characteristics

U.S. citizens and non-U.S. citizens

Typically submit during the 4th year of postdoc. training

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<tr>
<th>Degree</th>
<th>Number of Publications</th>
<th>First Author Publications</th>
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The NCI Transition Career Development Award (K22) PAR-18-467

- **Objective:** facilitates the transition of investigators in mentored, non-independent cancer research positions to independent faculty cancer research positions. The K22 provides protected time for the initial 3 years of the first independent tenure-track faculty position.

- **Eligibility:**
  - U.S. citizens and Permanent Residents (@domestic institutions)
  - 2-8 years of postdoctoral research training
  - Cannot have held an independent faculty or tenure-track position

- **Research:** all areas of cancer research
K22: Applications, Awards and Success Rates

![Graph showing applications, awards, and success rates over fiscal years 2015 to 2019. The success rate for each year is as follows:

- 2015: 16%
- 2016: 19%
- 2017: 16%
- 2018: 12%
- 2019: 16%](image-url)
What are reviewers looking for?

- 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)
Tips for mentors/ sponsors

- Identify co-mentor(s)/ co-sponsor(s)
- Co-mentor(s) should have a clearly defined role in the application
- Develop a training plan/ CDP 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
CTB Website: www.cancer.gov/grants-training/training/funding
Take home message

Motivate your students/postdocs to apply