

Students Career Path Postbaccalaureate Predoctoral Mentoring Opportunities Grants Training Clinical Research Internships Fellowships Cancer Collaboration Postdoctoral Innovation Data Science Epidemiology



NCI Support for Training Early-Career Cancer Researchers

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CABTRAC October 30, 2024

National Cancer Institute (NCI)



The Bottom Line:

- NCI is dedicated to sustained funding for mentored cancer investigators.
- Since 2018 total funding for the Center for Cancer Training's extramural training portfolio has increased by 28%.



NCI's Commitment to Advancing Cancer Training

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August 1, 2024, by Dr. Oliver Bogler, Director, NCI Center for Cancer Training

NCIs dedication to nurturing the next generation of cancer researchers is evident through its substantial investment in training programs and career development awards. In this blag, Dr. Bogier discusses recent trends in funding for cancer training, highlights enhancements to the Pathway to Independence Award and Introduces a new career development award for cilinical scientists.

Training the next generation of cancer researchers is critical to NCI's mission. This vital work is spearheaded by the Center for Cancer Training (CCT), in collaboration with other NCI groups such as the Center for Cancer Health Equity. CCT offers funding for training and education and engages in outreach to undergraduates, graduate students, postdoctoral scholars, and other mentored investigators across all areas of cancer research. NCI provides opportunities and resources to support the cancer research workforce across a wide range of disciplines at institutions nationwide, as well as within NCI's Intramural Research Program.

Five-year trends in NCI funding for cancer training

In alignment with the National Cancer Plan's goal to optimize the workforce, NCI remains dedicated to sustained funding for mentored cancer investigators. This commitment is reflected in the significant increase in funding for CCTs portfolio over the past several years.

In fiscal year 2018 (FY18), total funding for CCT's extramural training portfolio was \$163 million. By the end of FY24, it rises to about \$209 million. This includes fellowships, career development awards, institutional training, research education grants, and other activities. Despite budget pressures in FY24, NCI prioritized increased support for training-related grants. This estimated 5% increase in funding helped address several critical needs:



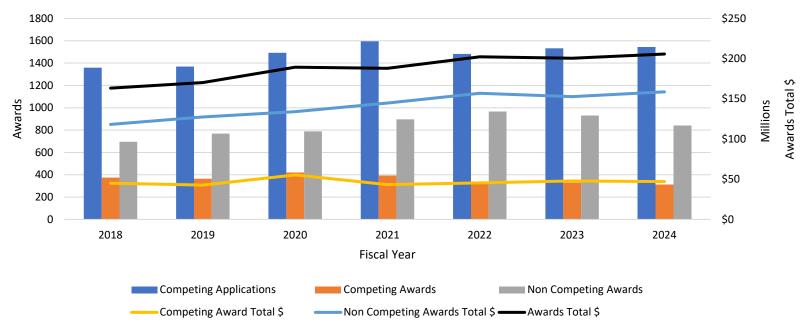
Oliver Bogler, Ph.D. Director, Center for Cancer Training

- · 20% increase in childcare subsidies supported by Ruth L. Kirschstein National Research Service Awards (NRSA)
- 8% stipend increase for postdoctoral scholars supported by NRSA
- 4% stipend increase for graduate students supported by NRSA
- salary increases for postdoctoral scholars supported by the NCI Predoctoral to Postdoctoral Fellow Transition (F99/K00) Award

As discussed in previous updates, while CCT's training portfolio is growing, supporting more out-year commitments to existing extramural awards has created budget pressures. As NCI Director Dr. Kinnyn Rathmell explained in a previous *Bottom Line blog* post, NCI's FY24 appropriation allowed NCI to prioritize funding for new grants, particularly for early-stage investigators, training mechanisms, and NCI-Designated Cancer Centers. Consequently, despite the overall budget increase, the funds available for competitive awards—including new submissions and renewals—are estimated to be about 7% lower in FY24 than in FY23. Without the additional investment in FY24, this reduction would have been significantly larger.

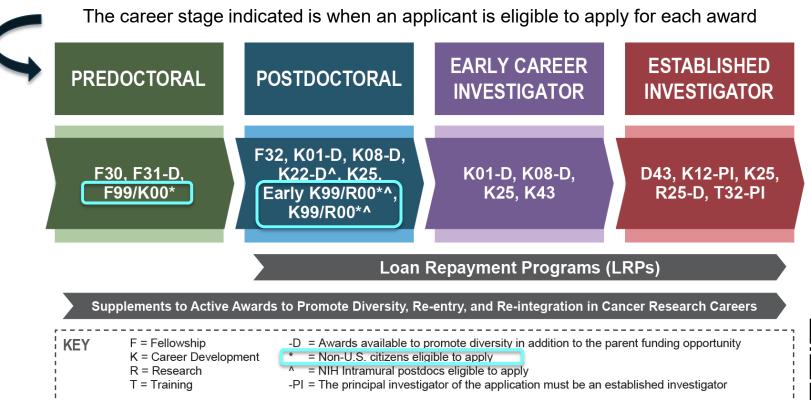
Evaluation of the NCI Pathway to Independence Award (K99/R00) Program

All CCT Awards



All Awards	2020	2021	2022	2023	2024
Competing Applications	1493	1596	1482	1533	1545
Competing Awards	421	393	324	329	311
Non Competing Awards	789	896	966	931	839
Total Awards	1210	1289	1290	1260	1150
Competing Award Total \$	\$55,331,448	\$43,280,217	\$45,381,694	\$47,739,159	\$47,056,229
Non Competing Awards Total \$	\$134,047,297	\$144,772,700	\$156,971,044	\$152,811,965	\$158,697,733
Awards Total \$	\$189,378,745	\$188,052,917	\$202,352,738	\$200,551,124	\$205,753,962

NCI Funding Opportunities for Training in All Areas of Cancer Research





CCT Awards to Support Cancer Training: Funding Rates 3-Year Average (FY22-FY24)

Program	Average Success Rate		
F30	24%		
F31	16%		
F32	16%		
F99/K00	45%]	
K08	25%		
K22	15%	1	
Early K99/R00	25%	1	
K99/R00	15%	1	
R25	26%	1	
T32	40%		
LRP	75%	1	

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NIH) NATIONAL CANCER INSTITUTE https://report.nih.gov/funding/nih-budget-and-spending-data-past-fiscal-years/success-rates

Supplements within the CURE: Diversity and Re-Entry/Re-Integration



- Each supplement supports the research experience of one identified candidate
- Parent grant must have **at least two years** of active status at the time of supplement application; some exceptions are granted by NCI
- A bridge for candidates to progress to the next academic/career level
- Application receipt: Oct 1 Dec 1 and Feb 1 Mar 31

More Information

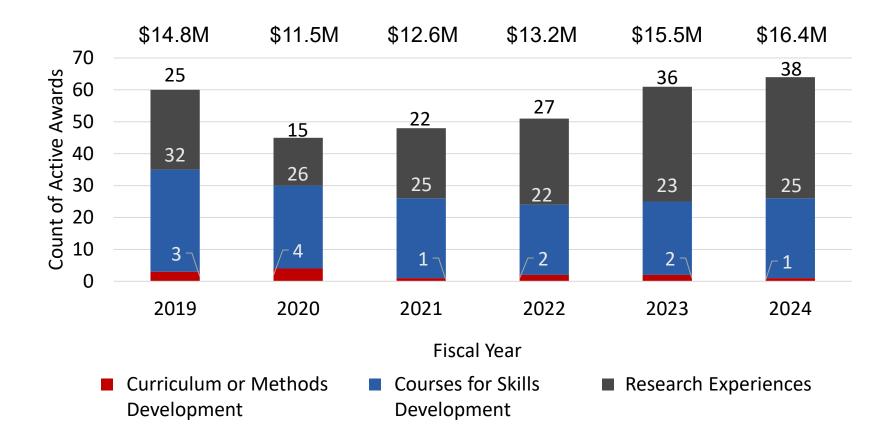
Diversity Supplements	https://www.cancer.gov/about-nci/organization/crchd/diversity- training/cure#individuals
Diversity Supplements	https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/ds-
Guidelines	guidelines.pdf

Contact CUREsupplements@nih.gov

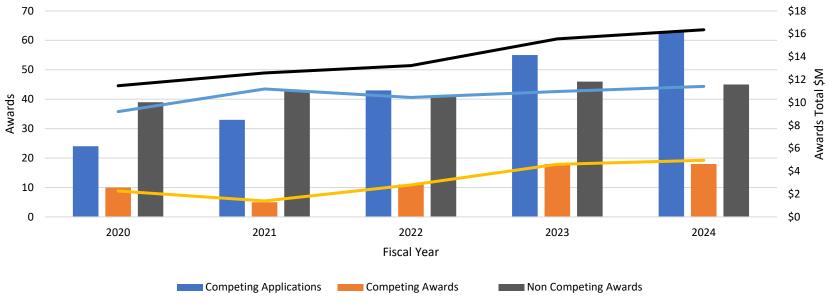
R25 and T32 Programs Status Update



NCI R25 Portfolio (Center for Cancer Training)



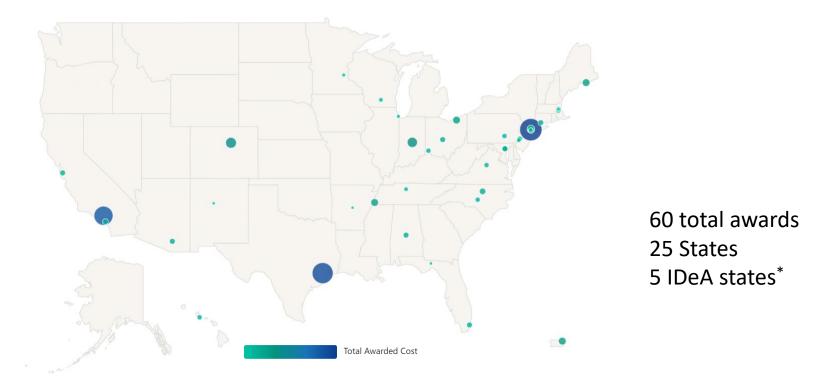
CCT R25 Awards



-----Competing Awards Total \$ ------Non Competing Awards \$ ------Awards Total \$

R25	2020	2021	2022	2023	_2024
Competing Applications	24	33	43	55	63
Competing Awards	10	5	11	18	18
Non Competing Awards	39	43	41	46	45
Total Awards	49	48	52	64	63
Competing Awards Total \$	\$2,262,239	\$1,396,849	\$2,787,041	\$4,599,225	\$4,950,969
Non Competing Awards \$	\$9,202,597	\$11,179,721	\$10,436,154	\$10,963,258	\$11,406,686
Awards Total \$	\$11,464,836	\$12,576,570	\$13,223,195	\$15,562,483	\$16,357,655

Current NCI R25 Programs (Center for Cancer Training)

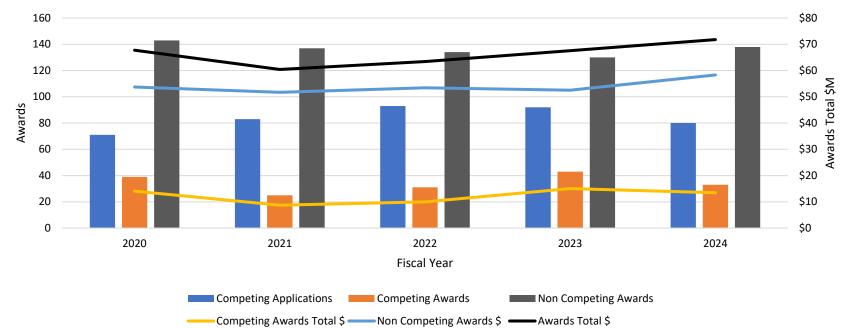


*Established in 1993 by congressional mandate, the IDeA Program aims to increase research capacity in states with historically low levels of NIH funding.



NIH iReport visualization September 2024

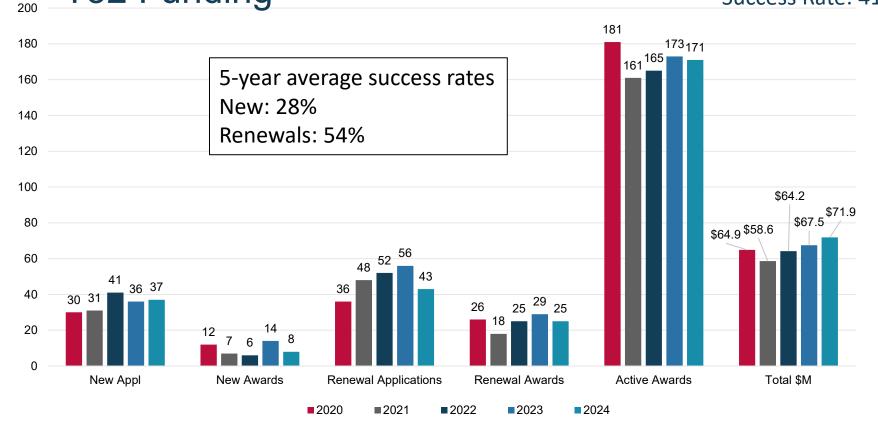
CTB T32 Awards



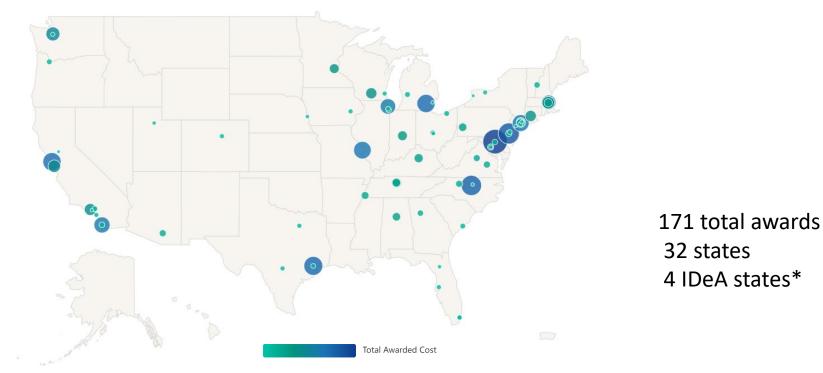
T32	2020	2021	2022	2023	2024
Competing Applications	71	83	93	92	80
Competing Awards	39	25	31	43	33
Non Competing Awards	143	137	134	130	138
Total Awards	182	162	165	173	171
Competing Awards Total \$	\$14,030,097	\$8,711,742	\$9,943,326	\$15,039,524	\$13,467,571
Non Competing Awards \$	\$53,744,815	\$51,711,859	\$53,464,973	\$52,532,607	\$58,331,059
Awards Total \$	\$67,774,912	\$60,423,601	\$63,408,299	\$67,572,131	\$71,798,630

T32 Funding

Fiscal Year 2024 Success Rate: 41%



Current NCI T32 Programs



*Established in 1993 by congressional mandate, the IDeA Program aims to increase research capacity in states with historically low levels of NIH funding.

NIH iReport visualization September 2024



Current List of T32 Awards

Upcoming Changes to Cancer Training Funding Opportunities



Important Changes to NIH Fellowship Applications

The NIH fellowship application and review criteria are undergoing changes that take effect for due dates on or after January 25, 2025.

To learn more, scan to watch the recording of the informational webinar from September 19th.



Key Fellowship Changes

NIH will no longer allow grades to be included in the application package and is updating fellowship biosketch instructions to indicate that change;

A Candidates will now be asked to discuss their scientific perspective on their field and how their work will advance its unsolved questions;

Sponsors will now be asked to submit five statements outlining the candidates preparedness for the fellowship and mentorship plan.

Key Changes to NIH Institutional Training Grant Applications

For due dates on or after January 25, 2025

- The Recruitment Plan to Enhance Diversity will be its own attachment in the PHS 398 Research Training Program Plan Form.
- Mentor training expectations will be more clearly defined in parent T32 Notices of Funding Opportunity.
- Institutional Training data tables will be updated to reduce burden and promote consistent information collection across training programs.
- "Responsible Conduct of Research" and "Recruitment Plan to Enhance Diversity" will now be included among the Additional Review Considerations that contribute to the overall impact score.

Scope: <u>https://grants.nih.gov/policy-and-compliance/changes-coming-2025/updates-to-training-grants</u> NIH blog: <u>https://nexus.od.nih.gov/all/2024/05/31/announcing-updates-to-nih-institutional-training-grant-applications-and-required-data-tables/</u> Webinar materials and recording: https://grants.nih.gov/news-events/calendar-of-events/66df65419ca8efaee00543e2/video

NCI RFI and Visioning Workshops – Key Takeaways

- December 2023: NCI received responses to RFI on supporting early career, mentored cancer researchers and trainees
- September 2024: NCI held two visioning workshops with:
 - 1. Postdoctoral scholars
 - 2. Faculty mentors

Desired increases in:

- Funding opportunities for postdocs on temporary U.S. visas
- Time for postdocs to acquire career development awards
- Compensation for predocs and postdocs
- Focus on creativity instead of productivity
- Opportunities to compete for funding early in postdoc experience

Upcoming Changes to NCI K99/R00 and NCI K22 Awards

- The NCI K99/R00 award will undergo significant changes including *expanding* the eligibility window from 4 years to 6 years of postdoctoral research training experience. Will move from NIH parent K99/R00 participation to NCI-issued PAR: <u>https://grants.nih.gov/grants/guide/notice-files/NOT-CA-24-077.html</u>
 - Funding opportunity estimated publication November 2024.
 - First estimated application due date February 14, 2025.
 - Earliest estimated award date is January 2, 2026.
 - Earliest estimated start date is January 2, 2026.
- The NCI K22 (PAR-24-117) award will sunset effective November 13, 2025. <u>https://grants.nih.gov/grants/guide/notice-files/NOT-CA-24-079.html</u>
 - Applications will be accepted until November 2025.

Resources for Early Career Researchers



Download from the Apple iOS App Store – search for NanCI





The National Cancer Institute (NCI) is dedicated to promoting diversity in the cancer research workforce, addressing cancer disparities, and advancing health equity. To achieve this, NCI provides paid mentored research opportunities including:

- Summer internships
- Postbaccalaureate fellowships
- Graduate partnerships
- Postdoctoral fellowships





JOIN THE TRAIN AT NCI MAILING LIST



https://trainatnci.cancer.gov/

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Thank you for your attention

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