The NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers (K99/R00)

RFA-CA-22-035, RFA-CA-22-036 and RFA-CA-22-037

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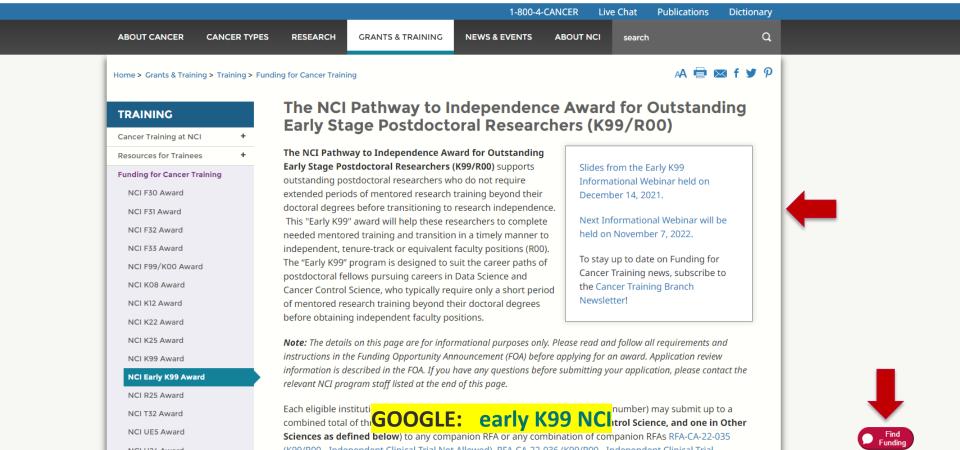




Update







The NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers aka. the early K99/R00

Objective: Help outstanding postdoctoral researchers complete needed, mentored training and transition in a timely manner to independent, tenure-track or equivalent faculty positions.

This program is designed for outstanding postdoctoral fellows who do not require extended periods of mentored research training beyond their original doctoral degrees before transitioning to research independence, which is common for those working in <u>data science</u> and <u>cancer control</u> <u>science</u>. Therefore, researchers from these disciplines are particularly encouraged to apply.

Early K99/R00: The NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers

RFA-CA-22-035 (no CT), RFA-CA-22-036 (CT), RFA-CA-22-037 (BESH)Submission due date February 28, 2023

- <u>Two-stage award:</u> K99 phase up to 2 years of mentored training (1 year minimum);
 R00 phase up to 3 years of support as an independent scientist
- K99 to R00 transition is not automatic tenure-track assistant professor position (or equivalent) must be offered and accepted
- The award provides:
 - **K99 phase:** Salary up to \$100,000/year + fringe benefits; R&D funds up to \$30K/year
 - R00 phase: up to \$249,000/year in total costs

Early K99/R00 – Eligibility

- Postdocs with less than 2 years of total aggregate postdoctoral research experience (as of February 28, 2023) are eligible to apply
 - "Clock" starts when all requirements for the degree were completed
 - Postgraduate clinical training not counted against the 2-year cap
 - Extension of one year for childbirth may be approved (contact NCI program director)
 - Extension for parental, medical, military, or other well-justified leave of generally less than 12 months may be approved (contact NCI program director)
- Candidate must be nominated by an institution. Institution may nominate up to 3
 candidates: one in data science, one in cancer control science, and one in other sciences
- U.S. citizenship or permanent residency not required Individuals on U.S. visas are eligible to apply
- No resubmissions allowed but may apply again next year if still eligible and re-nominated

Institutions limited to Three Applications per Due Date

EACH application MUST be in a different scientific area, as defined here:

- (A) Data Science: an interdisciplinary field of inquiry in which quantitative and analytical approaches, processes, and systems are both developed and used to extract knowledge and insights from increasingly large and/or complex sets of data. This includes cancer-focused data integration and visualization, systems biology, artificial intelligence, machine learning, informatics, genomics, precision oncology, and developing analytics for epidemiological or biostatistical studies.
- (B) Cancer Control Science: basic and applied research in the behavioral, social, and population sciences to create or enhance interventions that, independently or in combination with biomedical approaches, reduce cancer risk, incidence, morbidity, and mortality, and improve quality of life. This includes research in epidemiology, behavioral sciences, health services, surveillance, cancer survivorship, and healthcare policy.
- (C) Other Sciences: all scientific fields supported by the NCI that are not included in (A) or (B). Applicants proposing research in (C) "Other Sciences" may apply if it is reasonable to expect them to transition to independence with an abbreviated period of mentored research training beyond their original doctoral degrees.

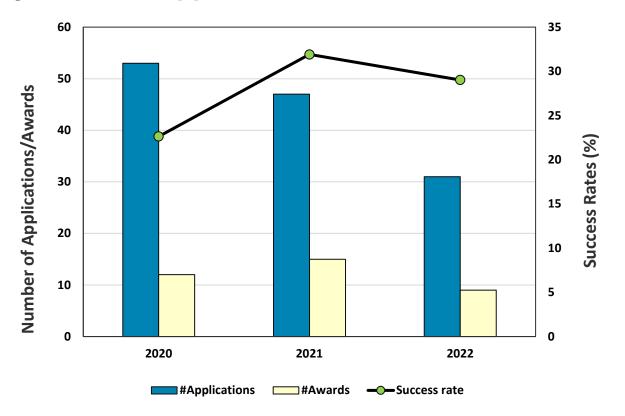
Early K99: Special Instructions - Nomination Letter

- Institutional Nomination Letter is required. Applications without Nomination Letters will be withdrawn
- Must be written and signed by the head of the candidate's department or program
- Institutional Nomination Letter and Institutional Commitment Letter are TWO separate documents
- Institutional Nomination Letter submitted under "Other Attachments"
- The letter is limited to 2 pages
- The letter must include the following information:
 - Must identify one of the three scientific areas: (A) Data Science, (B) Cancer Control Science
 or (C) Other Sciences
 - Must affirm that the candidate is the institution's sole nominee in the specified scientific area for the specified application due date
 - Should describe the main factors that identify the nominee as likely to obtain a tenure-track or equivalent research position at an early career stage (i.e., why a PI is a good candidate for the early K99/R00 award)

Distinct Features affecting review of the early K99/R00

- Publications from postdoctoral training are <u>not</u> required
- Preliminary data are <u>not</u> required. Reviewers evaluate creativity and potential of research to launch and sustain a career rather than extensive preliminary data
- Applications reviewed by an "early K99" Special Emphasis Panel they don't compete with "regular K99" (parent K99) applications
- One receipt per year, no resubmissions allowed, but may apply again next year if still eligible and re-nominated
- This is a pilot program up to 16 awards/year

NCI Early K99/R00: Applications, Awards and Success Rates



<Success Rate> = 27% Number Awardees = 36



Application Sections and Tips for Writing the Early K99 Application

Application Sections	Page Limits
Candidate's Background	12
Career Goals and Objectives	
Candidate's Plan for Career Development/Training Activities	
Research Strategy	
Specific Aims	1
Training in the Responsible Conduct of Research	1
Plans and Statements of Mentor and Co-mentor(s)	6
Letters of Support from Collaborators, Contributors, etc.	6
Description of Institutional Environment	1
Institutional Commitment	1
Biographical sketch (non-fellowship)	5
Nomination Letter	2

Reference Letters

- Required part of the application, but they are submitted separately; applications without adequate number of reference letters considered incomplete and will be withdrawn
- 3 5 letters of reference are required
- Referees submit reference letters <u>directly</u> to NIH via eRA Commons, applicants do not see them
- Should be provided by individuals <u>not directly involved in the application</u>, but who are familiar with the applicant's qualifications, training, etc.
- Letters from mentors, co-mentors, collaborators, etc. do not count
- Include a list of referees (name, departmental affiliation, and institution) in the cover letter of the application

If you have any issues with Reference Letters: Contact the eRA Service Desk

K-grant application Review Criteria

- Candidate
- Career Development Plan/Career Goals and Objectives
- Research Plan
- Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)
- Environment & Institutional Commitment to the Candidate

Candidate

- Potential to become an independent investigator – Will the candidate be competitive for an independent Assistant Professor position in 1-2 years?
- Research productivity, awards
- Strong letters of support
- Background, prior training

Application Section(s)

- Biosketch (one of the most scrutinized parts of the application)
- Candidate's Background
- Letters of Support
- Letters of Reference

Career Development Plan/ Career Goals and Objectives

- Justified?
- Relevant to the proposed research/career path?
- Specific training, workshops, etc.
- Professional development (grant writing, lab management, etc.)
- Timeline with milestones of activities, transition to independence
- Advisory committee

Application Section(s)

- Career Goals and Objectives
- Candidate's Plan for Career
 Development/Training Activities
- Plans and Statements of Mentor and Co-mentor(s)

Research Plan

- Strong rationale
- Innovative, hypothesis-driven mechanistic research
- Aims not interdependent
- Pitfalls and alternative solutions
- Clear outline of K99 vs. R00
- Could it form a strong basis for an independent career, eventual R01?

Application Section(s)

- Specific Aims
- Research Strategy

(Clearly explain why your project is important – K-study section is likely very diverse)

Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)

- All necessary expertise included
- Mentoring track record
- Funding
- Clear statement that the project is portable with the candidate
- Clear outline of their involvement in the project and career development

Application Section(s)

- Plans and Statements of Mentor and Co-mentor(s)
- Letters of Support from Collaborator(s), Consultant(s), etc.

Environment & Institutional Commitment to the Candidate

- Clearly stated support for the candidate and mentor(s)
- Availability of resources and training
- Min. 75% effort assurance

Application Section(s)

- Description of Institutional Environment
- Institutional Commitment to Candidate's Research Career Development
- Facilities and Other Resources

Characteristics of a strong K application

- Candidate: <u>publications</u>, awards, prior training, letters of support, letters of reference
- Career Development Plan: relevant to the proposed research and future career; well-justified need for mentored training; specific/detailed (courses, seminars, workshops, conferences, milestones, etc.)
- Research plan (<u>Aims should span both K99 and R00 Phases</u>): innovative, important, hypothesis-driven, strong rationale, high likelihood to significantly advance the field, could form a strong basis for future R01s, experimental details provided, pitfalls and alternatives addressed
- Mentor(s): established investigators with strong mentoring and funding track records, have all required expertise and experience; mentor's role clearly described; mentor's training plan in sync with career development plan; primary mentor should clearly state that the project is yours when you move to independence
- **Institutional Support:** institutional support for the candidate and mentors clearly stated; availability of resources, assurance of min. 75% effort

Tips for preparing a K-application

- Biosketch (one of the most scrutinized parts of the application): use correct template (<u>non-fellowship</u>), highlight your achievements, include a URL to a full list of your published work, utilize "Personal Statement" section
- Letters of Support: make sure every collaborator/contributor provides a letter of support, where he/she explains his/her role in the application
- Letters of Reference (3-5): <u>required</u> part of the application NOT letters of support
- Research Plan/Specific Aims: clearly explain why your project is important; how it will advance the field, benefits patients; clearly explain the rationale (K-study section is likely VERY diverse!), make sure it is easy to read/logical; clearly outline what will be done in K99 phase vs. R00 phase
- Utilize Assignment Request Form: indicate your choice of NIH IC (<u>no need to specify study section for K-grants</u>), list <u>areas of expertise</u> required to review your application, do not name/suggest reviewers, may ask to exclude reviewers in conflict

Pre-application stage: best practices

- Read the FOA
- Read K-Career Development Instructions (SF424 (R&R) Version G)
- How to Apply NIH Application Guide
- If you have any questions about eligibility or other pre-application questions contact NCI program official
 - Email is the best way of communication
 - Attach your biosketch and a draft of your specific aims

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