Part 1:
Career Development Award – Overview and Tips

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Grant Proposal Developer

Research Development

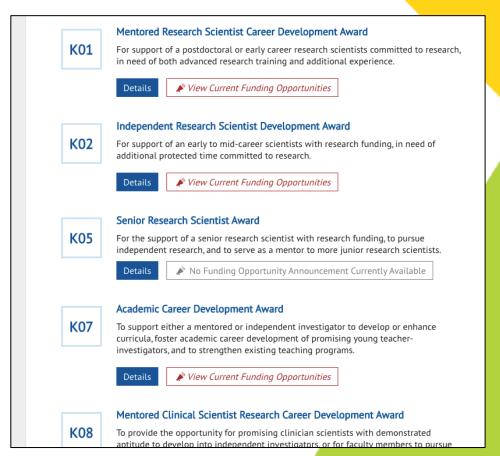Office of the Vice President of Research

The University of Vermont

Career Development Awards relevant to CVRI members

From the NIH: K99, K08, K01, K23 (among 11 others)

https://researchtraining.nih.gov/programs/career-development

From the American Heart Association: Career Development Award

https://professional.heart.org/en/research-programs/application-information/career-development-award

K99/R00 – Pathway to Independence Award

- Increase and maintain a strong cohort of new and talented independent investigators

- Designed to facilitate a timely transition of postdocs or clinician-scientists from mentored research position to independent, tenure-track or equivalent faculty positions

- No more than 4 years of post-doctoral research experience at the time of application

- 75% minimum effort (50% minimum for physician-scientists)

- Budget limits dependent on Institute to which you apply (for instance, for Parent K99, NHLBI limits salary support to $100k + fridge/year and research support to $25K/year)

- 5 year award period

- Currently 21 K99/R00 active FOAs being offered

K08 – Mentored Clinical Scientist Research Career Development Award

- To prepare clinically trained individuals for careers that have a significant impact on the health-related research needs of the Nation

- Must hold a clinical degree (some Institutes constrict to specific degrees)

- 75% minimum effort (50% minimum for physician-scientists)

- Budget limits dependent on Institute to which you apply (for instance, for Parent K08, NHLBI limits salary support to $100k + fridge/year and research support to $25K/year)

- 5 year award period

- Currently 8 K08 active FOAs

K01 – Mentored Research Scientist Career Development Award

- To provide support and protected time for an intensive, supervised career development experience in the biomedical, behavioral, or clinical sciences leading to research independence

- Different institutes use the K01 mechanism differently: enhance workforce diversity, training in a new field, or had a hiatus in their research career

- Must be a US citizen or permanent resident with a research or clinical doctoral degree

- 75% minimum effort

- Budget limits dependent on Institute to which you apply (for instance, for Parent K01, NHLBI limits salary support to $100k + fridge/year and research support to $30K/year)

- 5 year award period

- Currently 25 K01 active FOAs

K23 – Mentored Patient-Oriented Research Career Development Award

- To support the career development of individuals with a clinical doctoral degree who have the potential to develop into productive, clinical investigators, and who have made a commitment to focus their research endeavors on patient-oriented research

- Must hold a clinical degree and completed clinical training

- 75% minimum effort

- Budget limits dependent on Institute to which you apply (for instance, for Parent K23, NHLBI limits salary support to $100k + fridge/year and research support to $30K/year, or with a strong budget justification $50K/year)

- 5 year award period

- Currently 3 K23 active FOAs

NIH Instructions for writing proposals:

NIH Application Guide (SF424 R&R Version G): https://grants.nih.gov/grants/how-to-apply-application-guide/forms-g/general/g.100-how-to-use-the-application-instructions.htm

Career Development Specific Instructions: https://grants.nih.gov/grants/how-to-apply-application-guide/forms-g/career-forms-g.pdf

Major requirements for all NIH Career Development proposals:

- Specific Aims – 1 page

- Research Strategy – 12 pages total w/ Candidate Information

- Candidate Information and Goals for Career Development– 12 pages total w/ Research Strategy

- Plans and Statements of Mentor and Co-Mentor(s)– 6 pages

- Training the Responsible Conduct of Research – 1 page

- Description of Institutional Environment– 1 page

- Institutional Commitment to Candidate's Research Career Development – 1 page

- 3 – 5 Reference letters – submitted directly to NIH by the letter writers

Other documents required for *all* NIH proposals:

- Project Summary/Abstract – 30 lines of text

- Project Narrative – Three sentences

- Biosketch – 5 pages

- Facilities and Other Resources– no page limit

- Equipment – no page limit

- Resource Sharing Plan – no page limit

- Budget – R&R budget form

Documents to include if applicable:

- Letters of Support from Collaborators, Contributors, and Consultants– limited to 6 pages

- Vertebrate Animals

- Select Agent Research

- Authentication of Key Biological and/or Chemical Resources

- Human Subjects

AHA Career Development Award

- To support highly promising healthcare and academic professionals in the early years of their first professional appointment that will provide preliminary data and training necessary for the applicant's future success

- As of award start date, no more than 5 years and 9 months since applicant's first faculty/staff appointment after receipt of doctoral degree

- Must be an AHA Professional Member

- $77,000/year budget, including 10% indirect costs (total of 3 years)

- Must provide at least 10% effort

- Can hold a NIH K award concurrently as long as there is no budgetary overlap (K99/R00 awardees must be in the R00 stage of their award)

Major components of AHA Career Development Award

- Research Plan – 8 pages

- Biosketch – 5 pages

- Career Development Plan – 3 pages

- Literature Cited – 4 pages

- Research Project Environment – 2 pages

- Budget Justification – 2 pages

- Vertebrate Animal Subjects – if applicable

Third Party Documents:

- Department Head Letter – 5 pages

- (Primary) Mentor Training Plan – 4 pages

- (Primary & Secondary) Mentor's Past/Current Trainees – 3 pages each

- (All mentors) Mentor Biosketch – 5 pages

- (All non-prime) Mentor's Letter – 3 pages

Strategic Tips

- Get your timing right to be competitive (How many publications? How long past terminal degree?)

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- Read all the Information on the NIH Career Development webpage – pay special attention to the linked FOAs (are there *non-parent FOAs* that may be less competitive?)

Which FOA?

Pathway to Independence Award

K99/R00

Program Purpose

The purpose of this program is to increase and maintain a strong cohort of new and talented, NIH-supported, independent investigators. This program is designed to facilitate a timely transition of outstanding postdoctoral researchers or clinician-scientists from mentored research positions to independent, tenure-track or equivalent faculty positions, and to provide independent NIH research support during the transition that will help these individuals launch competitive, independent research careers.

PD/PI	Eligibility	Career level
	U.S. citizen or non-citizen, with research or clinical doctoral degree, and no more than 4 years of Post-Doctoral research experience.	Postdoctorate/ Residency, Early Career

INSTITUTION	Eligibility
	U.S. domestic institutions.

Relevant Policy Notices

- NOT-OD-18-156: Career Award (K) Policy Update: Temporary Adjustments to Percent Effort or Part-Time Institutional Appointment
- NOT-OD-18-157: Career Award (K) Policy Update: Concurrent Support from a Mentored K Award and a Research Grant
- NOT-OD-17-094: Clarification and Update: Salary Supplementation and Compensation on Research Career Development (K) Awards
- Frequently Asked Questions Regarding the Usage of Person Months
- Early Stage and Early Established Investigator Policies

NIH Funding Opportunity Announcements

The links below provide details on funding amounts period of performance, application dates and eligibility:
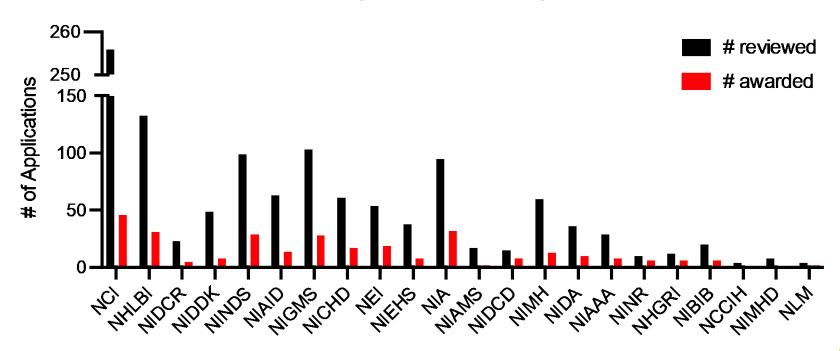
- NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers (K99/R00 - Independent Clinical Trial Required)
- NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers (K99/R00 - Independent Basic Experimental Studies with Humans Required)
- NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers (K99/R00 - Independent Clinical Trial Not Allowed)
- NINDS Alzheimers Disease and Alzheimers Disease-Related Dementias (AD/ADRD) Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00 Independent Clinical Trial Not Allowed)
- Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity (K99/R00 Independent Clinical Trial Not Allowed)
- Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity (K99/R00 - Independent Clinical Trial Required)
- Maximizing Opportunities for Scientific

Strategic Tips

- Get your timing right to be competitive (How many publications? How long past terminal degree?)

- Read all the Information on the NIH Career Development webpage – pay special attention to the linked FOAs (are there non-parent FOAs that may be less competitive?)

- Find the best Institute fit for your proposal idea

  - Identify the **specific potential FOAs** to which you will apply

Which Institute?

K99/R00 Proposals reviewed by Institute 2020

Which Institute?

K99/R00 2020 success rate

Which Institute?

K08 Proposals reviewed by Institute 2020

Which Institute?

K08 2020 success rate

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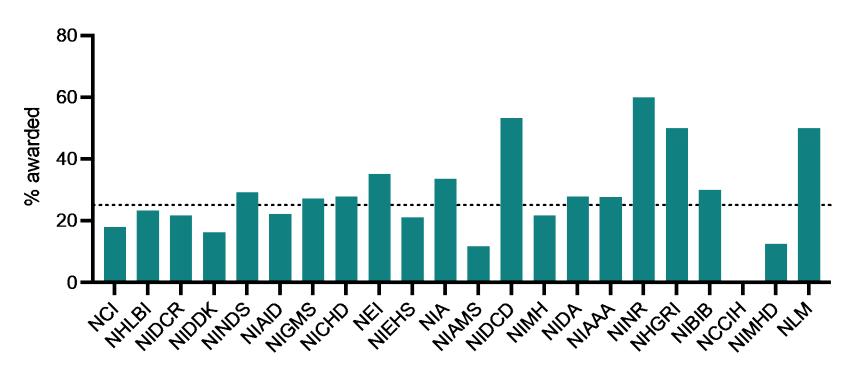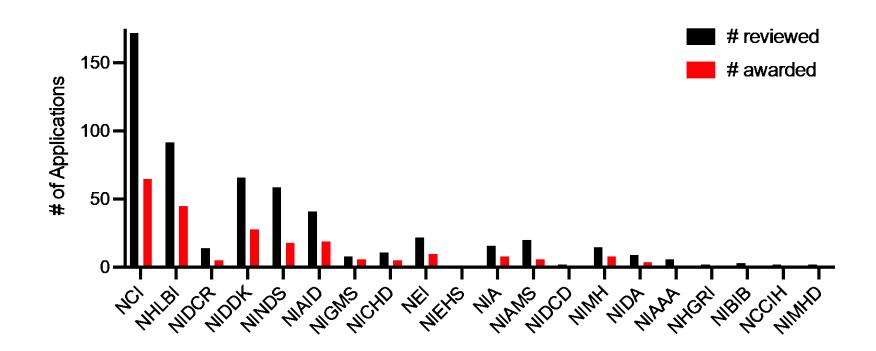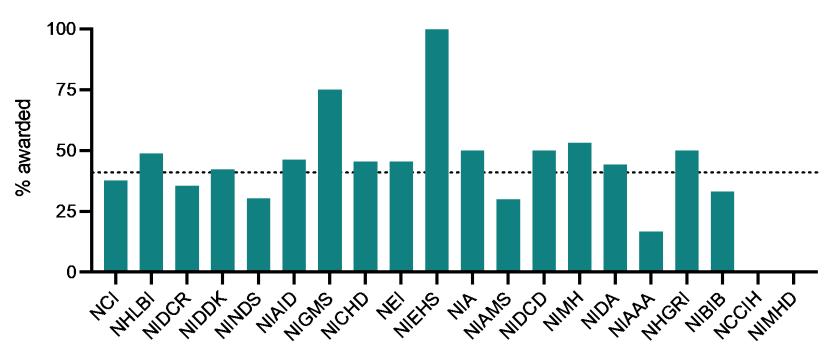 - Identify the **specific potential FOAs** to which you will apply

- Reach out to several Program Officers (POs) from different Institutes to discuss the fit and gauge interest of your proposal

Which PO?

https://grants.nih.gov/grants/guide/contacts/parent-K08-CT-required.html

Section VII. Agency Contacts

We encourage inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants.

Because of the difference in individual Institute and Center (IC) program requirements for this FOA, prospective applications **MUST** consult the Table of IC-Specific Information, Requirements, and Staff Contacts, to make sure that their application is responsive to the requirements of one of the participating NIH ICs. Prior consultation with NIH staff is strongly encouraged.

Application Submission Contacts

eRA Service Desk (Questions regarding ASSIST, eRA Commons, application errors and warnings, documenting system problems that threaten submission by the due date, and post submission issues)
Finding Help Online: http://grants.nih.gov/support/ (preferred method of contact)

Telephone: 301-402-7469 or 866-504-9552 (Toll Free)

GrantsInfo (Questions regarding application instructions, application processes, and NIH grant resources)
Email: GrantsInfo@nih.gov (preferred method of contact)

Telephone: 301-945-7573

Grants.gov Customer Support (Questions regarding Grants.gov registration and Workspace)
Contact Center Telephone: 800-518-4726
Email: support@grants.gov

Scientific/Research Contact(s)

See Table of IC-Specific Information, Requirements and Staff Contacts

Peer Review Contact(s)

Examine your eRA Commons account for review assignment and contact information (information appears two weeks after the submission due date).

Financial/Grants Management Contact(s)

See Table of IC-Specific Information, Requirements and Staff Contacts

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National Heart, Lung, and Blood Institute (NHLBI)

Scientific Program Contact:
Qing Lu, DVM, Ph.D.
Phone: (301) 480-9158
Email: Qing.Lu@nih.gov

Karin F. Lidman, Ph.D.
Phone: (301) 435-0535
Email: fredrikssonk@mail.nih.gov

Grants Management Contact:
Taryn Cobb
Phone: (301) 827-8025
Email: taryn.cobb@nih.gov

NHLBI Specific Information:

NHLBI has an 8 year limit of cumulative support on institutional and mentored K08).
Eligibility: Candidates must have a health professional doctoral degree, such as equivalent degree, and a professional license to practice in the United States. D licensure should be included in the application.

Advisory Committee: NHLBI strongly encourages K08 candidates to include an A of the candidate's mentor(s) and two or three other senior faculty members. If t an Advisory Committee, she/he should document which individuals are availab that are required for the research plan and career development.

NHLBI encourages career development award applications that propose mento disciplines, including but not limited to Artificial Intelligence, Machine Learning, Data Analytics, Public Health Data Analytics, Imaging Analytics, Predictive Analy the creation, management, analysis, and integration of complex, large data sets discovery in heart, lung, blood, and sleep health and disease. Proposals must m specified in the parent announcement.

Concurrent Competing Applications: K08 applicants may not hold any other Fed salary award.

Application Material: NHLBI suggests that K08 applications include biographica and consultants.

Salary Support: Up to $100,000 plus fringe benefits per year.
Research Support: Up to $25,000 per year.

Strategic Tips to Synergize sections of your proposal

- Get your timing right to be competitive (How many publications? How long past terminal degree?)

- Read all the Information on the NIH Career Development webpage – pay special attention to the linked FOAs (are there *non-parent FOAs* that may be less competitive?)

- Find the best Institute fit for your proposal idea

  - Identify the **specific potential FOAs** to which you will apply

- Reach out to several Program Officers (POs) from different Institutes to discuss the fit and gauge interest of your proposal

- Start Early!

- Follow the advice and experience of your mentors

Breakout Group Discussions

Part 2:
Crafting a Career Development Plan &
Tips to best synergize sections of your proposal

Heidi Malaby, PhD

Grant Proposal Developer

Research Development

Office of the Vice President of Research

The University of Vermont

All parts of the K award proposal must be integrated into a coherent and compelling story

A motivated applicant with great promise

Training plan will develop needed skills

Research plan is a vehicle for training

Your Story

Achievement of career & training goals

Mentors with the right skills and experience

Institutional support and commitment

Main training sections from mentee and mentor perspectives

K applications:

- Candidate Information and Goals for Career Development– 12 pages total w/ Research Strategy

- Plans and Statements of Mentor and Co-Mentor(s)– 6 pages

AHA applications:

- Career Development Plan – 3 pages

- (Primary) Mentor Training Plan – 4 pages

*ALL sections** need to synergize and be strong, these are good ones to start with*

Common elements of strong training plans

- Have an endgame (articulate your research aspirations for the long-term)

- And goals to get there (work backwards to establish long-term, intermediate, and short-term goals)

  - Critical to make clear the main thrust of the R01 level proposal you are likely to submit by the penultimate year of the award

- Create an interdisciplinary mentoring committee of 3-4 senior faculty with successful funding track records (and mix up the demographics)

  - If you don't know someone's funding status or history, you can look them up in [NIH RePORTER](#).

  - If you want or need someone who is less senior, consider balancing with others who have mentoring experience

- Make it *very clear* from the trainee and mentor perspectives how the trainees research is different from the mentors

Training goals need to map onto Research Aims

- Like your research, your training plan should be unique to you

- Given your previous training and research experience, propose a mix of instructional training and hands-on research experience that are clearly linked with your short to long-term goals

  - Your Research Aims are part of your short-term goals – include hands-on mentoring!

Other tips for your Career Development Plan

- Pay attention to required headings (check the FOA)

  - Candidate's Background

  - Career Goals and Objectives

  - Candidate's Plan for Career Development/Training Activities During Award Period

- Break up text with figures or tables

  - Include a timeline with major research and training milestones

  - Organizational chart of mentors w/ labels for who will provide what training

- Other tips

  - Including a discussion on networking opportunities (e.g., conferences you will attend)

  - Only include coursework if it's really needed (hands on training and mentoring is better)

  - Include a plan for experimental design and statistics

https://www.ninds.nih.gov/Funding/Training-Career-Awards/Mentored-Career-Awards/Suggestions-Good-Career-Development-Plan

All sections of career proposals are important – weave your central goals and selling points throughout each document

- Share your Specific Aims page and Training Plan with your letter writers and reference providers, as well as the writer of your Institutional Commitment section (commonly your Dept Chair)

- Make sure your biographical sketch matches – especially the Personal Statement

- Make sure the things you mention in the Description of Institutional Environment also appear in your Facilities & Other Resources or Equipment sections

- Your budget and budget justification also need to match the rest of your proposal – career awards are usually monetarily limited, but you are required to provide a detailed budget with the R&R budget form

Read through the review criteria before, during, and after writing each section of your proposal:

Definitions of review criteria and considerations for K applications:

https://grants.nih.gov/grants/peer/critiques/k.htm

Peer Review Criteria for AHA Career Development Award:

https://professional.heart.org/en/research-programs/application-information/career-development-award

Thank you!

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Save the Date!

- **February 2, 2022**

  Viridis Montis Early Career Investigator Challenge in Cardiovascular Disease

- **February 11, 2022**

  Early Career Research Awards Application Due

- **March 31, 2022**

  Early Career Advisory Board Membership Applications Due

- **April 11, 2022**

  CVRI Summer Research Fellowship Final Proposals Due

https://cvri-vt.org/

Cardiovascular Research
Institute of Vermont