

Getting a K99/R00 Award from the National Institutes of Health

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WORKSHOP • PRIMER • ANNUAL MEETING



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The following relationships exist related to this presentation:

No Relationships to Disclose

The Pathway to Independence Award

K99 – up to 2 years of mentored research

R00 – 3 years of independent research

Facilitates early-stage basic scientists to make a timely transition from a mentored post-doctoral research position to a stable independent research position earlier than is currently the normal transition time

Eligibility

- No more than 5 years of postdoctoral research training at the time of application OR resubmission
- No previous K grant or R01
- No previous tenure-track or independent research position

Submission Dates

New Applications: Feb / June / Oct 12

Resubmissions: March / July / Nov 12

<http://grants.nih.gov/grants/guide/PA-files/PA-11-197.html>

Grant Format

12 pages

I. Candidate Information (#1 Priority)

- Candidate's Background
- Career Goals and Objectives
- Career Development/Training Activities During Award Period

II. Research Strategy

- Significance
- Innovation
- Preliminary Studies
- Research Design and Methods

Additional Sections:

- III. Environment and Institutional Commitment to the Candidate
- IV. Statements by Mentor, Co-Mentor(s), Consultants, Contributors
- V. Training in the Responsible Conduct of Research

Candidate Background

- Research Productivity: Publications – number and quality, prior grants
- Research Training
 - Undergrad Research
 - Thesis Project
 - Post-doctoral Project
- Awards / Recognition

What successes in your past indicate that you can be successful in an independent career?

Career Goals and Objectives

What do you know?

What do you need to learn?

Role of mentors

How will the mentored phase (K99) lead to your independent career

Reiterate how the mentored research and independent research are different

Career Development / Training Activities

- Training

Classes - diversity

Seminar series

Visit outside labs to learn techniques

Grant writing

- Meeting with mentor(s)

- Advisory committee

- Visibility outside of your institute

- Job search

Mentor Letter(s)

Summary of past mentoring

Supportive – assigned desk, dedicated work space, funding to cover the K99 portion of the work

K99/R00 was developed and written by the candidate

How will the mentor evaluate progress – lab meetings, weekly meetings, annual reviews, milestones, expectations for publications, progress, etc.

State that candidate is free to take the project to an independent position

Reiterate the career development plan

Reviewers: Candidate Section

Overall: Is there evidence that this candidate has a high potential to become an independent investigator?

3 letters of reference: Do they demonstrate the potential for success as an independent investigator?

Does the mentor support the candidate?

Does the application provide evidence of research creativity and the ability to develop an independent research program?

Career Development Plan

My weaknesses:

“One thing that is missing is **diversity in her education.**”

“The list of **anticipated accomplishments is rather vague** and is not distinct from the activities the candidate has been conducting already.”

“A minor concern is that there is **no plan outlined** that will facilitate interaction of the candidate with other investigators in the field....”

“The main concern is that neither the candidate nor the sponsor provides any indication that they have considered **how the project will be divided** once Dr Pilon-Thomas achieves independence”

K99 FAQ

How should potential reviewer concerns regarding overlap with the mentor's line of research during the K99 phase of the award be addressed?

Candidates are strongly encouraged to include in their application:

- 1) a description of the mentor's research describing how it relates to his or her proposed research and career development plans
- 2) details of potential overlap and synergism.

It is reassuring to reviewers if this issue is addressed directly in a letter from the mentor.

Reviewers: Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)

What is the track record of the mentor(s)?

Does the mentor address strengths of candidate and areas needing improvement?

Level of supervision?

What is the plan to support the research during the K99 phase?

What is the plan to support the candidate's efforts for transition to independence?

Are the co-mentors appropriate and how do they contribute to the success and transition of the candidate?

Reviewers: Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)

“He has developed a mentoring plan that has a high likelihood of success.”

“The career development plan is also very clearly reiterated and supported by Dr. Mulé’s letter.”

Reviewers: Plans to Evaluate Progress

“The mentor will achieve evaluation of progress through weekly one-on-one meetings with the candidate and review of annual progress reports”

Training in the Responsible Conduct of Research

Document prior instruction – Grad courses, Institutional requirements: Moffitt has an annual “mandatory” training. USF requires bio-safety, IACUC, radiation safety, human subjects ethics courses.

Plans to receive additional instruction during training period:

1. Format: course, seminar series, annual recertification
2. Subject Matter: research ethics
3. Faculty participation – how will mentor participate
4. Duration of instruction
5. Frequency of instruction

Environment and Institutional Commitment

- **Description of Institutional Environment**
- **Institutional Commitment** to the Candidate's Research Career Development
 - 75% effort to development of research program
 - remaining effort to activities such as teaching, clinical duties
 - remaining effort cannot interfere or detract from the proposed career development plan

Reviewers: Environment / Institutional Commitment

Are the research facilities adequate?

Are educational opportunities available?

Is there a strong commitment to the candidate's success?

Is at least 75% of time dedicated to the proposed career development plan?

“The administrator guarantees the candidate 90% protected time and freedom from administrative responsibilities during the funding period”

Research Plan

Describe the relationship between the mentor's research and the candidate's proposed research plan

I. Specific Aims

II. Research Strategy

Significance – what important problem does your project address?

Innovation – novelty

Approach – preliminary data, overall strategy, methods, analyses, potential problems, alternatives, benchmarks

Sum it up with how the research in your mentored phase is important for the conduct of the independent research

Research Plan

For each aim: Describe research that is relevant to the proposed R00 research plan

-Include a brief description of research performed prior to mentored phase

-A description of the research planned during the mentored phase

-A detailed description of the research planned for the independent phase

What does the candidate need to accomplish during the mentored phase in order to compete successfully once independence is achieved?

Reviewers: Research Plan

Overall: Is there evidence of long-term viability of the proposed R00 phase research plan?

Is the proposed R00 phase research scientifically sound and a logical extension of the K99 phase research?

Is the research significant?

Strengths:

Outstanding preliminary data, potential problems and alternative studies are specifically proposed.

Weaknesses:

“the degree to which this project and its aims overlap, if at all, with any of the mentor’s funded projects is unclear.”

Summary of Discussion

Overall strengths:

the care with which it was prepared

the exceptional training environment

the outstanding track record of the sponsor

Overall weaknesses:

somewhat overly ambitious scope

the **lack of detail in the career development plan** as to how the project will be divided between the candidate and the sponsor

READ THE INSTRUCTIONS!!!!!!

NCI Specific Information:

Grants awarded by NCI under this announcement will be funded as Howard Temin Pathway to Independence Awards in Cancer Research.

The candidate's research proposal must be laboratory-based and must include research on the etiology, pathogenesis, prevention, diagnosis, control or treatment of HUMAN cancer. The proposed research may involve model systems, including animal models.

However, at some point during the grant period, the proposed research must include work on human cancer (includes human cancer cells or tissues).

Candidates must be able to identify an individual with extensive experience in human cancer research who can serve as a mentor for the initial mentored phase of this award.

NCI Contact Information

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