

Key Features of Mentored K Awards

- 3 – 5 years in length
- Provide substantial salary support but limited research funding.
- Contain both a training plan *and* a research plan.
- Includes a team of mentors, co-mentors, advisors, etc.
- Goal: transition to research “independence”.

K Support

- Salary
 - \$75,000 per year for 5 years
 - Varies by institute
 - Up to 75% of salary cap in “exceptional circumstances”
 - Or 75% FTE (50% for some specialties)
- Research funding
 - Up to \$25,000 per year for research and training expenses (exceptions up to \$50,000)
 - Allowable training expense examples
 - Tuition, books, travel

General Tips on Mentored K Awards

- Understand the *intent* of the mentored K award.
 - To help promising new investigators achieve research independence (i.e., to compete successfully for *R01 funding*).
 - Preparing for the R01 grant application you will submit at the end of the K award should be the *organizing principle* of the K grant application.

General Tips on Mentored K Awards (cont'd)

- Make a compelling argument why you need a K award
 - Explain exactly how additional training and mentored research experience will enable you to compete successfully for R01 funding.
 - Be specific: give concrete examples of areas where you need additional training or experience in order to conduct the proposed research or areas where you are deficient that are directly related to your research career goals.

General Tips on Mentored K Awards (cont'd)

- Develop a career development training plan that is *uniquely* suited to you.
 - Given your previous training and research experience, and your short- and long-term career goals, propose a mix of didactic training and “hands-on” research experience that make perfect sense for you (and only you).
 - Degree-granting programs are appropriate for candidates with little or no previous formal training in research, but even these programs should be “customized” whenever possible.

General Tips on Mentored K Awards (cont'd)

- For candidates with substantial previous formal training in research, a plan that emphasizes “hands-on” research experience is appropriate.
- Reviewers expect you to fully exploit the training resources available to you.

Writing a competitive mentored K award grant application

- 4 main sections of the grant application:
 - The Candidate
 - Statements by Mentors, Co-Mentors, and Collaborators
 - Environment and Institutional Commitment to Candidate
 - Research Plan
- Plus: 3-5 letters of recommendation*

The Candidate

- 2. Candidate's background
- 3. Career goals and objectives
- 4. Career development activities during award period
- 5. Training in the responsible conduct of research
 - Suggested length: 2-3 pages – remember, Sections 2 – 5 *plus* the Research Strategy section (Section 11) *combined* cannot exceed 12 pages.

The Candidate: Review Criteria

- Quality of the candidate's academic and clinical record.
- Potential to develop as an outstanding independent researcher.
- Likelihood that the career development plan will contribute substantially to the scientific development of the candidate.

2. Candidate's Background

- Suggested length: Less than 1 page.
- Using your NIH biosketch as your guide, provide a personal narrative of your professional career.
- Explain why you made key career choices (e.g., to pursue specific kinds of training opportunities or research projects).
- OK to use 1st person ("I").

2. Candidate's Background

- Give examples of the opportunities you've had to engage in research (basic or clinical), as evidence of your long-standing commitment to research.
- Highlight early evidence of productivity (e.g., pursuing a specific question, analyzing data, presenting or publishing your results).
- Describe any formal research training

2. Candidate's Background

- **Tip:** Begin this section with a summary statement regarding your long-term research career goals.
- **Example:** " My goal is to become an independent clinical investigator and leader in the study of To continue my progress towards this goal, I am proposing an observational prospective study addressing specific hypothesis surrounding the role of gastroesophageal reflux in

3. Career Goals and Objectives

- Suggested length: at least 2 paragraphs
- The research plan you propose should include some specific “challenges,” for which you need additional training and/or experience to accomplish successfully.
- These “deficits” in your training/experience then become the focus of your career development training plan.
- Describe the specific areas where you have deficiencies (e.g., primary data collection, biostatistics, qualitative research methods).

4. Career Development Activities During Award Period

- Suggested length: 1 - 2 pages.
- List the specific training areas you will pursue to acquire the new set of skills you need.
- Explain why gaining additional training and mentored research experience in these areas will be critical to achieving your short-term and long-term career development goals.
- Describe *in detail* how you will gain this training, such as through specific courses, individualized tutorials, or practical experience gained from conducting the research.

Review of training plan

- Appropriateness of the content, the phrasing, and the proposed duration of the career development plan for achieving scientific independence
- Consistency of the career development plan with the candidate's career goals
- Likelihood that the plan will contribute substantially to the achievement of scientific independence.

Formal Coursework

- If you will need to perform new tasks or require skills that can be taught in a course
- If have limited or no formal postgraduate education in research methods used in the conduct of the award
- List the courses, method of teaching, when you will enroll. Describe the course

Immersion Training Examples

- Laboratory techniques/methods – Working in a collaborator's lab
 - If you do this, be specific about when you will pursue this, how long
- Specific courses, workshops
 - Again, be specific

5. Training in the Responsible Conduct of Research

- This is important now but is more like a checkbox for the reviewer
- See boilerplate

Statements by Mentors, Co-Mentors, and Collaborators

- Assemble a complementary team
 - Choose a primary mentor who is a *senior* investigator with a track-record of NIH funding; your primary mentor should be at OHSU.
 - Include co-mentors who will complement the primary mentor's strengths.
 - Can you have mentors outside of Portland? Yes, just be cautious.

Mentors, Co-Mentors, and Collaborators

- Each member of your "team" must play a role in your training or research plan. Introduce each with a short paragraph.
 - Create a table of what each will provide.
- Establish a mentoring committee of 3-4.
- If you need to add additional members, call them *scientific* or *technical advisors/collaborators*, who have a relatively narrow area of responsibility and focus.
- Include an evaluation component that describes how your mentors will assess your progress (e.g., quarterly meetings); include specific milestones during the K award.
 - Include timeline, frequency of mentoring

Statements by Mentors, Co-Mentors, and Collaborators (Cont'd)

- Evaluation criteria for primary mentor:
 - Appropriateness of mentor's research qualifications in the area of this application.
 - Quality and extent of mentor's role in providing guidance and advice to candidate.
 - Previous experience in fostering the development of more junior researchers.
 - History of productivity and support.
 - Adequacy of support for the research project.)

Letters of Collaboration

- The letter from the primary mentor is key. It should cover the following areas:
 - His or her qualifications in the research area proposed by the candidate.
 - Previous experience as a research supervisor.
 - The nature and extent of supervision that will occur during the award period.
 - What resources, if any, they will make available to you in support of your training and/or research.

Primary mentor's letter

- The primary mentor's letter can also "re-frame" any potential weaknesses in the application.
 - Examples:
 - Productivity of candidate (e.g., few publications).
 - Feasibility of conducting research plan with resources of K award.
 - Limited mentoring experience of primary mentor.
 - Limited resources of primary mentor (e.g., no current R01 funding).
 - Co-mentor(s) not at OHSU.
 - Scientific overlap with primary mentor.

Letters of Collaboration (cont'd)

- Letters from co-mentors, scientific advisors, and others can be much shorter.
- Be sure to include description of the role of the co-mentor/scientific advisor.
- Make sure that letters are consistent with text in grant application (re: frequency of meetings, etc.).

Description of Institutional Environment

- Evaluation criteria:
 - Adequacy of research facilities and the availability of appropriate educational opportunities.
 - Quality and relevance of the environment for scientific and professional development of the candidate.
- Describe the research facilities and educational opportunities of the sponsoring institution (OHSU) that are related to the candidate's career development training and research plans.
 - Include relevance of each component to your career development plan.

Institutional Commitment to Candidate's Research Career Development

- Evaluation criteria
 - Applicant institution's commitment to the scientific development of the candidate and assurances that the institution intends the candidate to be "*an integral part of its research program.*"
 - Applicant institution's commitment to protect at least 75% of the candidate's effort for proposed career development activities.

Institutional Commitment to Candidate's Research Career Development (Cont'd)

- These assurances are stated in a letter from your department chair or division chief
 - Note: For fellows, this letter must state that you will be promoted from your current position to a "higher" position (ideally, to a full-time faculty position) during the K award period.

Letters of Recommendation

- 3 - 5 letters are required.
- They should be from senior investigators who have competed successfully for NIH funding and have been involved in the training of junior investigators.
- Can be from any period in your career (e.g., medical school, residency).
- Cannot be from your primary mentor or co-mentors.

Review of Research Plan

- Scientific and technical merit of the research question, design and methodology
- Relevance of the proposed research to the candidate's career objectives
- Appropriateness of the research plan to the stage of research development and as a vehicle for developing the research skills described in the career development plan
- Innovation! Does this create a niche for applicant?