

# K Awards: The Career Development Plan

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# 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*).
  - Therefore, 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 (e.g., MPH, MAS) are appropriate for candidates with little or no previous formal training in research, but even these programs should be “customized” whenever possible.



# Career Development Plan

Let's look at the RFA

[http://grants.nih.gov/grants/guide/pa-files/  
PA-14-044.html](http://grants.nih.gov/grants/guide/pa-files/PA-14-044.html)

# Most Important: Choose a Suitable Primary Mentor

- The right mentor
  - Productive and funded investigator in your area of endeavor
  - Track record of successful mentoring, including K Awardees
  - Willing to make a major commitment to your career development
  - Has the available time and not overcommitted to other trainees
  - Funding and resources available to support your research training above those from the K Award
  - Compatible and the right “chemistry”
  - Choose co-mentors (especially distant ones) with care!

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

- NIH guidelines (search **Career Development Plan**)
  - There are 3 places where you need to address the Career Development Plan
    1. Candidate Information, Candidate's Plan for Career Development/Training Activities During Award Period
    2. Environmental and Institutional Commitment to the Candidate, Institutional Commitment to the Candidate's Research Career Development
    3. Research Plan, Research Strategy

# Scoring: Career Development Plan/Career Goals and Objectives

- What is the likelihood that the plan will contribute substantially to the scientific development of the candidate and lead to scientific independence?
- Are the content, scope, phasing, and duration of the career development plan appropriate when considered in the context of prior training/research experience and the stated training and research objectives for achieving research independence?
- Are there adequate plans for monitoring and evaluating the candidate's research and career development progress?



# Scoring: Research Plan

- Are the proposed research question, design, and methodology of significant scientific and technical merit?
- Is the research plan relevant to the candidate's research career objectives?
- Is the research plan appropriate to the candidate's stage of research development and as a vehicle for developing the research skills described in the career development plan?



So how do you fold it  
into the grant?

# In the Research Plan

- Some disagreement if it should be included in your aims; however,...
- In the research plan, 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.
- Summarize in 1-2 paragraphs at the end of your research plan
  - Challenges
  - Training to overcome them

## In the Research Plan (cont'd)

- Describe the specific areas where you have deficiencies (e.g., primary data collection, biostatistics, qualitative research methods).
- **Example:** "I have made progress in developing my clinical research skills, but there are three important areas where I require additional training, mentoring, and experience: (1) multidisciplinary collaboration with clinical and basic scientists, (2) the design and implementation of prospective study design with involvement in the IPFnet, and (3) advanced study design and biostatistical methodology. In the following section, I present a detailed career development plan designed to enable me to acquire the additional training and mentored research experience I need to address these deficiencies and compete successfully for R01 funding, thereby achieving independence as a clinical investigator."



# Career Development Plan I

- Suggested length: 1–2 pages.
- This is defined by your Career Goals!
- So what are your career goals?
  - “To be an independently funded principal investigator studying the effect of physical activity on the outcomes of rheumatoid arthritis patients”
  - “To be an independently funded principal investigator studying the translation of a recently discovered rheumatoid arthritis disease mechanism into therapeutics for rheumatoid arthritis patients”
  - “To be a principal investigator for industry sponsored clinical trials in rheumatoid arthritis”
  - “To be a site principal investigator for industry sponsored multicentered clinical trials in rheumatoid arthritis”

# Career Development Plan II

- Domains
  - Training to gain substantive knowledge/skills
    - Clinical condition: epidemiology, clinical presentation, diagnostic tools, treatment, prognosis, prevention
    - Relevant “exposures” and “outcomes”
    - Conceptual model(s)
  - Training to gain methodologic knowledge/skills
    - Measurement of relevant “exposures” and “outcomes”
    - Study design and analysis techniques
  - Training in the responsible conduct of research
  - Training in professional advancement
    - AAMC Faculty Professional Development Courses

# Career Development Plan III

- Elements
  - Didactic component
    - Coursework (e.g. exercise physiology, outcomes measurement, epidemiology, biostatistics, clinical trials, clinical research ethics, writing for peer review)
    - Degree program (e.g. MS in Clinical Investigation, MS in Epidemiology/Biostatistics, MPH)
    - Workshops (e.g. annual Physical Activity and Public Health Course at Sea Pines, GA)
  - Experiential Component
    - Research Project
    - Participation in multidisciplinary research group(s)
    - Participation in local and national conferences and events

# Career Development Plan IV

- Expected measurable outcomes and time horizon
  - Coursework (degree) completed by....
  - Number and titles of abstracts submitted by..
  - Number and titles of papers submitted by..
  - First independent grant proposal submitted by....