Helping Your Mentees Develop a Competitive K Award Application
(K01, K07, K08, K23, K25, K99)

Thomas Mitchell, MPH
Department of Epidemiology & Biostatistics
University of California San Francisco
May 2010
Key Features of Mentored K Awards

- 3 – 5 years in length
- Provide substantial salary support ($50K - $180K per year) but limited research funding ($20K-$90K per year).
- Contain both a training plan and a research plan.
- Includes a team of mentors, co-mentors, advisors, etc.
- Goal: transition to research “independence”.
NIH Criteria for Evaluating Candidates

- Potential for conducting research.
- Evidence of originality.
- Adequacy of scientific background.
- Quality of research endeavors or publications to date.
- Need for further research experience and training.
NIH Criteria for Evaluating the Primary Mentor

- Appropriateness of mentor’s research qualifications in the area of the 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.
Main Components of a Mentored K Award Application

- Career Development Training Plan
- Mentoring Plan
- Institutional Commitment
- Research Plan
Developing a Career Development Training Plan

- Understand the *intent* of the mentored K award – which is to help new investigators achieve independence (i.e., to compete successfully for R01-level funding).

  Therefore, preparing for the R01 grant application that the candidate will submit at the end of the K award should be the *organizing principle* of the K grant application, which includes both a training plan and a research plan.
Career Development Training Plans (cont’d)

- Make a compelling argument why the mentee needs a K award.
  - Identify critical gaps or deficiencies in the mentee’s knowledge or skills.
  - Explain how additional training or mentored research experience in these areas will enable the mentee to compete successfully for R01 funding.
  - Be specific; provide examples.
Career Development Training Plans (cont’d)

- Develop a career development training plan that is *uniquely* suited to the mentee.
  - Given their previous training and research experience, mentees should propose a mix of didactic training and hands-on research experience that address the gaps or deficiencies in their knowledge or skills.
  - Fully exploit the training opportunities available.
  - The training plan should be as carefully thought out and presented as the research plan.
Developing a Mentoring Plan

- Describe your mentoring role.
- If you are the primary mentor, agree to meet with the candidate weekly throughout the K award.
- Include an evaluation component where you meet with other co-mentors/advisers as a group at least every 6 months to review the candidate’s progress.
- Include key milestones, such as completing coursework on schedule and submission of manuscripts and grant applications.
- Keep candidate focused on submitting a competitive R01-level application before the end of the K award.
Demonstrating Institutional Commitment

- Institution’s commitment to protect at least 75% of the candidate’s effort for the proposed career development activities.
- Institution’s assurance that the institution intends the candidate to be “an integral part of its research program.”
- These assurances are stated in a letter from the department chair or division chief.
  - Note: For fellows and post-docs, this letter must state that they will transition from their current position to a “higher” position (ideally, they will be recruited to a full-time faculty position) during the K award period.
Developing a Mentored K Award Research Plan

3 things to remember when designing a research plan for a mentored K award:

1. The research plan is a training vehicle. The research plan should be well integrated with the candidate’s training plan and provide an opportunity to acquire new skills.

2. The research plan is a means to achieve independence. The research plan should be viewed as a precursor for the next state of research – ideally, an R01.
3. Mentored K awards provide **limited funding**. The scope of the research plan needs to be appropriate and feasible, given the modest funding provided by a mentored K award ($25K-$50K/year).

- A “modular” approach is possible, which might include several small projects, such as secondary analyses of existing data, leveraging ongoing studies, or conducting a small pilot studies.

- All aims should be relevant and integral to the subsequent R01 grant application.
Insist on Good Grant Writing Work Habits

Don’t let your mentee procrastinate: Time is their greatest resource and most important asset.

1. Make sure they get started early (at least 4-6 months before the grant application is due).
2. Ensure steady progress; the mentee should arrange dedicated time each week for grant-writing.
3. Help them get constructive peer review at critical junctures, well before submission to the NIH.
4. Insist that they submit only their best work.
   1. Shoot for funding on the 1st round!
Grant Development Resources at UCSF

- **BREAD • Biostatistics, Research Ethics, and Design Program**
  
  Assistance can be provided in devising appropriate study designs; formulating hypotheses; defining appropriate outcome, predictor, and confounding variables; calculation of sample size and power; outlining appropriate data analysis strategies and tests; and writing or editing sections of the grant application.

- Up to 5 hours of free consultation for fellows/junior faculty applying for a career development award.

- Contact information: CtsiBread@ucsfmedctr.org
  Phone: 415-502-7893
Grant Development Resources at UCSF (cont’d)

- Grant Writing Workshop on Mentored Career Development Awards
  - 5-week workshop covering K01s, K08s, and K23s.
  - Free of charge/not for credit.
  - Offered 3 times/year: January, May, and September.
  - The next workshop will begin May 5.
    - Register online at: http://www.epibiostat.ucsf.edu/courses/schedule/grant_writing_spring.html