I. Level of Postdoctoral Experience

II. Why I decided to apply

III. Timeline

IV. Career Development Plan

V. Research Plan

VI. Institutional Support

VII. Tips and lessons learned
1. Ph.D. at UCSD in 2006. Advisor: Roger Tsien

   Two first author papers:


   One first author paper:


   Applied for K99/R00 October 2009.

   Reviewed Jan 2010: Impact/Priority Score = 11 (Highest score at NCI in 2010)

   Awarded 8/17/2010
Why I decided to apply

1. The best reason is obvious: to get an academic job!

2. Every postdoc in my lab applies after their 1st paper. Lab success rate is ~50%.
   
   This was a great resource, since my lab had 3 previous applications available.

3. Develop a research plan to carry forward to academic job search.

4. Have enough funds to do high quality research in my future lab.
Timeline

6 months in advance:
- Publish a 1st author paper as postdoc.
- Discuss K99 with advisor.
- Collect as much preliminary data as possible.

3 months in advance:
- Developed research plan with a strong hypothesis!
- Agree with mentor about independent research plans.
- Think of ways to integrate new approaches with a strong hypothesis.
- Choose an institute and tailor specific aims to their goals (NCI).
- Inform references they will need to write a letter
  (3 letters + 1 from your postdoc advisor)

1.5 month in advance:
- Get institutional approval and paperwork started.
- Stop doing research! Start writing your grant!
- Ask for letters of collaboration from any collaborators.

2-3 weeks in advance:
- Send a draft to your references so they can write strong letters.
- Get revisions from friends and your advisor.
- Submit!!! Don’t wait to the last minute!
1. Career Development (4 sections). Don’t copy from someone else!
   1. Candidates background. Write about your accomplishments. Talk about other research that may not fit into your K99.
2. Career Goals and Objectives
   1. Discuss your path to wanting to pursue an academic career
   2. What are the advantages to training in your lab.
3. Career Development / Training Activities During Award Period
   1. San Diego Lab Management Class
   2. Talk about things you want to learn, classes, etc.
   3. Discuss access to collaborators for help.
   4. Make an advisory committee (like a thesis committee). Have a few faculty agree to meet to supervise your progress during your postdoc. This is good for getting good letters in the future.
4. Training in the Responsible Conduct of Research
   1. Discuss opportunities for ethics training (required for all NIH grants).
Research Plan

1. Research Proposal
   1. INDEPENDENT research from your advisor.
      1. This is THE MOST IMPORTANT part of the application.
   2. 3 Specific Aims (for my grant)
      1. 1st was already done in unpublished work. This aim was technology development. Showed lots of preliminary data. This was proposed for completion during my postdoc.
      2. 2nd was mostly to be completed during my postdoc, with extensions to my future lab. This used the technology to test a hypothesis. Lots of preliminary data.
      3. 3rd was the furthest away from my current research and completely done in my future lab. This tested another set of hypotheses. Showed a lot of preliminary data.
   3. Integrate many approaches.
      1. I proposed mass spectrometry proteomics, organic chemistry, mouse models, fluorescence microscopy, and cell biology.
      2. Supported these approaches with preliminary data.

4. Pitfalls and Setbacks
   1. Be sure to provide backup plans when things fail.
1. Letters of recommendation
   1. Try to get people with a strong recognized mentoring history
   2. Give them lots of time.
   3. Be sure to give them a draft of your proposal to show them how serious you are.
   4. Instruct them to talk discuss your training potential in your postdoctoral lab and how this will help establish your independent career.

2. Institutional Support (department chair / advisor)
   1. My advisor offered to match the postdoctoral money to hire a research technician (all 3 reviewers loved this!).
   2. Explicit description of space and facilities. Don’t just copy someone else. Spend the time to make sure these are up to date and accurate.
   3. Make sure animal protocols are well written and approved.
Other Tips

1. Get an old application from someone who was funded.
2. This grant separates you from the other hundreds of applicants on the job market. Don't cut corners.
3. Make a strong hypothesis. This is essential to get funded.
4. You don’t have to do everything you propose. Just make sure you don’t leave any holes.
5. Don’t give away specifics in your narrative. This goes public!
6. Submit an update. Due approximately 1 month after submission date. Leave some preliminary data behind to show you have made progress.

Good luck!

Simple questions:

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