CAREER Proposal Tips
(Notes from NSF EHR Directorate CAREER Webinar 2/24/15)

Advice from Panel of CAREER Awardees (Faculty)

Timing/when to apply for CAREER

Consider applying for a CAREER proposal in the second year of your faculty appointment.

During the first year, spend time getting some early research results & papers, establishing relationships within and outside your department, and learning how to get administrative tasks done at your institution (i.e. how to hire postdocs, grad students, IRB, NSF reporting, etc).

In the year or two before you apply, engage in some pilot education outreach work. Leverage existing relationships. Position yourself so you have a track record and don't have to start from scratch.

Get familiar with your Sponsored Research Office and your grants analyst. Know what they do, what they don't do, what you must do.

Volunteer to serve as an NSF review panelist. This is the best possible preparation for writing your CAREER proposal.

Prepare & start early

Leave plenty of time to plan/write. Set aside some time every day.

Start early; February is not too early for a July submission (nine months is even better).

Ask for help

Look at successful CAREER proposals; many models and approaches can work. Ask peers if they will share their proposals with you (most will).

Leverage other people's expertise. Call experts in advance, tap into their knowledge.

Consider forming an Advisory Board at the proposal stage. Should ideally be composed of people you admire and would benefit from having as advisors for both research & education. The AB provides oversight & can augment evaluation of both research and education.

Selection and scope of research project

Be realistic, develop a timeline. Cut back 50% from what you originally think you can get done. Build in flexibility/back-up plans (i.e., what if plan A doesn't work, what's plan B?)

Pick an idea you love and want to spend a long period of time working on.

CAREER proposals should focus on how the proposed research will fit into and advance your career as a researcher and teacher. Many PIs are hesitant to talk so personally about themselves, but this is a strength in the CAREER proposal.

The ideal CAREER project should have specific goals & launch your research career, but it should have an accordion-like potential, i.e. side-projects or tentacles that allow your students to build their own projects.

The CAREER award allows you to develop your lab and your research team (postdocs, grad students, undergrads).

What are the educational implications of your research? Ask yourself: what opportunities can you, the PI, create to educate others in your lab who are in the process of establishing themselves and building their own careers?

Frame your very specific research interests with what else is going on in the field at large. What is the bigger picture? Your proposal should address these bigger picture issues.

General tips/advice

Be persistent. If you don't get funded in the first round, try again.

The CAREER grant can take up your whole life—it's a big undertaking.

GENERAL ADVICE FROM AN NSF PROGRAM OFFICER

Ideally, should apply for CAREER in the second year of your appointment.

CAREER eats up a lot of time, but does not provide that much money.

CAREER grants are not divided equally among NSF programs. Programs must agree to fund CAREER.

Interdisciplinary proposals are not common. This is a *single PI award*.

Take the time to carefully review the program solicitation and the Grant Proposal Guide. For CAREER you must respond to both the Program Solicitation and the PAPPG (NSF Proposal and Award Policies and Procedures Guide).

Writing/planning takes time. Plan before writing. The proposal is like a blueprint for a house. Start with a research idea or question, then ask where you would like to be in five years.

Know your audience: CAREER reviewers will be in your broad domain, but not necessarily in your specific field. Do not dive too quickly into the weeds.

Your proposed project should be well-grounded. Should not be so far out (i.e. way beyond what we know) that it is perceived to be unrealistic. The idea should be novel, sharp, clear, interesting. (Chase the ideas, not the money). Must have a sound rationale, and a mechanism for monitoring success in both your research plan and education plan.

Questions to ask yourself: 1) Is this a CAREER project? Parameters to consider: project should be feasible, last for five years, ideally produce interim results/goals so you can publish annually. 2) Do you have the expertise as an individual investigator to tackle the proposed project? 3) What resources are available to you? (e.g. collaborative arrangements, partnerships, relationships, equipment). 3) How will you integrate of research and education components (this is critical)? 4) What is your timetable for both research and education milestones? How can you build in flexibility to allow for unexpected set-backs/ contingencies? (Think: What if results turn out negative? What if the first year doesn't go as planned?)

Inform yourself about the basics of proposal budgeting and indirect costs. Berkeley PI's: Proposal budgeting basics can be found at the SPO website http://spo.berkeley.edu/procedures/budget.html). Your grants analyst can answer questions and help you with the budgeting process. Cultivate your relationship with your grants analyst and involve him/her early!

Review the literature pertaining to both the research and education plan.

An advisory committee is a good idea, for both education and research. Assemble Advisory Committee early—they can give advice on your proposal! During the project, the AC will provide you with feedback from experts in both research and education/Broader Impacts.