

NSF Career Grants

Hank Levy

Computer Science & Engineering

A little about CSE

- We are in COE but also have one foot in A&S
- We take awards very seriously
- We have a history of successful junior faculty awards:
 - 27 NSF Career Awards
 - 4 Presidential Faculty Fellow or Early Career (PECASE)
 - 5 Office of Naval Research Young Investigator Awards
 - 14 Sloan Research Fellowships
 - 2 Packard Fellowships
 - 2 Microsoft New Faculty Fellowships
 -more stuff
- These things are a lot of work – they don't happen by accident

About Career

- Supports future leaders in the field
- Typically 4 or 5 years to bootstrap your work
- Prestige – the best young faculty are “expected” to win awards like this

What NSF is looking for

- Research Vision – you need to show that you have vision for the future in at least two ways:
 - In the problem you've chosen to work on
 - In your approach to the research
- Academic Mission – you need to show that your interests are broader than the research itself, including:
 - Education, teaching, training
 - Outreach, participation of underrepresented groups
 - Development and dissemination of educational materials, experimental infrastructure, etc.
- ***BOTH of these (and their INTEGRATION) are critical to your proposal***

Specific NSF Evaluation Criteria

- “Intellectual Merit”
 - Importance of activity to advance knowledge and understanding
 - Creativity and originality
 - Significance of expected contributions
- “Broader Impacts”
 - Integration of research and teaching
 - Broadening participation of underrepresented groups
 - Developing experimental research and educational experiences
- *Reviews will be required to specifically address these two criteria!*
 - You want to “make it obvious” what to say 😊

More on criteria

- You should have a clear outline of work
 - How will you carry out the research?
 - What is your timeline?
 - How will you use results in education and outreach?
- You should make it clear *why you* are the person to fund
 - What skills, knowledge, or experience do you have that will convince me that you can do what you are claim?
 - What local resources are available that will help to make you successful?
 - Physical environment
 - Collaborations
 - Programs already in place (including education/outreach)
 - Mentoring

What if?

- If you get one: whoohoo!
- If you don't get one:
 - These things are always a crapshoot – not everybody wins the lottery with their first ticket
 - Not to worry -- you have several years to try again
 - The reviews will not tell you what really happened
 - Talk to your program officer, get feedback on what the committee liked and didn't, ask how to improve the proposal for next time