

Applying for an NSF CAREER Grant Workshop April 21, 2005

ESSENTIAL POINTS FROM PREVIOUS CoE CAREER WORKSHOPS

VISION

- **What do you want to do?**
- What do you know the most about?
- What are you the most enthusiastic about?
- **Where is your career going in 5 years and even longer?**
- Talk to Program Manager (CoE has program to help facilitate this – see Mary Heusner)
- Talk to a senior colleague with whom you can share your ideas

WRITING

- Focus on writing a decent story
- Write with different levels of detail
- Include figures if meaningful
- Heading: clearly states what reader will glean from each section
- **Write it early**

- Don't assume they know the jargon – write clearly
- Show it to colleagues in department
- Goal: must be readable by everyone, but technically precise
- Remember: many proposals are read on the plane
- Do a literature search, one of these people could be on the panel, know players in your field

- Redundancy can be included to emphasize the point
- Get familiar with NSF divisions and web site
- Research NSF awards in your field
- Good idea to research different NSF program divisions, but choose best fit for your project

COLLEGE MATCHING SUPPORT

- Not required by NSF
- CoE Faculty should talk to Mary Heusner (heusner@enr.washington.edu)

COLLABORATION W/ INDUSTRY

- Industrial Support letters – can show simply cooperation, doesn't have to be monetary
- Talk to Industrial contacts to get letters
- Letters should be **STRONG**
- You can write the letter yourself!

EDUCATIONAL / OUTREACH (BROADER IMPACT)

Research & Education

- Focus on integration of Research & Education
- There should be a synergy between R&E
- Study Science/Engineering Education Literature – this portion should be as scholarly as your technical research section
 - To learn about engineering education literature: visit Jim Borgford-Parnell (bjparnell@engr.washington.edu, 221-2633) in Center for Learning and Teaching (CELT)
- Assertions must have references
- **Examples of educational integration with research:**
 - Bringing into the course the kind of work you're doing in your research
 - Students conducting research in faculty lab
 - Make materials available on the web

Diversity

- Work with existing diversity infrastructure
 - ADVANCE Center for Institutional Change (faculty)
 - Center for Workforce Development
 - Office of Minority Affairs
 - CoE Diversity Programs
 - MESA (K-12)
 - DO-IT (Program for Disabled Students)
 - MSEP (Min. Sci. & Engr. Prog. for UG & Grads)
 - WiSE (Women in Science and Engineering for UG and Grads)
 - GenOM (Genomics Outreach for Minorities)

PANELIST PERSPECTIVE

Key points

- Creativity, vision
- Good read, story
- Credible researcher with respect to proposed research. Can he/she achieve scope
- Broader Impact / outreach must be included

Fatal Flaws

- Technical Errors
- Rambling, no clear story
- Absence of any remotely interesting outreach / broader impact

OTHER ISSUES:

NSF FastLane

- Check out the NSF FastLane web site
- Start entering on FastLane a couple weeks ahead of due date
- Print it out to see if figures replicate
- Remember Program Managers are not printing in color
- Leave yourself ample time to fix technical problems