

# **Making the Transition from Postdoc to Faculty/Permanent Researcher**

**– Funding Opportunities and  
the NSF**



# Division of Astronomical Sciences

- **Research & Instrumentation Grants (Annual Deadlines)**
  - Astronomy & Astrophysics Research Grants (AAG)
    - in all areas, e.g. extragalactic, galactic, stellar, planetary
    - supports any technique, e.g. observation, theory, laboratory
  - Research at Undergraduate Institutions (RUI)
  - Instrumentation program (ATI)
- **Support for conferences** (received anytime)
- **Supplements** to existing grants, e.g. support for undergraduates (anytime)



# Division of Astronomical Sciences

- NSF-wide programs administered in AST
  - Research Experiences for Undergraduates (REU)
  - CAREER (Faculty Early Career Development Program)
  - Research in Undergraduate Institutions (RUI)
  - Programs for under-represented minorities (Research Planning Grants, Career Advancement Awards)
  - Major Research Instrumentation (MRI)



# NSF Initiatives

- NSF-wide special programs and initiatives
  - ADVANCE (Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers - NSF 01-69)
  - Information Technology Research (ITR) (NSF 04-012)
  - Biocomplexity, Nanotechnology
  - Mathematical Sciences



# CAREER Program

- Faculty Early Career Development Program (CAREER)
  - hold tenure-track faculty (or tenure-track equivalent) position
  - can apply no more than three times
  - career development plan integrates research and education
    - “Successful applicants will propose creative, integrative, and effective research and education plans.”
  - 5 year duration, average award >\$500K over 5 years
- Deadline 22 July 2004 (announcement NSF 02-111)



# Office of International Science and Engineering

- Grants and fellowships programs
  - collaborative international work (students and faculty)
  - International Research Fellowships (postdoctoral and early career) (NSF 00-135)
  - many other programs in specific regions or countries
- <http://www.nsf.gov/sbe/int/start.htm>



# Education Programs

- Education & Human Resources Directorate
  - Undergraduate Education
    - Course, Curriculum, and Laboratory Improvement
  - Elementary, Secondary, and Informal Science Education
    - supplements for activities in informal science education
- <http://www.nsf.gov/home/ehr/>



# A few common problems in writing proposals

- Match the budget to the scope of the project
  - Ask for what you need, be realistic and justify your needs
  - Reviewers must be confident the PI can manage the project and personnel effectively
- Pay attention to review criteria
  - NSF criterion 2 - “Broader impact”
  - Any criteria specific to the program
- Describe roles of collaborators and include letters of commitment (not endorsement or recommendation)
- If students are involved, describe their roles and identify them if possible, especially thesis students



# NSF and You

- Remember NSF is there to help you get things done
  - Talk to the program officers, ask questions when you have them
  - Visit (and give talks) when you have a chance
- Serve on review panels and committees
  - Gain experience with programs
  - Understand the review process
  - Observe reviewer reaction to different ways of writing proposals
  - See lots of proposals (good and bad)



# AST Program Deadlines

- 24 January 2004: Major Research Instrumentation (MRI)
- 22 July 2004: CAREER
- 1 November 2004:
  - Advanced Technologies and Instrumentation (ATI)
- 15 September 2004: REU Sites
  - REU Supplements anytime
  
- 15 November 2004: Astronomy & Astrophysics Research Grants (AAG)
  - Extragalactic Astronomy & Cosmology
  - Galactic Astronomy                      - Stellar Astronomy & Astrophysics
  - Planetary Astronomy                      - Research at Undergraduate Inst (RUI)
- 15 January 2004: Underrepresented Minorities Programs
  - Research Planning Grants (RPG); Career Advancement Awards (CAA)

