

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)

