

National Science Foundation

**Funding Opportunities
for
Geoscience Education and Diversity**

Updated: August 2007



Visit the NSF Geosciences Directorate at:

<http://www.geo.nsf.gov>

NSF has published a new Proposal & Award Policies & Procedures Guide (NSF 07-140).

Find out more at:

<http://www.nsf.gov/pubs/policydocs/papp/nsf07140.pdf>

The **National Science Foundation** (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." The Directorate for Geosciences (GEO) is one of six research arms within the National Science Foundation. Its mission is to support research in the atmospheric, earth, and ocean sciences. As the principal source of federal funding for university-based fundamental research in the geosciences, GEO addresses the nation's need to understand, predict, and respond to environmental events and changes and to use Earth's resources wisely. Basic research in the geosciences advances scientific knowledge of Earth's environment, including resources such as water, energy, minerals, and biological diversity.

About the GEO Education and Diversity Portfolio GEO recognizes that active support of geoscience education and workforce development must be a significant element of GEO's mission to promote the overall health of the geoscience enterprise. This commitment extends beyond the familiar tradition of support for the training of graduate students to embrace geoscience education reform at the undergraduate and pre-college levels and active outreach to the public. Included in these activities are focused efforts to broaden participation of underrepresented minorities in the geosciences.

GEO supports innovative projects in these **key areas**:

- Creating an effective and knowledgeable geoscience teacher workforce
- Providing meaningful research experiences for K-12 and undergraduate students
- Providing outreach to the general public on relevant geoscience topics and current research
- Building capacity in the geosciences at Minority Serving Institutions
- Conducting research on effective geoscience education practices
- Preparing a diverse and capable workforce that can pursue the wide variety of geoscience career paths
- Increasing opportunities for learning about geosciences and NSF supported research in these fields

Other NSF programs that support education and diversity activities related to the geosciences:

- Research at Undergraduate Institutions (RUI) - **NSF #00-144**
- Research Experiences for Teachers (RET) – **NSF #03-056**
- Research Experiences for Undergraduates (REU) – **NSF# 07-569**
- Faculty Early Career Development (CAREER) – **NSF# 05-579**
- Cyberinfrastructure for Training, Education, Advancement, and Mentoring (CI-TEAM) – **NSF# 07-564**
- Ethics Education in Science and Engineering (EESE) – **NSF# 07-541**
- Course, Curriculum, and Laboratory Improvement (CCLI) – **NSF# 07-543**
- Information Technology Experiences for Students and Teachers (ITEST) – **NSF# 07-514**

For additional information please visit www.nsf.gov.

MyNSF (<http://www.nsf.gov/mynsf/>) allows you to receive notifications about new content posted on the NSF website, including new funding opportunities. Notification can be received via email or RSS. Here are some basic points about how it works:

- After subscribing, be sure to create your "profile" of publications you want to be told about.
- This automatically creates a custom web page for you, which you access using your email account.
- You can choose to be notified via email when new documents matching your profile are added to the NSF Online Document System. Emails include links to the electronic location of each document, and/or full text of short documents.
- A weekly email alert listing all documents added the previous week is available under "Notification Options" when you set up or modify your profile.

Geoscience Education (GeoEd)

The GeoEd program aims to improve the quality of geoscience education at all levels; increase the number and competency of Earth & Space science teachers at K-12 levels; demonstrate the relevance of careers in the geosciences; increase the number and diversity of students enrolling in geoscience courses and degree programs at all educational levels; and increase the public's understanding of geoscience-related concepts and issues.

Solicitation # **NSF 05-609**

Next proposal deadline: November 15, 2007

Notes: Biannual competition that accepts Track 1 (max \$150k; <2 years) and Track 2 (max \$500k; <4 years) proposals.

Opportunities for Enhancing Diversity in the Geosciences (OEDG)

The OEDG program seeks to increase the participation of students from underrepresented groups in STEM disciplines (i.e., African-Americans, Hispanics, Native Americans and persons with disabilities) in geoscience education and careers, and increase awareness about the geosciences among these communities.

Solicitation # **NSF 04-590** (expired)

Next proposal deadline: To Be Announced, Expected to be Fall 2008

Notes: Biannual competition that accepts Track 1 (max \$100k; <2 years) and Track 2 (max \$2m; <5 years) proposals. A new solicitation be released in early 2008.

Global Learning and Observations to Benefit the Environment (GLOBE)

The GLOBE program is an international program for elementary and secondary teachers and students world wide, who engage in hands-on investigations and environmental observations to monitor and understand planet Earth, in collaboration with members of the scientific community. The program has been in existence since 1996.

GLOBE is a collaborative program managed in partnership with NASA, which provides support for the GLOBE Program Office at the University Consortium for Atmospheric Research (UCAR). NSF provides support for members of the geoscience research community engaged in Integrated Earth System Science Projects (IESSPs) to design, implement, and maintain investigation protocols and related activities for GLOBE students and teachers.

Solicitation # **NSF 06-515** (expired)

Next proposal deadline: To Be Announced, Expected to be 2010

Notes: This competition is held every four years. A new solicitation is expected to be released in late 2009.

Geoscience Teacher Training (GEO-Teach)

The GEO-Teach program supports projects designed to have a transformative effect on improving the quality of geoscience instruction nationwide, primarily at middle and high school levels. GEO-Teach projects are providing teachers with easy access to high-quality curricular materials as well as the current state of scientific knowledge. The goal of this program is to identify effective strategies for widely disseminating pre-service teacher training and in-service professional development programs that emphasize an Earth system science approach, inquiry-driven student learning, and integration of research and education, in order to enhance students' understanding of and appreciation for the importance of the geosciences.

Solicitation # **NSF 06-526** (expired)

Next proposal deadline: To Be Announced, Expected to be 2009

Notes: A new solicitation is expected to be released in early 2009.

The above programs are managed by the GEO Office of the Assistant Director (OAD). For additional information, please contact:

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Centers for Ocean Science Education Excellence (COSEE)

GEO's Division of Ocean Sciences supports a coordinated network of COSEE centers. COSEEs facilitate collaborations and communications between ocean science researchers and educators; foster the integration of ocean research into high-quality educational materials; help ocean researchers to gain a better understanding of educational organizations and pedagogy; provide educators with an enhanced capacity to understand and deliver high-quality educational programs; and provide material to the public that promotes a deeper understanding of the ocean and its influence on quality of life and our national prosperity.

Solicitation # **NSF 05-527**

Next proposal deadline: March 03, 2008

For additional information regarding COSEE, please contact:

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Division of Earth Sciences Education and Human Resources (EAR/EHR)

The EHR program managed by GEO's Division of Earth Sciences facilitates activities that engage a wide range of audiences in EAR research efforts. To this effect, the following types of activities are supported: 1) postdoctoral experiences outside the framework of normal NSF research grants; 2) research experiences for undergraduate students (including NSF-wide REU program); and 3) education activities both inside and outside the classroom through CAREER proposals and supplements to existing research grants. A new program solicitation for the EHR program is currently under development.

Solicitation #: Expected to be issued in Fall 2007

Next proposal deadline: Open

For additional information regarding EAR/EHR, please contact:

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