

National Science Foundation 4201 Wilson Boulevard Arlington, Virginia 22230

NSF 12-121

## Dear Colleague Letter - Changes to the Directorate for Geosciences (GEO) Education and Diversity Programs for Fiscal Year 2013 and Solicitation of Community Input Regarding Broadening Participation Programs in the Geosciences

DATE: September 17, 2012

The purpose of this Dear Colleague Letter (DCL) is to notify the geoscience education and research communities, and relevant stakeholders, of important changes being made to some of the Directorate for Geosciences (GEO) education-related programs, and to invite community input to help shape future priorities for programs that encourage broader participation in the geosciences. Effective immediately, GEO will be revising its portfolio of investments related to geoscience education and diversity. This portfolio includes the following affected programs:

- Opportunities for Enhancing Diversity in the Geosciences (OEDG)
- Geoscience Education (GeoEd)
- Geoscience Teacher Training (GEO-Teach)

In response to several recent reports from the President's Council of Advisors on Science and Technology (PCAST), among other high level documents concerning STEM education and workforce needs, NSF is undertaking several new initiatives to re-invigorate and strengthen funding opportunities that support advancements in STEM learning and development of the future STEM workforce. A major focus of the changes being proposed is fostering much stronger integration of the learning sciences and the disciplinary research that NSF supports.

In light of these evolving NSF-wide priorities, GEO has begun an effort to re-balance its investments related to geoscience education. This effort is being undertaken to ensure better alignment between GEO's programs and those being offered through the Directorate for Education and Human Resources (EHR) and to establish opportunities through which GEO's funding resources can be used most effectively to address the priority needs of the geoscience education community.

Consistent with this re-balancing effort, the *GEO-Teach* program was retired as of **August 1, 2012**. NSF does not expect to issue a new program solicitation for this program.

*GeoEd* is undergoing significant review and restructuring. The current solicitation (NSF 10-512) has been archived.

The *Opportunities for Enhancing Diversity in the Geosciences (OEDG)* program solicitation has also been closed, pending revision The current *OEDG* program solicitation (NSF 10-599), which previously announced a competition for Track 1 and Track 2 proposals during Fall 2012 (original proposal submission deadline of October 10, 2012), has been archived to indicate this change in status. During the next few months, NSF will work with the geoscience education and research communities to synthesize insights gained through the past ten years' worth of *OEDG* investments, identify additional needs and opportunities related to broadening participation of underrepresented groups in the geosciences, and develop a new program solicitation that reflects emerging priorities related to diversity in the geosciences and has a scope that is consistent with budgetary constraints.

At this time, NSF anticipates that a revised *OEDG* solicitation will be issued in Fiscal Year 2013 (FY 2013). In order to shape the direction of a revised *OEDG* program, NSF seeks community input in two areas: (1) identifying the critical needs regarding efforts to engage, recruit, and retain underrepresented students in the geosciences and broaden public Earth System Science literacy among diverse communities; and, (2) contributing ideas for how best to engage relevant stakeholders and communities for addressing those needs, given budgetary constraints. Modest proposals to support community workshops that focus on identifying needs or best practices regarding broadening participation in the geosciences will also be entertained at any time, if submitted in accordance with the NSF Grant Proposal Guide (http://www.nsf.gov/publications/pub\_summ.jsp?ods\_kev=gpg).

This DCL is not a request for submission of a single research proposal idea; rather, it is meant to generate potential topic areas that are forward-looking, innovative, and potentially transformational over significant scales. You may submit your comments and ideas through brief (less than one-page) descriptions by visiting <u>http://www.nsf.gov/geo/oedg/index.cfm</u>. Please follow the instructions provided.

The deadline for submission of comments is November 1, 2012.

Receipt of these short statements does not signify adoption, endorsement, or approval of the content by NSF. The content remains the property and opinion of the contributor. No personally identifiable information will be collected and no awards will be made for these submissions. NSF will not be able to send individual feedback to those submitting comments.

Jill Karsten Program Director, GEO Education and Diversity

## BACKGROUND

The *OEDG* Program was established in FY 2002 to serve a critical role in focusing the geoscience community on efforts designed to address the fact that certain groups are underrepresented in the geosciences relative to their proportions in the general population. The primary goal of the *OEDG* Program has been to increase participation in the geosciences by African Americans, Hispanic Americans, Native Americans (American Indians and Alaskan Natives), Native Pacific Islanders (Polynesians or Micronesians), and persons with disabilities. A secondary goal of the program has been to increase the perceived relevance of the geosciences among broad and diverse segments of the population. The *OEDG* Program has supported a variety of effective pilot projects and full-scale projects that include activities to increase the number of members of underrepresented groups who:

- Are involved in formal pre-college geoscience education programs;
- Pursue and earn Associate's, Bachelor's, Master's, and Doctoral degrees in the geosciences;
- Enter geoscience careers; and
- Participate in informal geoscience education programs, including research experiences.

After a decade of OEDG investments, and in light of other recent advances in the science of broadening participation, the time is right for taking a short hiatus in order to review the accomplishments and impacts of our past investments and reconsider where the emphasis should be placed in OEDG program solicitation priorities going forward. The "Strategic Framework for Education and Diversity, Facilities, International Activities, and Data and Informatics in the Geosciences" document

(<u>http://www.nsf.gov/geo/acgeo/geovision/geo\_strategic\_plans\_2012.pdf</u>) released in 2012 as a companion to the GEO Vision Report, articulates GEO's overarching objectives and near-term priorities for advancing the geoscience community's goals related to broadening participation. This framework acknowledges the complex factors that challenge our ability to engage a more diverse geoscience community and identifies a

number of potential areas of investment. During FY 2013, NSF needs to identify the most important targets for funding, as well as the most efficient approaches for engaging relevant stakeholders and implementing/scaling-up evidence-based best practices and resources, so as to optimize its return-on-investment.

## YOUR OPPORTUNITY TO CONTRIBUTE

## Submit Via OEDG2012 Link: http://www.nsf.gov/geo/oedg/index.cfm.

The comments and ideas that you submit should provide forward-looking views, informed by current research on broadening participation in STEM. Comments that identify community opportunities to leverage other NSF or Federal agency resources to achieve maximum impact related to broadening participation in the geosciences are especially encouraged. The comments should not simply summarize or justify your own ongoing research, education or outreach activities. Note that topics that can be addressed through other funding opportunities at NSF (e.g., the programs in EHR/HRD) should not be included. NSF staff will review all submitted comments/ideas, in consultation with external experts. NSF expects to synthesize these comments and convene webinars and online discussions with the geosciences community later in the fall, to further refine concepts that may ultimately be incorporated in a revised *OEDG* program solicitation.

"Prepare and Inspire: K-12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future" (2011) [http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-stemed-report.pdf]; "Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics" (2012) [http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final 2-25-12.pdf]