NSF 14-064

Dear Colleague Letter - Stimulating Research on Effective Strategies in Undergraduate STEM Education at Two-Year Hispanic Serving Institutions

April 22, 2014

Colleagues:

NSF invites proposals that address effective approaches in undergraduate science, technology, engineering, and mathematics (STEM) education for students at two-year Hispanic-Serving Institutions (HSIs). This Dear Colleague Letter (DCL), which encourages research on the science of broadening participation and related STEM education areas, is one of two DCLs highlighting funding opportunities focused on students at HSIs in STEM in fiscal year 2014.

NSF encourages the submission of proposals for Early Concept Grants for Exploratory Research (EAGER) and Conferences, Symposia, and Workshops that focus on evidence-based practices that have been shown to be particularly effective for students at HSIs, as well as exploratory research that may lead to new models and best practices. Examples of appropriate topics include:

- Understanding factors that will lead to improved retention of students in STEM programs at twoyear HSIs
- Understanding barriers and challenges that prevent the transfer of students at two-year HSIs to four-year colleges; understanding factors that promote the transfer of students including articulation agreements
- Improving the quality of STEM undergraduate academic and research experiences at two-year HSIs
- Research on strategies that enhance interest and motivation of students and improve persistence and graduation rates in undergraduate STEM programs at HSIs through innovations in STEM curricula, instructional materials, and research experiences
- Building capacity at HSIs through collaborations with majority institutions that support faculty research, professional development, and mentoring

SUBMISSION DEADLINE

Proposals must be submitted by May 31, 2014.

FUNDING LEVEL AND AWARD DURATION

- EAGER: Up to \$300,000 and two years duration
- Conferences, Symposia, and Workshops: Up to \$50,000

PARTICIPATING DIRECTORATES AND PROGRAMS

The following NSF Directorates and Program Offices will accept inquiries and submissions of EAGER proposals and proposals for Conferences, Symposia and Workshops:

BIO: DBI, DEB, Contact the cognizant program officer in the appropriate Biological Sciences EF, IOS, MCB Organization & Program. http://www.nsf.gov/dir/index.jsp?org=BIO EHR: A. James Hicks Program: Louis Stokes Alliances for Minority Participation Bridges to the Tasha Inniss Baccalaureate http://www.nsf.gov/funding/pgm_summ.jsp? pims_id=13646&org=HRD&from=home Dave Brown Programs: Advanced Technological Education http://www.nsf.gov/funding/pgm_summ.jsp? pims_id=5464&org=DUE&from=home John Krupczak NSF Scholarships in Science, Technology, Engineering, and Mathematics Paul Tymann http://www.nsf.gov/funding/pgm_summ.jsp? pims_id=5257&org=DUE&from=home Improving Undergraduate STEM Education Myles Boylan http://www.nsf.gov/funding/pgm_summ.jsp? pims_id=504976&org=DUE&from=home CISE: Jan Cuny Contact the CISE program officer listed for information on participating programs. http://www.nsf.gov/dir/index.jsp?org=CISE ENG: Bevlee Watford Contact the ENG program officer listed for information on participating programs. http://www.nsf.gov/dir/index.jsp?org=ENG GEO: Lina Patino Contact the GEO program officer listed for information on participating programs. http://www.nsf.gov/dir/index.jsp?org=GEO OIA: Randy Phelps Program: Major Research Instrumentation Kathleen http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5260 McCloud Program: Science and Technology Centers Dragana Brzakovic Joan http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5541 Frye MPS: AST, CHE, Contact the cognizant program officer in the appropriate Mathematics and DMR, DMS, Physical Sciences Organization & Program. http://www.nsf.gov/dir/index.jsp?org=MPS PHY SBE: Sally Dickerson Division of Behavioral and Cognitive Science http://www.nsf.gov/div/index.jsp?div=BCS

Division of Social and Economic Sciences http://www.nsf.gov/div/index.jsp?div=SES

Linda Lavne

SPECIAL INSTRUCTIONS

Please contact the Program Director or Division listed above prior to submission to ensure that the proposed idea is in compliance with the program of interest.

Proposals should be prepared and submitted in accordance with the guidance in the NSF Proposal and Award Policies and Procedures Guide, Part I: Grant Proposal Guide (GPG) (NSF 14-1): http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg. Specific instructions for EAGER proposals are found in Chapter II.D.2 of the GPG and specific instructions for proposals for Conferences, Symposia, and Workshops are in Chapter II.D.8.

The following resource is designed to help with educational research proposal preparation: *Common Guidelines for Education Research and Development (NSF 13-126). This new* publication was jointly developed by the National Science Foundation and the Institute of Education Sciences in the U.S. Department of Education and describes six types of research studies that can generate evidence about how to increase student learning. The Common Guidelines may be accessed at the following link: http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf. A set of supporting FAQs is also available: http://www.nsf.gov/pubs/2013/nsf13127/nsf13127.pdf

Sincerely, Joan Ferrini-Mundy, Assistant Director Directorate for Education and Human Resources

Participating Directorates and Offices

Directorate for Biological Sciences (BIO)

Directorate for Computer and Information Science and Engineering (CISE)

Directorate for Education and Human Resources (EHR)

Directorate for Engineering (ENG)

Directorate for Geological Sciences (GEO)

Directorate for Mathematical and Physical Sciences (MPS)

Directorate for Social, Behavior, and Economic Resources (SBE)

Office of Integrative Activities (OIA)