An Overview of NSF REU Site Program in Geosciences

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Division of Polar Programs
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News from NSF

- NSF Moving Headquarters
- America Competes Act 2010 – under revision
- NSF STEM Education Update
- Budget update
- Division News
  - AGS
  - EAR
  - OCE
  - PLR
NSF Moving to New Building in Alexandria

GEO Move dates are set for September, 2017
(1) at least half of the students participating in a [REU] program...shall be recruited from institutions of higher education where research opportunities in STEM are limited, including 2-year institutions;

(6) student participants are tracked, for employment and continued matriculation in STEM fields, through receipt of the undergraduate degree and for at least 3 years thereafter.
What is happening at NSF now?

- Improving Undergraduate STEM Education (IUSE) programs
  - IUSE: EHR – research on undergraduate education
    - NSF 15–585  Deadline Nov. 2nd and January 11th
  - IUSE: GEOPATHS

- Broadening Participation
  - INCLUDES – EHR
  - GOLD – GEO

- PLR issued Dear Colleague Letter for collaborations with EHR–IUSE, AISL and DRK–12
INCLUDES

- Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science
- Press Release 16–104
- 37 projects

GOLD

- GEO Opportunities for Leadership in Diversity
- Cultivate Geoscience “diversity champions”
  - Leadership
  - Professional Development
GEOPATHS

Increase the number and diversity of students
Prepare students for any geoscience career
Build on & contribute to the evidence base

EXTRA IMPACT

NSF 16-584
Research Experiences for Undergraduates (REU)
In FY 2017, $53 million in funding is requested for the Research Experiences for Undergraduates (REU) Sites and Supplements program, a decrease of $20M below the FY 2015 Estimate of $73M.

BUT: GEO REU funding is level.
GEO REU PRIORITIES

• GEO encourages new models for REU sites. REU sites should contribute to the intellectual merit of REUs (not only the scientific contributions)

• Before major conferences (AMS, ASLO, GSA, AGU, etc.) please email Lisa, Manda, or Lina a list of any REU related presentations (students, mentors, PIs)

• Recruitment of participants from underrepresented backgrounds and from MSIs continues to be an issue.
Annual Reporting

- We are no longer encouraging the early submission of student names for your reporting purposes.

- Students are not filling out the NSF survey, so we are looking for other ways to collect data on student applicants.

- GEO may be participating in experiments to test new systems.
AGS REU News

• REU Program is now centrally managed in AGS (all proposals go to one PO)

• AGS encourages international REU sites

• AGS encourages more engagement with community college students and students in their first or second year of college

• AGS will be moving to a uniform date for students to accept/decline an REU spot
Minorities in AGS

Minorities AGS 2009-2016


0% 5% 10% 15% 20% 25% 30%

African Americans  Native Americans  Hispanic/Latino(a)s
Pacific Islanders  Asians
All EAR-funded REU Sites **must give students until March 15th or LATER** to accept/decline their offers regardless of the application deadline.

Award letter for new REU sites indicates that PIs must **submit additional data when requested**.
OCE REU News

• No Repeats Rule in effect, but exceptions are frequently approved;

• March 15th or LATER for student acceptance notice

• Award letter for new REU sites indicates that PIs must submit additional data when requested.
OCE REU Student Participation by Gender


Gender: Male (blue), Female (red)
Welcome REU supplements & REU requests that are part of new research proposals

Each program considers REU supplement and Site requests separately

PIs are encouraged to submit REU Site proposals even if they don’t involve field work

PLR Special Initiatives (Rom) will consider supplements to REU programs for students who are working with Polar-funded mentors

Call your program officer prior to submitting any proposal!
Questions?

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OCE Number of REU Minority Students 2009–2016

Total REUs in 2009 = 201
Total REUs in 2016 = 288

Number of REU Students Participating

- African Americans
- Native Americans
- Hispanic/Latino(a)s
- Pacific Islanders
- Asians

Axis Title
Long-term Trends in GEO REU

2012 Data

Ethnicity of Participants

- Number of African Americans
- Number of Native Americans
- Number of Hispanic/Latino(a)s
- Number of Pacific Islanders
- Number of Asians
- Number of Caucasian

AGS

OCE

EAR
Long-term Trends in GEO REU

From NSF Intern Presentation by Gonzales, 2012
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