



Diversity, Equity, and Inclusion in NSF Broader Impacts

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Motivation



More to diversity than just recruiting students from underrepresented groups

Great value in Broader Impacts sections of research proposals to NSF

Lack of diversity in marine science and related disciplines

Understanding benefits of diversity quantitatively

Why Diversity Matters



Diverse teams are...

- More profitable
- Make better decisions
- More innovative
- More often cited

...smarter?

Objectives



Communicate the value NSF places on the broader impacts (BIs) sections of research proposals

Underscore the value of meaningful efforts to make underrepresented students feel valued and included

Convince you that putting significant effort into BI sections will pay off in two ways:

- Securing funding
- Actually increasing diversity in STEM graduates and the workforce





Diversity, Equity, and Inclusion in NSF Broader Impacts Question and Answer Session

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References and Resources

The Diversity-Innovation Paradox in Science Hofstra et al. 2020

Why Diverse Teams Are Smarter Rock and Grant 2016

How Diversity Makes Us Smarter Phillips 2014

<u>Gender-Heterogeneous Working Groups Produce Higher Quality Science</u> Campbell et al. 2013

Barriers to fieldwork in undergraduate geoscience degrees Giles et al. 2020

No progress on diversity in 40 years Barnard and Cooperdock 2018

Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do Steele 2010

NSF programs



Geosciences

- Geoscience Opportunities for Leadership Development (GOLD)-Expanded Network (EN) Dear Colleague
 Letter NSF 20-058
- <u>Improving Undergraduate STEM Education: Pathways into the Earth, Ocean, Polar and Atmospheric & Geospace Sciences (IUSE:GEOPAths)</u>
- Coastlines and People (CoPe)

NSF-wide Programs

- Research Experiences for Undergraduates (REU) "supplement" and "Site" proposals
- Faculty Early Career Development Program (CAREER)
- Inclusion Across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)
 - Planning Grants
 - Alliances