



# *Diversity, Equity, and Inclusion in NSF Broader Impacts*

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# Motivation

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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

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## Diverse teams are...

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

...smarter?

# Objectives

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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***

Leslie Ponciano, CSU Chancellor's Office

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***Diversity, Equity, and Inclusion in NSF  
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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

[Gender-Heterogeneous Working Groups Produce Higher Quality Science](#) 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](#)
- [Improving Undergraduate STEM Education: Pathways into the Earth, Ocean, Polar and Atmospheric & Geospace Sciences \(IUSE:GEOPATHs\)](#)
- [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](#)