



# **FOSTERING DIVERSE COMMUNITIES AT RESEARCH INTENSIVE INSTITUTIONS:**

**The Center for Inclusive Education as  
a community building space for underrepresented and  
underrepresented minority scholars**

Toni Sperzel, Director, Center for Inclusive Education  
Karian Wright, Program Manager, Center for Inclusive Education  
Stony Brook University  
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- If a scientific team wants to be innovative, it must be diverse. Psychology, sociology, economic and demographic research continues to prove that diversity makes us smarter (Page, 2008).
- With the ever-increasing diversity of our population, it is a national imperative that institutions of higher education take responsibility for preparing *all* scholars to communicate, collaborate, and innovate within a diverse community of scientists from a position of respect, understanding and advocacy. Failure to do so will continue the trend of diverse scholars choosing to leave the STEM career pathway, which will directly impact our nation's ability to grow and maintain a productive STEM workforce (National Academies, 2007).



- The departure of underrepresented scholars from STEM fields is occurring at an alarming rate.
- Women and ethnic minority groups are now estimated to make up 70% of college-aged students, but only 45% of students who receive STEM undergraduate degrees (Olson & Riordan, 2012).
- This data does not even consider the number of scholars who identify as disabled, veteran, or coming from a poverty-level economic background, or scholars who may identify as members of the lesbian, gay, bisexual, transgender and queer (LGBTQ\*) community, a group which recent data reports have also shown to experience discrimination, discomfort, isolation and exclusion in STEM fields (Atherton et al., 2016; Partridge, Barthelemy & Rankin, 2014; Moran, 2017).



When a stigmatized person becomes aware that their stigmatized status may be relevant in a particular context, they may become vigilant and increase attention for environmental cues relevant to potential prejudice and discrimination.

- Critical to STEM graduate student success, stereotype threat can lead to:
  - **Reduced Openness to Feedback**
  - **Reduced Domain Identification**
  - **Reduced Engagement**
  - **Reduced or Changed Career Aspirations**

(Casad & Bryant, 2016)

These reductions directly impact persistence in STEM disciplines



When underrepresented graduate students perceive that faculty in their academic environment value natural intelligence (Fixed Mindset) and brilliance over hard work (Growth Mindset) and effort, it undermines their sense of belonging and confidence. This perception sets a groundwork for future experiences of facing advisors and mentors who take a “fixed intelligence” approach to interacting with their protégés (Dweck, 2006, Clark, Dyar, Maung, & London, 2016).



- 1) Create Community – connecting underrepresented minority (URM) scholars across academic programs to create connections and foster sense of belonging
- 2) Engage Academic Departments- work with graduate programs to identify critical junctures in degree pursuit where URM scholars encounter academic, research, and identity obstacles
- 3) Provide Peer mentorship – Connect Scholars across career points to share just-in-time guidance and support through critical junctures in the PhD pathways
- 4) Create opportunities for peers to share the community value and public impact of their research efforts (Gibbs & Griffin, 2013)



# Integrate Physical Cues: Including photos and posters of diverse people and groups engaged in research activity





## Signal Institutional Valuing of Diversity: Including diverse researchers in departmental events, programming and curriculum







Cultivate a Community of Support: Train advisors and peers on giving wise feedback from a growth mindset perspective (Cohen, Steele, & Ross, 1999; Yeager et al., 2013)





Stony Brook University



The Center for Inclusive Education  
Stony Brook University  
Computer Science Suite 2401  
Stony Brook, NY 11794-4422  
[CIE\\_graduateschool@stonybrook.edu](mailto:CIE_graduateschool@stonybrook.edu)



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