

**Stream Proposal for EDI Conference 2024,  
Seville, Spain**

**Topic:** Structural, Cultural, and Climate Barriers to Promoting Gender Equity in STEM

**Submissions to the Stream:** The stream chair welcomes 5-page abstracts, as well as full papers, related to the stream topic, “Structural, Cultural, and Climate Barriers to Promoting Gender Equity in STEM” with a submission deadline of February 16, 2024. All submissions will be subjected to peer review with two referees for each paper. Authors will receive feedback regarding whether their paper has been accepted by 8 March 2024.

**Stream Chair:**

Dr. Georgina M. Montgomery  
Professor, Lyman Briggs College  
Michigan State University

**Stream Outline:** Diversity in science is important for many reasons, including providing mentorship for an increasingly diverse student body; promoting more equitable, representative, and responsive science; increasing innovation and productivity; and improving decision-making. Despite efforts to create a more diverse academic STEM faculty, women, underrepresented racial/ethnic minorities and people from other socially marginalized groups (e.g., persons with a disability, sexual minorities) remain a numerical minority in many disciplines, with the greatest gap at later career stages.

These problems are partly due to structural and cultural barriers faced by graduate students and postdocs from marginalized groups that impede their hiring, retention, and advancement in faculty positions. In addition, the absence of an inclusive climate (i.e., an environment that values differences and is welcoming) in academic STEM is a barrier to full inclusion and increased participation of marginalized scholars.

This stream invites proposals for talks focused on structural, cultural, and/or climate barriers to gender equity in STEM. Presentations that explore interventions, such as changes to policies, practices, and community norms, are also welcome.

Potential topics include, but are not limited to:

- Experiences, career outcomes, and/or persistence of LGBTQ+ scholars in STEM
- Experiences, career outcomes, and/or persistence of non-binary scholars in STEM
- Barriers to inclusive authorship experiences and/or interventions to promote more inclusive authorship in STEM
- Differential impacts of CV 19 on academic careers in STEM

### **Relevant Publications Co-Authored by Stream Chair:**

H. M. Douglas, I. H. Settles, E. A. Cech, G. M. Montgomery, L. R. Nadolsky, A. K. Hawkins, G. Ma, T. M. Davis, K. C. Elliott, and K. S. Cheruvelil. 2022. "Disproportionate Impacts of Covid-19 on Marginalized and Minoritized Early-Career Academic Scientists," *PLOS ONE*.

K. Robotham, I. H. Settles, K. S. Cheruvelil, G. M. Montgomery, and K. C. Elliott. 2021. "How Just and Inclusive Team Climates Affect Mentoring Satisfaction: The Roles of Negative Mentoring and Race," *Journal of Career Development*.

E. Cech, I. H. Settles, K. S. Cheruvelil, K. C. Elliott, G. M. Montgomery, and S. T. Brassel. 2021. "The Social is Professional: The Effects of Team Climate on Professional Outcomes for LGBTQ Persons in Environmental Science," *Journal of Women and Minorities in Science and Engineering* 27: 25-48.

A. Singer, A., G. Montgomery, and S. Schmoll. How to Foster the Formation of STEM Identity: Studying Diversity in an Authentic Learning Environment. *International Journal of STEM Education* 7, no. 57, 2020. (Open Access).

I. H. Settles, S. T. Brassel, P. A. Soranno, K. S. Cheruvelil, G. M. Montgomery, and K. C. Elliott. 2019. "Team Climate Mediates the Effect of Diversity on Environmental Science Team Satisfaction and Data Sharing," *PLOS ONE* 14(7)

K. C. Elliott, I. H. Settles, S. T. Brassel, G. M. Montgomery, K. S. Cheruvelil, and P. A. Soranno. 2018. "Honorary Authorship Practices in Environmental Science Teams: Structural and Cultural Factors and Solutions," *Accountability in Research* 24: 80-98.

I. H. Settles, S. T. Brassel, G. M. Montgomery, K. C. Elliott, P. Soranno, and K. S. Cheruvelil, "Missing the Mark: A New Form of Honorary Authorship Motivated by Desires for Inclusion," *Innovative Higher Education* (2018): 1-17