

Title: Geoscience Diversity Experiential Simulations (GeoDES)

Authors: Heather R. Houlton, Jason Chen, Carolyn Brinkworth

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A diverse, inclusive, and equitable working environment is critical for producing innovative science. Among the STEM disciplines, the geosciences are some of the most homogenous fields - an average of 8-12% of scientists are racially or ethnically underrepresented. Yet, a growing body of empirical literature is revealing that heterogeneous groups advance research at higher rates and form more successful business ventures than do their homogeneous counterparts. Thus, increasing diversity will not only improve our community and engage all talent, but is critical to producing our best science.

The goal of our project, titled “Geoscience Diversity Experiential Simulations” (GeoDES), is to train 30 geoscientists as “champions for diversity” through a 3-day intensive workshop and follow up activities. These professional development activities will help participants gain the knowledge, skills, and volition to push back on prejudice as it happens in the workplace and to be proactive in seeking out opportunities to make structural changes in their institutions and improve the overall climate at work. A unique aspect of this project is an innovative, mixed-reality, virtual simulation to give participants experience in how to speak up and act in tough situations. The scenarios are uniquely situated within a geoscience context. To generate authentic situations, the research team conducted fifteen, 30-45 minute interviews with geoscientists who have faced prejudice in academia. We integrated these qualitative data into scripts to drive the simulations.

We have collected pre-intervention survey data as a baseline for participants’ beliefs and knowledge about Diversity Equity and Inclusion (DEI) and their confidence in effecting change. We will also conduct observations of how participants interact during the virtual simulations during the workshop in November, 2017. Next year we will be conducting monthly virtual meetings with participants to discuss readings related to DEI. During these meetings, we will collaboratively problem-solve and develop strategies for participants to carry through with their plans on creating institutional change. We also welcome feedback regarding how to make our project more impactful.