Title: MS PHD'S–GEO REU: Promoting retention, inclusivity and meaningful engagement in the geosciences for URM participants of NSF REU programs.

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Abstract:
National Science Foundation Research Experiences for Undergraduates (NSF REU) programs are major contributors for developing a diverse, internationally competitive, and globally engaged geosciences workforce. The Minorities Striving and Pursuing Higher Degrees of Success in GEO REU (MS PHD'S-GEO REU) Professional Development Program is intended to further leverage these NSF investments for attracting and retaining underrepresented minority (URM) geosciences scholars. Modeled after the successful MS PHD'S in Earth System Science Professional Development Program, the MS PHD'S-GEO REU utilizes holistic and interdependent virtual and on-site professional development, networking, community building and mentoring activities to further promote retention, inclusivity and meaningful engagement within the geosciences community for URM participants of NSF REU programs. Through a two-phase program design, activities integrate with professional conferences to engage participants in repeated authentic geosciences activities, thus exposing participants to leading researchers and facilitating ongoing collaborative and individual reflection. Program participants undertake extensive virtual and on-site professional development training activities, connect with academic and professional opportunities, establish effective mentor-mentee relationships, and develop peer-to-peer communities of support. Participant experiences are further enhanced through membership in an active virtual community that supports and sustains "real life" interactions and mentorship, facilitates networking and professional development, and maintains continuity of shared networks. Participants of the MS PHD'S-GEO REU become members of the established MS PHD'S professional community, which currently supports 223 participants. Of the 223 participants 57, 21 and 16 have received Doctorate, Masters and Baccalaureate degrees respectively and are currently employed within the geosciences workforce. The remaining 129 participants are enrolled in undergraduate and graduate programs throughout the U.S. Geographic representation includes 35 states, the District of Columbia, Puerto Rico and two international postdoctoral appointments – one in Saudi Arabia and the other in France.