



Peer mentor networks to build more inclusive scientific communities: Lessons from the Earth Science Women's Network (ESWN)

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Informal networks play a critical role in advancing careers by providing peer support. This is particularly important in fields where women are grossly underrepresented, as peer networks can reduce feelings of isolation and provide access to information and opportunities for professional development. The power of networks lies in their ability to mobilize people and information for educational and institutional change.

Geoscientists are at the frontline of societally relevant work on natural hazards, energy, climate, water, and food security. Despite its importance to understanding Earth's past, present, and future, the geosciences workforce is one of the least diverse in the science, technology, engineering, and mathematics (STEM) fields. Women receive 39 percent of undergraduate degrees in the earth, atmospheric, and ocean sciences in the U.S., yet make up less than 16 percent of the workforce and only 20 percent of faculty in the geosciences. The geosciences have the smallest representation of historically underrepresented racial and ethnic minority groups. Black, Hispanic, American Indian, Alaska Native, and Asian Pacific Islander women together represent only 5 percent of bachelor's degrees and 7 percent of tenure-track faculty. Increasing the participation of diverse communities enhances the social relevance of STEM work and contributes to building a more inclusive society where all groups have the opportunity to pursue STEM learning and employment.

Here we highlight the example of the Earth Science Women's Network (ESWN), which grew from a group of six female graduate students and postdocs to a non-profit organization with more than 3000 members worldwide in 15 years. We describe the evolution of the ESWN model for online and in-person community building and peer mentoring that builds upon personal connections to identify challenges and opportunities for the advancement and promotion of women in the geosciences and catalyze cultural and institutional change through societal partnerships. ESWN's activities support professional development for scientists at all career stages and include an international earth science jobs list and a program for undergraduate students. Today, ESWN is partnering with larger professional societies to improve workplace climate conditions and shape a more inclusive society, particularly in light of incidences of sexual harassment. ESWN is also working to change the public perception of scientists through a large-scale public outreach initiative and fundraiser, called "Science-A-Thon" which serves as a platform to humanize science, offers a wide range of potential role models for students and highlights individual stories to increase public engagement with science.