PROGRESS (PROmoting Geoscience Research Education and Success): a novel mentoring program for retaining undergraduate women in the geosciences

Sandra Clinton (1), Amanda Adams (1,2), Rebecca Barnes (3), Brittany Bloodhart (4), Cheryl Bowker (4), Melissa Burt (4), Elaine Godfrey (1), Heather Henderson (5), Paul Hernandez (5), Ilana Pollack (4), Laura Beth Sample McMeeking (4), Jennifer Sayers (5), and Emily Fischer (4)

(1) University of North Carolina at Charlotte, Charlotte, NC, United States, (2) National Science Foundation, Arlington, VA, United States, (3) Colorado College, Colorado Springs, CO, United States, (4) Colorado State University, Fort Collins, CO, United States, (5) West Virginia University, Morgantown, WV, United States

Women still remain underrepresented in many areas of the geosciences, and this underrepresentation often begins early in their university career. In 2015, an interdisciplinary team including expertise in the geosciences (multiple sub-disciplines), psychology, education and STEM persistence began a project focused on understanding whether mentoring can increase the interest, persistence, and achievement of undergraduate women in geoscience fields. The developed program (PROGRESS) focuses on mentoring undergraduate female students, starting in their 1st and 2nd year, from two geographically disparate areas of the United States: the Carolinas in the southeastern part of the United States and the Front Range of the Rocky Mountains in the western part of the United States. The two regions were chosen due to their different student demographics, as well as the differences in the number of working female geoscientists in the region. The mentoring program includes a weekend workshop, access to professional women across geoscience fields, and both in-person and virtual peer networks. Four cohorts of students were recruited and participated in our professional development workshops (88 participants in Fall 2015 and 94 participants in Fall 2016). Components of the workshops included perceptions of the geosciences, women in STEM misconceptions, identifying personal strengths, coping strategies, and skills on building their own personal network. The web-platform (http://geosciencewomen.org/), designed to enable peer-mentoring and provide resources, was launched in the fall of 2015 and is used by both cohorts in conjunction with social media platforms.

We will present an overview of the major components of the program, discuss lessons learned during 2015 that were applied to 2016, and share preliminary analyses of surveys and interviews with study participants from the first two years of a five-year longitudinal study that follows PROGRESS participants and a control group.