

CSU-Led Program Aims to Close Gender Gap in the Science Field

September 2, 2014

A Colorado State University-led Earth Science program is attempting to close the gender gap in the field. In the United States, men outnumber women in many science and engineering fields by nearly 3 to 1. In fields like physics or the geosciences, the gender gap can be even wider.

Emily Fischer, professor of atmospheric science at Colorado State University, is the lead investigator on a \$1.7 million National Science Foundation grant to close that gap in the geosciences, which encompass mining and geology, atmospheric sciences, issues related to natural resource management, natural disaster forecasting, and oceanography.

They intend to bolster the number of female undergraduate students earning degrees in the geosciences or going on to graduate school in these fields. They are developing a program to be piloted on the Colorado Front Range and in the Carolinas.

"We want to build the pipeline of female students entering the geosciences," Fisher said in a statement. "Females are underrepresented in the geosciences – at about 16 percent of the workforce. That is the picture in my field too – women represent about 15 percent of atmospheric scientists. It's even lower when you get into geology."

Starting in 2015, the team will recruit 50 first-year female students from Colorado State University, the University of Colorado-Boulder, and the University of Wyoming to attend a workshop where they will learn about educational and career opportunities and meet peers with similar interests. The team will simultaneously recruit a cohort of students from the University of North Carolina Charlotte, Duke University, and the University of South Carolina.

From there, the students will be mentored in person by local members of the **Earth Science Women's Network, a nonprofit organization**. In addition, female students will have access to a web platform that will enable national-scale peer mentoring.

"We are patterning this intervention after outreach programs that we know have been successful with advanced undergraduate and graduate-level women," Fischer said. "We want to see if this can work with female undergraduate students and get more of them interested in pursuing careers in the geosciences."

Their goal is to design an effective, inexpensive recruitment and working with an interdisciplinary team to increase retention program that can be a model for other universities.



Emily
Fischer

Manda
Adams

Becca
Barnes

Sandra
Clinton

In September, 2014, the University Herald, a news source focused on higher education institutions, announced the \$1.7 million NSF Grant, led by ESWN Board Members Emily Fischer, Manda Adams, and Becca Barnes, ESWN member Sandra Clinton, and an interdisciplinary team to increase undergraduate participation of women in the geosciences.