The American Geophysical Union and Two-Year Colleges

Bethany Adamec, Education and Outreach Coordinator, American Geophysical Union

The American Geophysical Union is a not-for-profit society of Earth and space scientists with more than 62,000 members in 148 countries. Established in 1919 and headquartered in Washington, D.C., AGU advances the Earth and space sciences through its scholarly publications, meetings, and outreach programs.

AGU Education offers a variety of special programs for Earth and space scientists, students, K-12 educators, and the public at AGU's fall meeting held each December in San Francisco, CA. The meeting attracts over 23,000 professionals annually and is the world's largest gathering of Earth and space scientists. Our goals include strengthening professional development of K-12 teachers of Earth and space science, contributing to strengthening Earth and Space sciences departments and undergraduate teaching at the college and university level, providing opportunities for interested AGU members to participate in outreach activities and programs, supporting national STEM education initiatives, and strengthening the numbers and diversity of the Earth and space science workforce. AGU has a particular interest in developing the talent pool of future Earth and space science professionals, and in efforts that engage and retain undergraduates, especially two-year college students.

The Unique Research Experiences for two-year College faculty And Students (URECAS) planning workshop was the AGU's first step in implementing a larger program focused on engaging and retaining two-year-college students in the Earth and space sciences. Research in the field of undergraduate teaching and learning shows that engaging in research can help students at two-year institutions succeed, thus our efforts have focused on fostering research by students.

The NSF-funded URECAS workshop was held in July, 2012 at the AGU headquarters. Participants included faculty from two-year and four-year colleges, as well as representatives from federal and state agencies and other professional organizations. Throughout the two-day workshop, presentations and small-group discussions tackled issues such as challenges faced by students and faculty who are involved in undergraduate research, best practices in conducting and institutionalizing research at two-year colleges, facilitating the transfer of research students to a four-year institution, and addressing the needs of diverse students. In addition to the discussions held among faculty members, representatives from federal agencies, professional societies, and undergraduate education organizations joined the conversation and provided information about tools and opportunities available at their institutions for both faculty and students. For more information about the workshop content, including the final workshop report, see http://urecas.agu.org/.

AGU is now working on the next steps for URECAS, with a focus on keeping students engaged in Earth and space science research and facilitating their transfer to four-year institutions. This takes the shape of special programming at the Fall Meeting for both students and faculty, and of staying engaged with the two-year college faculty community throughout the year, in addition to staying up-to-date with current research concerning two year colleges, so that AGU can leverage its size and reach to help the next generation of Earth and space scientists succeed. Visit the above website in the near future to learn more about specific efforts. We look forward to the opportunity to learn from other workshop participants about their current best practices and challenges in supporting two-year college students, and to building our network of those working to improve two-year college student success.