The AGU, its Fall Meeting, and a niche for two-year colleges

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The American Geophysical Union is a not-for-profit society of Earth and space scientists with more than 61,000 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’s education programs capitalize on the intrinsic allure of the Earth and space sciences, and their fundamental relevance to daily life. Through education- and career-focused events at the annual AGU meeting (called Fall Meeting), professional development workshops for teachers, special programs for pre-college and post-secondary students, awards for science educators, and printed and electronic resources, AGU offers an array of opportunities that expose students, teachers, and life-long learners to the freshest, most accurate scientific knowledge and the excitement of discovery. We use a multi-staged approach designed to make Earth and space science fun and interesting for a variety of audiences and age ranges. We also work to provide awards, recognition, networking, and mentoring opportunities for college students and early career scientists, in addition to programming that works to strengthen the skills of instructors at all education levels. By reaching out to such broad groups, we are helping to ensure a robust geoscience talent pool that also reflects our nation’s diverse population.

Outreach in the area of primary or secondary education area plays a significant role in developing and nurturing the next generation of Earth and space scientists. Several strategies will help AGU meet its overarching goal related to workforce or talent pool development (see AGU’s strategic plan at: http://www.agu.org/about/strategic_plan.shtml). Particular emphasis is being placed on building partnerships and collaborations that will increase the effectiveness of AGU’s outreach efforts related to education.

An example of AGU’s innovative approach to STEM programming is our work to support two-year colleges, which play a vitally important role in the higher education system in the U.S.—including attracting a large population of students from underrepresented groups. Unfortunately, many STEM students from these institutions do not finish their degrees or succeed in transferring to and completing programs at four-year colleges. Our new effort, Unique Research Experiences for two-year College faculty And Students (URECAS), is intended to support and foster the educational careers of two-year college students in the Earth and space sciences, and ultimately create pathways for them to enter the workforce.

A planning workshop for this new initiative concerning two-year college student research was held at the AGU headquarters in Washington, DC from July 11-13, 2012. This workshop brought...
together faculty from two-year colleges, four-year colleges and universities, and representatives from professional societies and federal organizations to learn more about how to support two-year college faculty and students engaged in Earth and space science research and to discuss the development of a program to strengthen the role of two-year college Earth and space science students in the future workforce. This work will help AGU identify barriers to participation for both students and faculty, which will then allow us to begin defining a path toward implementation of a full program in the near future.

The specific goals of this workshop were to:

- Identify and develop a community of two-year college Earth and space science faculty who are engaged in research experiences and programs with their students.
- Determine model programs and best practices within the community that make these research experiences and programs successful for faculty and students.
- Identify barriers to successful faculty and student research experiences and programs.
- Connect faculty who want to engage in research experiences with their students to national and local resources that can assist them in being successful in these endeavors.
- Highlight and develop collaborations that will allow two-year college students and faculty to attend and present their research at the AGU Fall Meeting.

Look for more information about URECAS and future programs at http://education.agu.org/

AGU galvanizes a community of Earth and space scientists that collaboratively advances and communicates science and its power to ensure a sustainable future. Fostering excellence in Earth and space science education plays a critical role in achieving that vision.