

ABOUT AGU

AGU Education and Public Outreach Programs: Empowering Future Earth and Space Scientists

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The staff and leadership of AGU are committed to fostering excellence in Earth and space science education. While AGU's Strategic Plan does not specifically highlight primary or secondary education among its objectives, outreach in this area plays a significant role in developing and nurturing the next generation of Earth and space scientists. Several educational goals along with specific strategies will help AGU meet its goal related to workforce or talent pool development. Particular emphasis is being placed on building partnerships and collaborations that will increase the effectiveness of AGU's outreach efforts related to education.

The specific goals that staff are focusing on are (1) developing ways to strengthen the professional development of K–12 teachers of Earth and space science, (2) contributing to strengthening Earth and space science departments and undergraduate teaching at the college and university levels, (3) providing opportunities for interested AGU members to participate in outreach activities and programs at the Fall Meeting and beyond, (4) supporting national science, technology, engineering, and mathematics (STEM) education initiatives in conjunction with AGU public affairs staff, and (5) exploring ways to strengthen the numbers and diversity of the Earth and space science workforce.

Among the education workshops and other events that will be held at this year's AGU Fall Meeting (<http://sites.agu.org/fallmeeting/>) are the Bright Students

Training as Research Scientists (Bright STaRS) poster session and luncheon with AGU leadership, where middle and high school students affiliated with summer science programs present their research. This year's event includes student participation outside of the Bay Area programs. Additionally, in partnership with the National Earth Science Teacher's Association, AGU will run teacher workshops on Earth and space science at the meeting. These Geophysical Information for Teachers (GIFT) workshops allow secondary science teachers to hear about the latest geoscience research from the scientists making the discoveries in many of AGU's science areas, explore new classroom resources for their students, and visit exhibits and technical sessions of the AGU meeting for free. At the conclusion of this year's workshop the content will be available to other teachers and AGU members via our Web site.

Another important event at Fall Meeting is the Heads and Chairs workshop, where heads and chairs of Earth and space science departments meet to discuss current issues facing higher education. This year, the morning program will focus on recruiting undergraduate majors, fund-raising and development, and small group discussions on topics suggested by participants. The afternoon program is titled "Advancing Women and Underrepresented Minorities in the Academic Geosciences"; participants will discuss the current status of these groups and barriers to hiring and promotion.

Finally, AGU will conduct a range of family science events including an annual

public lecture concerning a current hot topic in Earth and/or space science and Exploration Station, an afternoon-long hands-on science program administered by member scientists. We look forward to your participation at these events as well as your attendance at a variety of education sessions. We received a record-breaking 687 abstracts this year, which highlights the importance of education and outreach to our members.

In addition to Fall Meeting programs, AGU education provides opportunities for AGU members to participate in outreach activities and programs and supports national STEM education issues by collaborating with other organizations on public policy initiatives. The content of these collaborations centers on the Earth and space science student "pipeline," workforce development, and undergraduate geoscience teaching and learning, among other things. For example, we're currently involved in work on the entire K–16 education spectrum by collaborating on research proposals regarding broadening participation in the geosciences and participating in a series of discussions with the developers of the new Science Education Standards Framework. The framework identifies the key scientific practices, concepts, and ideas that all students should learn by the time they complete high school and is being used as a guide by the developers of the Next Generation Science Standards. We are also involved in coordinating workshops for early-career faculty and postdoctoral students.

There are many ways for members to be involved in AGU's education and public outreach work. For more information, visit our Web site at <http://www.agu.org/education/>. If you have questions, contact Pranoti Asher (pasher@agu.org) or Bethany Adamec.

—BETHANY ADAMEC, Education and Public Outreach Coordinator, AGU; E-mail: bhadamec@agu.org; and PRANOTI ASHER, Manager of Education and Public Outreach, AGU