Science Outreach and Informal Science Education-Programs and Partnerships

Bruce McClure

Division of Biochemistry, Interdisciplinary Plant Group, University of Missouri, 117 Schweitzer Hall, Columbia, MO 65211

Our vision is to create a culture where engagement between scientists and the public is the norm. This will contribute to workforce development, public understanding of science and its economic impacts in our state. We are creating opportunities for exchange between scientists and the public and training graduate students to regard public engagement as an ordinary part of professional life. We are looking for partners to sustain and expand these efforts.

Our approaches:

Saturday Morning Science (SMS) is a free public lecture series held at MU every Saturday throughout the fall and winter semesters. Talks are geared toward the general public and include a two-way engagement between scientists and the public. SMS has established its reputation by presenting scientific ideas and concepts in a lively, engaging, and accessible manner. Audiences include K-12 students and teachers, retirees, and MU students, among others. Largely through word-of-mouth, interest in SMS has grown tremendously. We have held over 145 presentations with approximately 18,000 total attendees. Science Talks to You (STTY) is SMS's new off-campus offshoot. Like SMS, STTY will feature direct engagement between established scientists and the public, but in venues around Missouri including communities distant from museums, science centers, and research universities. Our plan is to visit specific communities several times over a period of a few years ensuring a significant impact for a manageable cost.

Science and Me (SaM) is a public lecture series offered by graduate students in MU's "Public Understanding of Science" course designed by Dr. Hannah

Alexander. Students are mentored as they develop presentations focusing on science in everyday life. Their presentations are given to adult audiences in venues such as libraries and assisted-living facilities. Students gain an understanding of how science fits into the lives of audience members and how to communicate effectively to non-scientists. Audience members gain an appreciation for the role of science in their lives and also for the perspectives of young scientists. In fall 2008, SaM hosted 31 presentations in seven venues with audiences totaling nearly 500. Approximately 25 presentations are planned for early 2010.

Sustaining These Programs

Despite wide recognition of the need for engagement between scientists and the public, sustaining these programs is a challenge. SMS has succeeded largely with volunteer effort and modest support from MU's Office of Research and Bookstore. Monsanto recently made a gift that will extend SMS, pilot STTY presentations, and SaM in 2010. Dr. Alexander teaches her course and organizes SaM without salary support.

The greatest needs are for salary and graduate student support. To realize our vision of cultural change we propose a new kind of graduate assistantship...not teaching assistants, but outreach assistants. These would be students skilled in both science and science communication. We need to identify partners who share this vision and can help make it a reality.