

ASPB Education Foundation 2006 Grant Award Program Winners

ASPB awards grants to members for education & outreach projects that promote plant biology.

This year's projects focused on National Public Radio programs, public lecture series and international outreach opportunities.



Beth Judy

Flora Delaterre, Plant Detective. For 10 years, she's traveled the world in search of the mysterious, and often disappearing, plants that have created some of the most effective medicines known today. Her motto: "Medicinal plants are everywhere and you've got to treat 'em right, 'cause some day, they might be treating you."

The creation of a University of Montana professor and ASPB member and radio producer Beth Judy, "The Plant Detective" will now be aired across the country on National Public Radio. The ASPB Education Foundation has awarded Judy a 2006 Grant Awards Program (GAP) grant of \$14,250 to support this 90-second spot illuminating the benefits, risks, and efficacy of individual medicinal plants.

The show has run on Montana Public Radio for 10 years with overwhelming results, and in 2002 "The Plant Detective" was picked up by 25 affiliates from Alaska to Arkansas, reaching an estimated 708,000 listeners. With funds from ASPB, Judy and her colleagues are embarking on a three-year goal of adding 100 stations and more than 3 million listeners.

Each segment focuses on one plant, explaining how its chemical and biological functions provide remedies to specific ailments. The plant's growing conditions, habitat, and cultural uses are often covered as well. Past examples include now extinct sylvion, used as birth control in Ancient Rome; foxglove, used to make cardiac drugs; and calabar bean compounds, used in modern anesthetics. Detective Delaterre also explores plants that hold promise of future cures. Judy believes that people will more readily understand the importance of plants when their health is directly involved.

CDs and accompanying print materials will be distributed at national broadcasting conferences and marketed directly to NPR affiliates. The program will also be available on the Internet.



Steven Strauss

Oregon State University Professor Steven Strauss believes that public controversy over the use and safety of bioengineered foods is unnecessarily exacerbated by limited, and perhaps misleading, information. In response, he has created the *Food for Thought* public lecture series, which the ASPB Education Foundation is funding with a GAP award worth \$10,450.

The goal of the program is to present the average person with accurate and objective information on GMOs. To that end, renowned experts in the fields of science, philosophy, journalism, and ethics put into plain language facts about and issues surrounding the technology. Past topics have included the science and environmental impacts of genetically modified foods, crop domestication, and vaccine development from plants.

This program began in 2005 on the OSU campus and drew more than 150 people to each of the seven events. Eventually, two of the presentations were recorded and podcast, generating thousands of viewers. Strauss's grant will be used to tape and podcast 10 upcoming lectures over the next two years. The programs will be disseminated through listservs such as the K-16 educators, the National Science Teachers Association, the Society for Science College Teachers, and biotechnology-related lists.



Daniel Scheirer

Daniel Scheirer and his team at Northeastern University will be putting students from kindergarten to college behind the wheel of a fuel efficient car—virtually. This is just one of the interactive games they have created to provide hands-on learning about the development and uses of biofuels.

Renewable Biofuels: From Camarasaurus to Corn explains the process through which plants create energy; how the energy is transformed into biofuels; and how the technology fits into the greater scheme of politics, business, and everyday life. ASPB has awarded Scheirer \$21,888 to develop and market the project on the Internet and CD.

Users learn to identify different fuels in addition to understanding the problems or risks associated with each. In another activity they are shown a step-by-step procedure through which plants are used to make biofuels. Afterward, they must recreate the process by choosing icons on the screen and placing them in order. The end result shows the carbon cycle from corn seed to eventual release of carbon dioxide. The program uses simple and more technical scientific language to accommodate any teaching level.

A novel approach to understanding fuel economy allows participants to choose from a variety of cars and fuels to meet criteria put forth by the activity. Guidelines may ask users to find the combination that allows for the greatest distance on a single tank of gasoline or to choose the most environmentally friendly combination. Students also analyze and interpret the data.



David Stern

Next time you're listening to National Public Radio, keep your ear tuned for "MicrobeWorld," a 90-second spot illuminating the benefits of plant-related microbes. ASPB has awarded David Stern, president of the Boyce Thompson Institute (BTI) at Cornell, a GAP award worth \$9,975 to develop stories for the announcement.

"MicrobeWorld" sponsors are acknowledged on air, and in three years BTI has gained widespread name recognition from the broadcasts. Stern's grant will be used to produce nine stories credited to ASPB in 2007. Eighty public radio stations broadcast the spot nationwide. Given this distribution and the frequency of announcements, Stern estimates that ASPB will be identified at least 680 times next year.

The programs are free to download off the "MicrobeWorld" website or are available as a podcast through iTunes. Nearly 1,000 people subscribe to the podcast, and the site records close to 100 downloads each day.