A year to remember for science at A-State

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SPEAK TO THE SUN

The year 2008 was another extraordinary year for science at Arkansas State University in the areas of research, teaching and outreach. With the University’s Centennial Celebration coming up in 2009 along with the national Year of Science celebration, next year is gearing up to be an even better one.

ASU scientists carried out a number of critical research initiatives in such diverse areas as the fundamental properties of subatomic particles, biofuels and the benefits of dung beetles to livestock producers. Some of this research hit close to home, including that on abnormalities shown by Arkansas monarchs, the biology and conservation of queen snakes, small salamanders called starns, cave fishes of the Ozarks, and the effects of introduced species and chemical toxins on the ecological balance in the waters of the Natural State. Other research, such as that on the cave fish of China and studies on a sea otter from Washington State that died of a rare infection, took ASU scientists a little further from Jonesboro.

While some of this was basic research, most of the research done was directly applicable to issues found in the newspaper, such as work on soil conservation, nanoparticles, ecological remediation, and bomb detection. All of these projects gave students the opportunity to expand the knowledge acquired in the classroom as both undergraduate and graduate students were integral to performing the studies and reporting the results. Some projects, such as the RISE-UP and Arkansas Pell Grant, gave students in the K-12 system a chance to create and perform their own research. These projects were financed through a record number of grants and contracts. The results were published in top professional journals, including in special issues of ASU’s Electronic Journal of Integrative Biosciences.

Unique accolades

ASU scientists also received some unique accolades during the past year. One of the Biology faculty, Dr. Stanley Trueth, was honored when a new species of parasitic was named after him. This is a great honor amongst scientists, as it is done in tribute to many years of work in the field. The Department of Chemistry and Physics also had two National Fellows named during the year, as Dr. Robin Hannigan was voted a Geological Society of America Fellow and Dr. John Fratite was named as a SENCER Leadership Fellow. Students were also lauded for their work, as Justin Paine, a graduate student of Dr. Nayya McKay, won second place in the Student Competition for the President’s Prize at the annual meeting of the Entomological Society of America.

The past year also brought scientists from all over the world to Jonesboro. ASU hosted the second international Summit on Environmental Studies this past May, with scientists from across the United States, South America, Europe, Asia, and Africa attending. Participants were very impressed with ASU’s facilities and greatly appreciated the unique offerings to our unique ecosystem.

Efforts to engage the public in science also continued to expand this year. For the fourth year, a weekly column on science has continued to be published uninterrupted week after week, reaching article number 184 with this one. These articles are also reproduced by many other print media in the United States. A weekly radio program, “Science in the Natural State,” broadcast by KAUM and many other radio stations across the United States, will be number 150 of the series. These articles and radio shows have been the product of a collective effort by dozens of people at ASU increasing the profile of our university.

This year also saw some new additions to scientific outreach endeavors. The book, “Well, in the Wild, a collection of field and lab stories by biology faculty,” was published by the University of Arkansas Press. “The Hall of Science,” a permanent science exhibit in the lobby of the Lab Science East Building, was opened in February and has quickly become a site for K-12 students to visit. In addition to TV programs showcasing the research carried out by ASU faculty and students that can be seen in YouTube, among other media, a series of science-based movies (“Science Flicks”) also has been offered every month and now has become a course (“Science in the Cinema”) offered jointly by the departments of Biology and Chemistry and Physics.

These achievements and future projects were accompanied by a number of recognitions to retired faculty such as the naming of the Rock McDanel Biology Library and the celebration of the 31 years of work by Dr. Leon Richards with the modernization of the botany teaching lab.

During 2009, ASU will be an active participant in the Coalition on the Public Understanding of Science’s Year of Science celebration. Both the Biological Sciences and Chemistry and Physics Departments will take part with different scientific events every month. All these events will be open to the general public. Along with all of the other research, teaching, and outreach activities, they promise to make 2009 a year to remember.

For more information contact the ASU Department of Biological Sciences at biology@astate.edu.

This picture shows The Hall of Science on the Jonesboro campus of Arkansas State University.