**Programs Offered by COSAM Outreach**

**AU Explore**
AU Explore is COSAM’s annual Open House Day for 5th - 8th graders. On Tuesday, May 4, approximately 1525 students and 150 teachers and parents from 23 schools all over Alabama attended this free event on Auburn’s campus. Students had the opportunity to experience live animals up close, as well as interact with University faculty and students at the Science and Math EXPOs. Make-n-Take Science Fun Shops and Demo Shows presented by Auburn’s finest also occurred throughout the day.

Funding Source: COSAM, Food & T-shirt sales during the event

**AU Math-a-thon**
The third annual AU Math-a-thon Tournament was held on Saturday, February 6, 2010. Teams of high school students from across the state competed in this one-day tournament featuring individual tests, team tests, and ciphering. A total of 112 students from 8 schools competed in the 2010 Tournament.

Funding Source: Self-supporting through participant fees

**G.E.A.R.S.E.F.**
Co-hosted with the Samuel Ginn College of Engineering, the Greater East Alabama Regional Science & Engineering Fair (G.E.A.R.S.E.F.) was held on March 10, 2010. Schools from 22 counties in Southeast Alabama are eligible to compete in the fair. Students in grades 6-12 submitted projects that were judged at this fair. Students that placed 1st or 2nd in their division and category moved on to compete at the Alabama State Science & Engineering Fair in Huntsville in April. Two exceptional students from our region advanced with an all expense paid trip to the International Science & Engineering Fair in San Jose, California in May.

Funding Source: Participant fees, COSAM, Samuel Ginn College of Engineering
Science Investigations (New in 2010)

Science Investigations provides a meaningful science lab experience for home schooled students in grades 6-12. The program is designed to be a learning continuum throughout the semester in which material builds on the knowledge learned the previous session. During Fall 2010, four sessions were held with 37 students returning for each session. Science Investigations helps to prepare home schooled students for collegiate science labs.

G.U.T.S.

G.U.T.S. is a monthly program for kids in grades 1-6 and their parents or grandparents. Each evening session includes dessert followed by a 90-minute science activity featuring a “Getting Under The Surface” theme, such as the G.U.T.S. of Art, the G.U.T.S. of the Gulf Oil Spill, and the G.U.T.S of Harry Potter’s Magic. In 2010, three sessions were held in the spring, and two sessions in the fall. In May, to conclude the 2009-2010 school year, we held a Backyard Bash with a Plasma Physics Show, hosted by Dr. Ed Thomas, as the year-end finale. Throughout the year, a total of 388 students and parents attended a G.U.T.S. session.

Funding source: Self-supporting through participant fees

Science Matters (New in 2010)

Science Matters is an all new summer enrichment program for elementary students that offers youngsters a supercharged science experience. The program allows participants to explore the world of science through real experiments, fantastic field trips, technology and art projects, and hands-on, make-n-take activities. Seven different science-themed weeks were offered during the summer of 2010. Themes included Furry Friends, NASA Design Squad, and Art in Science. Over the entire seven weeks, 123 students in grades 2-5 filled a total of 226 open seats.

Funding: Self-supporting through participant fees
Science Olympiad

Science Olympiad is a one-day academic track meet, consisting of up to 23 different competitive events. **Division B** was held on February 27, 2010. Twenty-two teams of 15 students each in grades 6-9 converged on Auburn’s campus to compete. Winners from the middle school division qualify to compete at the state Science Olympiad. **Division A** was held on March 27, 2010. Eighteen teams of students in grades 3-6 came to Auburn to compete in various scientific events.

Funding Source: COSAM, T-shirt donation from AU Bookstore

T.E.A.M.S. (Tests of Engineering Aptitude, Mathematics, and Science)

COSAM Outreach and the Samuel Ginn College of Engineering co-sponsored the T.E.A.M.S. competition for students in grades 9-12 held on February 26, 2010. Seventy-two students from 9 schools worked together as teams and used the principles of engineering, math, and science to solve real world challenges. T.E.A.M.S. is a program of the Junior Engineering Technical Society (JETS).

Funding Source: School-based fees, Corporate Sponsorship (Southern Company)

The Y.E.S. Program (Youth Experiences in Science)

**Spring Y.E.S.** was held on Saturday, April 10, 2010. Spring Y.E.S. is a free program offered every spring for students in grades 3-6. Hands-on courses for the 2010 Spring Y.E.S. included Chemistry in a Bag, Art in Science, Plants & Pollination, Propulsion & Parachutes, and Your Healthy Heart. A total of 116 students attended the 2010 event.

**Summer Y.E.S.** 2010 consisted of a four day camp for rising 6-9 graders. It was held on Monday, July 12th - Thursday, July 15th 2010. A total of 50 students attended and took part in hands-on courses. The courses offered for this camp included Chemistry and Other Sciences (C.H.A.O.S.), Krashers, River Creatures, Art in Science, and Robots and Avatars.

Funding Source: Participant fees
What do you get when you cross robots, a playing field, referees, cheerleaders, and pep bands? The BEST competition ever! BEST is an all-volunteer organization whose mission is to inspire middle and high school students to pursue careers in engineering, science, technology, and mathematics through a sports-like, science- and engineering-based competition. Started in 1993 with 14 schools and 221 students, today BEST has 39 hubs with over 750 middle and high schools and over 12,000 students participating each year. BEST Robotics at Auburn University is a partnership between COSAM, the Samuel Ginn College of Engineering, and the College of Architecture, Design, and Construction.

**Tennessee Valley BEST**

Tennessee Valley BEST, hosted at Calhoun Community College, had 22 schools compete in 2010. Kickoff was held on Saturday, September 4th, 2010. Teams were given the game theme - Total Recall - and the task for this year - process and package gadgets and gizmos to strive for six sigma quality levels. Four weeks later, on October 3rd, 2010 a practice “Mall Day” was held. On Saturday, October 16th, 2010, approximately 750 students, parents, teachers, and judges came together to compete in “Total Recall”. The BEST Award winner was the Decatur Austin Robotics Coalition (DARC), while the Game winner was Sparkman High School. TV BEST is a partnership between Auburn University and Calhoun Community College in Decatur, AL.

**War Eagle BEST**

War Eagle BEST had 19 schools from south central Alabama and west Georgia compete in 2010. Kickoff was held on September 19th 2010 in the Student Center Ballroom, where teams were given the game theme - Total Recall - and the task for this year. Four weeks later, on October 17th 2010, a practice “Mall Day” was held at Auburn / Opelika Colonial University Mall. On Saturday, October 30th 2010, approximately 1,000 students, parents, teachers, and judges came together to compete in “Total Recall”. The winner of both the BEST Award and robotics game was Wetumpka High School.

**2010 Sponsors**

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- Alabama Power (Auburn)
- Instrumentation Society of America (Birmingham Chapter)
The South’s BEST

In November 2010, a crowd of over 3500 students, teachers, parents, and industry mentors assembled at Auburn University for the 2010 South’s BEST Regional Robotics Championship. South’s BEST hosted 61 teams from 13 hubs and 7 states over the weekend of November 18-20, 2010. The 4th annual Women in Science and Engineering Luncheon, sponsored by the WISE Institute and Southern Nuclear, was held on Friday, November 19 and had over 250 attendees. The Friday night “Celebrate BEST” activities included a team video competition and a trivia challenge. Students answered trivia questions related to Auburn University, BEST Robotics, and general science and math while watching videos sent in from competing schools. Over $5000 in door prizes were also given out to students and teachers throughout the evening. The top eight winners of South’s BEST advanced on to the BEST National Championship to be held in April 2011 in Orlando, Florida. The 2010 BEST Award winners were: 1st Place - Decatur Austin Robotics Coalition (Tennessee Valley BEST), 2nd place - Oak Mountain High School (Blazer BEST), and 3rd place - Wetumpka High School (War Eagle BEST). The 2010 Game winners were: 1st place - Merrol Hyde Magnet School (Music City BEST), 2nd place - Central Magnet School (Music City BEST), and 3rd place - DART (Music City BEST).

2010 Sponsors

Corporate Partners ($15,000+)
Alabama Power
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Other Programs Affiliated with COSAM Outreach

Advanced Placement Summer Institute for Teachers
COSAM partnered with the Outreach Program Office and the Truman Pierce Institute to offer 5 different Advanced Placement workshops to 122 high school science teachers and 25 Science in Motion Specialists during the week of June 21-25.

Funding Source: Participant fees

Arboretum Days
Fall Arboretum Days were held once a month on Saturdays in September, October, and November. Programs targeted students in grades K - 5, and were nature-based events lasting approximately 1 hour. There is no fee for the programs, but registration is recommended.

Funding Source: COSAM

Women’s Leadership Symposium in Science & Mathematics
Held on August 27, 2010, the Women’s Leadership Symposium hosted 56 local high school girls at the Auburn University Hotel and Dixon Conference Center. Students participated in a panel discussion lead by female COSAM graduate students. Following the panel discussion, students had the opportunity to join the panelists in roundtable discussions. The day was capped off with a luncheon and keynote speaker, Dr. Cynthia Carver DeKlotz, resident physician in Internal Medicine and Dermatology at the Washington Hospital Center and Georgetown University Hospital in Washington, D.C., and Auburn University College of Sciences and Mathematics alumna from 2002.

Funding Source: Society of Women in Sciences and Mathematics; internal and external sponsorship.