

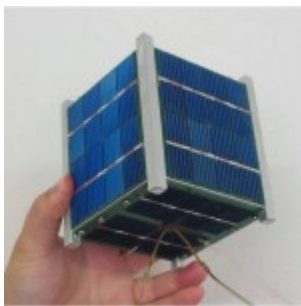


## COSAM Covalence E-News, August 2010

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### NASA Selects AubieSat-1 to Launch on Rocket



NASA selected [AubieSat-1](#), a small satellite built by Auburn University students, to be launched onboard a NASA rocket.

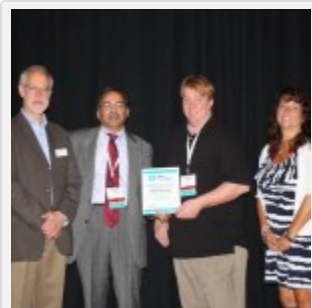
"We are now much closer to putting Auburn University on the map of student-designed-and-built satellites," says Professor J-M Wersinger, Physics. "We are proud and honored to have been selected by NASA."

AubieSat-1 is participating in the CubeSat Launch Initiative. The pilot project seeks to demonstrate viable launch opportunities for CubeSat payloads during 2011 and 2012 as auxiliary payloads on planned NASA missions, as explained by Jason C. Crusan, chief technologist for Space Operations at NASA.

AubieSat-1 is an aluminum-alloy cube with 4-inch sides weighing about 2.2 pounds. It is custom built by Auburn University students. The data collected by the satellite will be transmitted to the ground station in the Physics Department for analysis. The science mission is to measure gamma rays produced by high-altitude thunderstorms. In fall 2010 and spring 2011, AubieSat-1 will be tested at the NASA Kennedy Space Center for launch.

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### Interdisciplinary Research Project Wins Award



Dr. Luke Marzen (second from right), accepting award with Dr. Chetan Sankar (second

The Auburn University interdisciplinary project, "Geospatial Mapping of Coastal Alabama," was chosen as one of 11 winners from 448 nominations in the sixth annual Campus Technology Innovator Awards.

COSAM Associate Professor [Luke Marzen, Geography](#), says one of the objectives of the project, funded by the U.S. Economic Development Administration, is to train students in a real-world, geospatial science application through the mapping of coastal infrastructure along the Alabama Gulf. "By precisely mapping where our gas meters, fire hydrants, water meters and electrical utilities are located, we are providing local communities with information they can share with the people hired to clean up after a tropical storm," says Marzen. "Studies have shown that up to 50 percent of the damage from a hurricane can actually occur during clean-up efforts. The project brings together many stakeholders who normally don't share information and also gives students a sense of giving back to the local Alabama

from left).

communities.”

The principal investigator is Professor Chetan Sankar from the College of Business. The project also includes, along with Marzen, College of Business Associate Dean Amit Mitra and Professor PK Raju of the Samuel Ginn College of Engineering. “This project has introduced me to a number of colleagues in the Colleges of Business and Engineering who, along with me, see tremendous opportunity for the use of geospatial technologies and continued collaboration,” says Marzen, who is sending a class to south Alabama this semester to start the next step of developing a recovery protocol for locating features.



Geography students Derek Besley and Jessica Jones in the field.

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## Students Conclude Summer CMB Projects



Thirteen students participated in the summer Undergraduate Student Research program, managed by the [COSAM office of Cellular and Molecular Biosciences \(CMB\)](#).

An NSF grant funded nine projects while the CMB funded the remaining four. The interdisciplinary program provides a stipend for each student to work with faculty on selected research while participating faculty receive funding for project-related items.

Professor Joseph Giambrone, Poultry Science, worked with Caroline Benjamin, a senior in Molecular Biology. “It is rare we have the chance to work with undergraduate students

since most of them generally do not have the interest nor prerequisites to work in a molecular virological laboratory,” says Giambrone. “We were also impressed in how much a highly motivated undergraduate student could comprehend in a short amount of time.” Giambrone adds Benjamin was a great help with the completion of current scientific experiments.

“The CMB program has been an umbrella for the recruitment and training of undergraduate students as well as highlighting the importance of research scholarship to our academic mission,” says COSAM Dean Marie Wooten.

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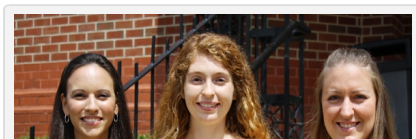
## COSAM Hosts Annual Leadership Symposium

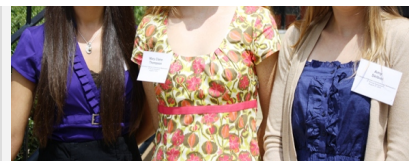


[The Society of Women in Sciences and Mathematics \(SWSM\)](#), an outreach component of COSAM, hosted the fifth Annual Leadership Symposium on Friday, Aug. 27. More than 50 high school girls attended the program as guests of SWSM to hear from successful women in the sciences and mathematics.

The day began with a panel discussion with Mary Claire Thompson, a Ph.D. candidate in Mathematics; Amy Skibieli, a Ph.D. candidate in Biological Sciences; and Natasha Dunaway, a Ph.D. candidate in Organic Chemistry.

Dunaway encouraged the young women to “not let frustration hold you back.” She described a “Prove You Wrong” theory she utilizes whenever she feels hindered in her goal of helping develop selective and pharmaceutically active anticancer agents based on binuclear metal complexes. “Whenever I feel someone holding me back or telling me I





Panelists (l-r) Natasha Dunaway, Mary Claire Thompson and Amy Skibiell

can't do something, I set out to prove them wrong," says Dunaway.

Wetumpka High School senior, Katie Dulak, said she enjoyed the one-on-one time with the panel during round-table discussions. "Miss Thompson made me see math is more than just math. She made it easier to understand why someone would want to go into that field."



Wetumpka High School students (l-r) Katie Dulak and Tuisi Patel

The event concluded with a luncheon featuring keynote speaker Dr. Cynthia Carver DeKlotz, a 2002 Applied Mathematics graduate and Gates Cambridge Scholar. "Shoot big and dream big," DeKlotz encouraged the attendees. "Shoot for the moon. Even if you don't achieve the highest dream, you'll land among the stars and sparkle."

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### Auburn Launches Campaign to Attract Outstanding Students



Auburn University launched an exciting campaign to increase the number of endowed scholarships. The Auburn Scholarship Campaign is dedicated to raising funds to support current students and to compete for future scholars who will enhance the reputation of excellence on our campus.

The Auburn Scholarship Campaign will offer alumni and friends a unique opportunity to help provide considerably larger scholarships to recipients. Scholarship endowment earnings will be paired with current Spirit of Auburn or Academic Scholarships which range from \$2,500 to more than full tuition, annually.

The campaign supports a goal outlined in the University's strategic plan of elevating academics and enriching the undergraduate experience. As part of this campaign, the University plans to increase the amount of scholarship endowment by \$15 million in order to strengthen the merit scholarship program for exceptional students.

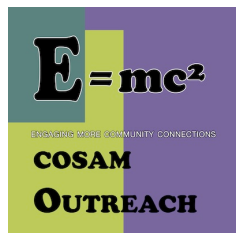
This campaign will conclude in December 2011. Please contact the [COSAM Office of Development](#) today at (334) 844-1235 to learn more.

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### COSAM Digital Updates



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