



COSAM Covalence E-News, April 2010

Headlines

[COSAM Student Ranks in Top Percent of Army ROTC Cadets](#)
[Chemistry Assistant Professor Receives NSF CAREER Award](#)
[Physics Professor Wins Frank J. Malina Astronautics Medal](#)
[Geology Students Win Awards](#)
[Littleton-Franklin Series Hosts Renowned Expert on Brain Function](#)
[COSAM Digital Updates](#)

COSAM Student Ranks in Top Percent of Army ROTC Cadets



The U.S. Army Cadet Command ranked Amy Farris, a senior in Mathematics, 51 out of 4700 seniors in the 273 host [Army ROTC programs](#). The ranking model is a combination of on-campus evaluations including cumulative grade point average (GPA), physical fitness and demonstrated leadership ability.

Lt. Col. Jon Segars, professor of Military Science, says the ranking also factors in an off-campus, external evaluation at the end of the cadet's junior year. Cadets receive credit for extracurricular activities, language training and college athletics.

Ms. Farris currently maintains a 3.51 GPA. "Auburn's ROTC program is one of the best in the nation, largely because of the dedicated Army professors and mentors. It is exciting to see everything finally come together, and that the valuable experiences and lessons learned throughout ROTC have finally paid off," Ms. Farris says.

Lt. Col. Segars describes three ways to enter the Army as an officer: Reserve Officer Training Corps (ROTC), Officer Candidate School (OCS) and the United States Military Academy at West Point. "Each have similar ranking and selection models, but ROTC is the largest producer of officers," Lt. Col. Segars says. Because Ms. Farris finished in the top 10 percent of her peers,

she was allowed her choice of speciality, and she selected Army Aviation.

"Amy is a true star in ROTC and will be an excellent leader of soldiers. She is our model of what Army ROTC expects from our very best and exactly what our nation's soldiers deserve," Lt. Col. Segars says. "Auburn Army ROTC continues to be one of the top performing programs in our military because of professionals like Amy Farris."

[Back to Headlines](#)

Chemistry Assistant Professor Receives NSF CAREER Award



[Dr. Wei Zhan](#), assistant professor of Chemistry, received a National Science Foundation (NSF) Faculty Early Career Development award (CAREER) for his research proposal entitled "Molecular Photovoltaics - A Lipid-Based Approach."



His research is designed to provide insight into a more efficient conversion of solar energy to electrical energy. Although solar energy has the potential to reduce dependence on fossil fuels, many current technologies are inefficient and costly. The award supports early career-development activities that combine both research and education.

In addition to his research, Dr. Zhan's education project initiatives will include classes and demonstrations to broaden awareness of alternative energy generation and outreach activities for a broad audience.

"The success of Dr. Zhan's proposal was in part due to the strength of COSAM's strong, innovative outreach programs that enable faculty to partner with existing programs," says Dr. Marie Wooten, COSAM associate dean of research.

The five-year award totaling \$580,000 is the third granted to the Department of Chemistry and Biochemistry since 2006. Associate Professors Dr. Holly Ellis and Dr. Susanne Striegler are previous recipients.

[Back to Headlines](#)

Physics Professor Wins Frank J. Malina Astronautics Medal



Dr. Wersinger indicates in which direction to find a balloon-tracking box during a balloon launch and recovery in 2007.

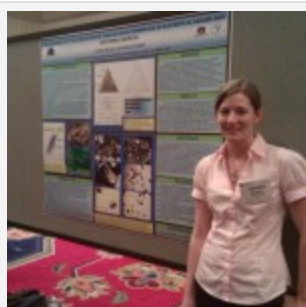
The International Astronautical Federation recently presented the Frank J. Malina Astronautical Medal to Dr. J-M Wersinger, Carr Professor of Physics. The award is presented annually to an educator who has demonstrated excellence in taking the fullest advantage of the resources available to him/her to promote the study of astronautics and related space sciences.

Dr. Wersinger's [space outreach and education activities](#) are extensive. Since 1994, he has worked for NASA on a national program to bring the benefits of satellite images to farmers and natural-resource managers. Since 2002, Dr. Wersinger has worked for NASA headquarters to help manage the National Space Grant Program and NASA's Experimental Program to Stimulate Competitive Research (EPSCoR).

The [Auburn University Student Space Program](#) (AUSSP) is one of Dr. Wersinger's on-campus projects. AUSSP participants are currently building the first student satellite in Alabama history dubbed the [AubieSat-1](#). Another AUSSP team is conducting a high-altitude ballooning experiment. Under Dr. Wersinger's leadership, many students have obtained top jobs at NASA and related industries.

[Back to Headlines](#)

Geology Students Win Awards



Jordan Sayers stands beside her poster presentation.

Jordan Sayers, Geology, and graduate student James Thomka, Geology, won awards during recent poster contests.

Ms. Sayers received an Outstanding Undergraduate Student Poster Award for her presentation at the 2010 Joint Northeastern/Southeastern Sections meeting of the GSA for her presentation titled "Provenance of the Cretaceous Tuscaloosa Formation in Eastern Alabama and Western Georgia."

Dr. Ashraf Uddin co-authored the poster. "Jordan has demonstrated an understanding of and ability to carry out high-quality research," Dr. Uddin says.

Ms. Sayers focused on tracing source terranes of an important rock unit (Tuscaloosa Formation) of Alabama and Western Georgia. Her research identified mineral grains derived from crystalline rocks originally formed at great depths in the Earth's crust and subsequently uplifted as part of the Appalachian Mountains.

As these rocks eroded about 90 million years ago, streams transported and laid down these mineral grains to form the sedimentary deposits of the Tuscaloosa Formation.

Mr. Thomka received the Paleontological Society Best Poster award at both the 2009 national meeting of the [Geological Society of America](#) (GSA) and the 2010 Joint Northeastern/Southeastern Section meeting of the GSA. At the regional level, Mr. Thomka presented a poster titled “Taphonomy of Disarticulated Crinoids from the Upper Pennsylvanian Barnsdall Formation, Northeastern Oklahoma.” His presentation at the national level was titled “Genus-level Taphonomic Variation within Cladid Crinoids, Upper Pennsylvanian Barnsdall Formation, Northeastern Oklahoma.”

“Both of these studies are attempts to understand the fundamental controls on the preservation of crinoids,” Mr. Thomka says.

[Back to Headlines](#)

Littleton-Franklin Series Hosts Renowned Expert on Brain Function



The COSAM-sponsored [Littleton-Franklin Lecture Series](#) hosted Dr. Michael Gazzaniga, a renowned expert on brain function, on April 13, 2010.

Dr. Gazzaniga authored such books as *The Social Brain*, *Mind Matters*, *The Ethical Brain* and *Nature’s Mind*. Through his publications, Dr. Gazzaniga has enabled information about brain function to be generally accessible to the public. Dr. Gazzaniga has a long and distinguished teaching and mentoring career that includes establishment of Centers for Cognitive Neuroscience at the University of California-Davis and at Dartmouth.

[Back to Headlines](#)

COSAM Digital Updates



[Congratulations 2010-2011 COSAM Leaders](#)

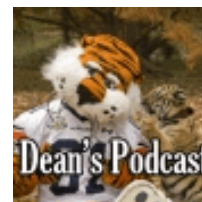
[Who’s Who Among Students](#)

[Career Development Services](#)



[COSAM Scrubbing for Germs](#)

[COSAM Limitless Learning](#)

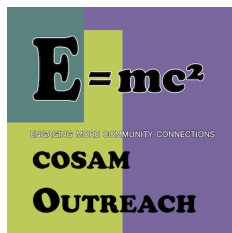


[Program Episode 32: Dr. Mark Liles: A Genomic Approach to Antibiotic Drug Discovery](#)

[Program Episode 33: COSAM Enjoys Return of Bill Alford and Bob Butzhttp](#)

[Episode 34: Dr. Wei Zhan as a New NSF Career Awardee](#)

[Back to Headlines](#)



Previous *Covalence* issues are available in the [archive](#). To subscribe or unsubscribe, email covalence@auburn.edu and include your email address and the word 'subscribe' or 'unsubscribe' in the subject and body.

For content suggestions contact COSAM at covalence@auburn.edu
Auburn University College of Sciences and Mathematics | Auburn University, AL 36849 | © 2011