It is really hard to believe that the 2008/2009 year is underway. Classes started this week in the Graduate School after what seems to have been a blistering fast summer. There is a lot of enthusiasm as we begin the new year with our returning students ever closer in reaching their academic goals and many new students embarking on theirs. We want to continue to do everything we can to facilitate these efforts and everyone in the graduate school from administrators to major advisors are committed to making all our programs successful.

We have some exciting events coming up this fall. First up are the Annual Chancellor’s Teaching Awards on September 9. This year the Graduate School has two honorees, Dr. Dana Gaddy and Dr. David Wessinger. Both of these graduate faculty have made significant contributions to our graduate programs and will be recognized at the awards ceremony. One of the contributions Dr. Gaddy initiated over 8 years ago is our annual Graduate School Career Day. This year Career Day will be held on October 30 with an outstanding slate of speakers and it is particularly rewarding to note that many of them are our own UAMS alumni. Another major event on September 29 will be our inaugural Research Induction Ceremony. This will be a ceremony to formally recognize all our PhD candidates along with their mentors. Candidates are going to be presented a personalized lab coat and the ceremony will end with them taking the “Affirmation of Scientists”. The overall goal is to help them recognize that they are at a point in their career when they are about to embark on a path that is serious and sets the tone for the expected honor and integrity associated with a career of discovery as a scientist. This ceremony was initiated at West Virginia University and has received a lot of positive recognition from around the country.

The summer has also seen a lot of growth and activity in the incredible amount of new construction on campus. The first level of the new Education West building opened for classes this month, the new UAMS Hospital and Psychiatric Research Institute will open this academic year, the new tower of the Winthrop P. Rockefeller Cancer Institute will have a topping out ceremony next month, and after several years of cramped and temporary locations, the Graduate School office will move to its new home in the renovated administration building of the old state hospital. This same building will also become the new centralized home of the College of Health Related Professions. Combined, this level of expansion is pretty much unprecedented for the state of Arkansas and promises to have a significant impact on the education efforts of all our colleges at UAMS.

We have many other events and activities planned for the Graduate School this fall and we hope that you will be able to be a part of as many of them as you can. The year is off to a great start and with all your continued support and feedback I think we can make it a very successful one.
Grad Student Looks Into Drug Resistance of Breast Cancer Cells

A UAMS graduate student recently received a three-year, $90,000 grant from the United States Department of Defense to continue his research into the reasons why some proteins make breast cancer cells drug resistant.

David Terrano of Northfield, Ohio, received a predoctoral traineeship from the Department of Defense’s Breast Cancer Research Program. His application was entitled “Identification of the Microtubule Inhibitor-Activated Bcl-XL Kinase: A Regulator of Breast Cancer Cell Chemosensitivity to Taxol.”

Terrano is starting his third year of the doctoral portion of the combined medical/doctoral degree program. He is working toward a doctorate in biochemistry and molecular biology in the lab of Tim Chambers, Ph.D., professor and vice chairman of the Department of Biochemistry and Molecular Biology in the UAMS Graduate School.

The grant covers tuition and provides a stipend. Upon completion of his research, he will return to medical school to complete his M.D.

While examining how certain proteins make cancer cells resistant to anticancer drugs, Terrano is focused on one particular protein, Bcl-xL, which helps normal cells survive.

“Unfortunately, it also helps tumor cells survive,” Terrano wrote in his grant application. “Breast cancer cells with too much Bcl-xL have greater resistance to therapy.”

Regarding therapy, “the patient chooses between a small decrease in death rate and enduring side effects,” Terrano wrote. Thus, the ultimate project goal, in collaboration with his clinical mentor Laura Hutchins, M.D., director of the Hematology/Oncology Division and a collaborator on the fellowship application, is to find a clinical link between Bcl-xL function and clinical resistance to taxanes. Taxanes are actively employed agents used to treat breast cancer.

Terrano developed a method to detect a protein activated by taxanes that promotes drug resistance potentially by inactivating Bcl-xL. This detection method will help him identify it in the laboratory and could provide the foundation for a clinical detection technique. Identifying this as yet unknown protein, he also wrote, could give clinicians a marker for predicting who will benefit from certain anticancer drugs such as taxanes and could make treatment more efficient and effective.

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UAMS Graduate Student Profile: Sarika

Sarika Saraswati said her parents always emphasized the importance of education as she was growing up in India. She credited that foundation as ultimately putting her on the path that now has her nearing her doctorate in biochemistry and molecular biology.

“They always encouraged me and my brothers to apply the knowledge I gain to better understand the world,” Saraswati said.

While her brothers both studied engineering, Saraswati said she was more fascinated in the natural world. This led her to an undergraduate degree in biological science in 1993 and then a master’s degree in botany in 1995.

After coming to the United States, her education was kick-started again by her husband, who she said motivated her to go after her doctorate. She has been working in the lab of advisor Alan B. Diekman, Ph.D., an assistant professor in biochemistry and molecular biology.

Saraswati’s research, studying a protein related to prostate function, has earned her numerous travel awards, meaning she was invited to present her work at conferences, along with awards for her research posters.

At the April 2008 conference of the American Society of Andrology, she received the Anna Steinberger Award for Poster Presentation for “meritorious original laboratory research.” She also received a Graduate School Achievement Award for her appointment as section editor of the Journal of Andrology.

“I love bench work,” she said of her time spent in the lab. “I love figuring out things I don’t know.

“In one instance, I was trying to find a specific enzyme, so I had to rule out other possibilities in order to locate the right one. It was fun.”

Saraswati is studying changes made to the protein galectin-3 by prostate specific antigen (PSA). PSA levels can be an indicator of prostate cancer in men.

“Our research has taken us one step further in better understanding the molecular mechanisms that may be involved in prostate cancer progression,” Saraswati said.

Ultimately, the work could lead to a new or more effective treatment for the disease.

Saraswati is now looking for a place to do postdoctoral work and would eventually like to teach.

The application also spurred Terrano and his advisors to form a breast cancer focus group. With the help of Thomas Kieber-Emmons, Ph.D., director of basic breast cancer research in the Winthrop P. Rockefeller Cancer Institute, and Thomas Kelly, Ph.D., an associate professor of pathology, the group brings together a consortium of oncologists and basic scientists who discuss ongoing research projects.

Their goal is to increase communication between oncologists and cancer researchers and facilitate ideas that will translate into medical outcomes and further research funding.

Continued from page 2
For the second year, the UAMS American Red Cross Partnership Board will sponsor a contest between all of the UAMS colleges to see which one can provide the most student donors at the monthly campus blood drives. The contest, which runs from September to April, gives the colleges a chance to display the coveted eagle trophy for each month that they win the contest. Participation is calculated as a percentage of student enrollment so each of the colleges on campus has a great chance to win.

At the end of the contest, an overall winner will be determined based on which college has won the most months. The winning college receives special recognition and their dean’s office gets to proudly display the eagle trophy until the next year’s contest.

If you are not able to give blood, whether because you are not eligible that month, are unable to donate for medical reasons, or you do not pass the screening process, you can designate someone as your “Blood Buddy”. Your Buddy can be a faculty or staff member, family member, or friend. In addition to signing his or her own name on the log, your Buddy will write down your name and college and indicate that he or she is donating as your surrogate.

Please remember that you and your Buddy cannot both donate in the same month.

Please join us in making this year’s student contest successful.

Remember: your efforts save lives.

See page 5 for blood drive dates
Graduate Student and Faculty Accomplishments and Awards

Please join us on Tuesday, September 9, 2008 at 3 pm in the Fred Smith Auditorium on the 12th floor of the Spine and Neuroscience Institute at the 2007-08 Chancellor’s Teaching Awards

Congratulation to the 2007-08 Graduate School Awardees

Dana Gaddy, Ph.D.

William D. Wessinger, Ph.D.

To view a list of graduate student awards received during the 2007-08 school year, visit http://www.uams.edu/gradschool/awards/.

The UAMS American Red Cross Blood Drive Dates for 2008:

- August 21 22
- September 18 19
- October 16 17
- November 13 14
- December 11 12
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Fall 2008 Important Dates

November 11, 2008  Veterans Day Holiday
November 23, 2008  Last day to drop a class
November 23-December 5, 2008  Registration for Spring Semester
November 27, 2008  Thanksgiving Holiday (day after Thanksgiving is a holiday only if declared by the Governor)
December 8, 2008  Last day to submit thesis and dissertations to Library
December 19, 2008  Last day to remove and “I” received during the last enrolled semester
December 19, 2008  Last day of the Fall Semester
December 20, 2008  Degrees Awarded