Gates restored
AU's front gates at Toomer's Corner are again welcoming visitors to campus after being out of commission for several weeks this spring. The gates were repaired and restored and the eagle statues were cleaned and returned to their perches during May. See page 3 for a picture of the front gates as they appeared when new, in 1917.

Lowders giving $1 million to CVM

Board of Trustees member Bobby Lowder and his wife Charlotte have pledged a $1 million gift to the College of Veterinary Medicine as part of AU’s “It Begins at Auburn” campaign.

The funds will support the Small Animal Teaching Hospital, which has treated two of the Lowders’ pet Boxer dogs since 1992.

“The enhancements will help our faculty use the latest technology in treating pets and will give our students even more experience,” said Veterinary Medicine Dean Timothy Boosinger. “It will, in turn, benefit our efforts to retain and attract top faculty.”

With the gift, the college initially plans to purchase a three-dimensional radiation treatment planner and a flexible endoscope and allocate funds toward recruiting faculty.

“The College of Veterinary Medicine is making large strides in the research and teaching of oncology and critical care,” said Bobby Lowder. “Many of the efforts are the same as those being applied to humans. The high-tech research and equipment allows new advances to benefit both animals and humans.”

In 1998, the Lowders gave $300,000 to establish the Robert and Charlotte Lowder Distinguished Professorship of Veterinary Surgery and Oncology. The oncology faculty use surgery, radiation and chemotherapy to treat animals with cancer.

The Lowders’ gifts to the university have included support for athletics, the College of Agriculture, the School of Nursing, the Jule Collins Smith Museum of Fine Art and the College of Business.

“Bobby Lowder has been and continues to be one of the most generous contributors to this university,” said interim AU President Ed Richardson. “This gift will help advance Auburn’s ability to serve as a resource for the diagnosis and treatment of various diseases found in small animals which will provide comfort to pet owners throughout the region.”

Lowder, a 1964 AU honors graduate in business, has served Auburn as a member of its Board of Trustees, president and member of the board of directors of the Auburn Alumni Association and as a member of the advisory council for the College of Business.

He is chairman of the board and CEO of Montgomery-based Colonial Bancgroup Inc., a bank holding company with assets of $22 billion and locations in Alabama, Florida, Georgia, Nevada and Texas. Colonial, which started with $166 million in assets, is now one of the 50 largest banks in the United States. He is a veteran of the United States Army and Alabama National Guard.
Industrial Design student project helps vets protect dogs' health

O utfitted with a nylon harness, Simon the Bassett Hound looks like a canine enterprising combat. In reality, Simon is helping Auburn students test prototypes of wire-free heart monitors and harnesses that could lead to healthier, longer lives for beloved pets.

Students in AU’s Department of Industrial Design spent last semester developing and designing the concepts. Their challenge? Develop heart monitors now on the market are designed for humans even though some are used primarily for animals. Also, supporting wires make their use in the operating room inefficient and require the use of the monitors nearly impossible.

“There is clearly a need for a more practical dog-specific EKG monitoring device as well as a monitor that can be used at home,” said Ray Dillon, Jack O. Rash Professor of Medicine in AU’s College of Veterinary Medicine.

Dillon worked with the six students in Assistant Professor Tsai Lu Liu’s design class to develop concepts for new monitors. Three members of the class focused their research and design on developing wireless EKG devices to be used in clinical settings. The other three students devoted their time to designing harnesses and devices that pet owners could use at home to monitor their pets’ EKG or electrocardiogram, which is a test that measures the electrical activity of the heartbeat.

“After some initial research, the students learned that it was impossible to design one product for both uses,” Liu said. “In the hospital, the animal is asleep and doesn’t need the harness to hold the monitor. The clinical devices needed a more professional look while the home devices needed to be more user-friendly.”

Liu said the harnesses would allow pet owners to take their animals to the vet when they could not continue to monitor them without an extended stay at the clinic. Graduate student Britt Curtis was one of the three students to develop a harness prototype. His final design consisted of an adjustable harness made from coated nylon and webbing. His EKG device clips to the harness and operates digital technology.

“The harness did not feel tight, and you could comfortably breathe,” Curtis said. “The heart monitor worked quite well in the harness.”

Curtis and his fellow students test-fitted their monitors and harnesses on dogs at AU’s College of Veterinary Medicine. “I quickly determined that one size does not really fit all when it comes to dogs. The product needs to come in sizes small, medium and large,” said senior Matt Ganter designed an EKG monitor for clinical use. His research resulted in a monitor that transmits the EKG information wirelessly to a personal computer and mobile phone.

“Using a PDA was the most cost efficient method and also provides a convenient package, eliminating the number of cables needed in the operating room” Ganter said.

His particular model employs Bluetooth technology, a type of short-range wireless communication that sends information to various electronic devices such as cellphones, personal computers and digital assistant, which can then be synced to a desktop computer.

“If you ask the vets, they can’t wait to use this product in small animals,” Curtis said.”

With so many vehicles in one facility, AU will designate a new parking zone, D, in August. The university will mail application forms for 2006-07 parking permits to faculty and staff the first week in July; the mailings will contain information about parking options, which will include permits for the A and B zones, plus the new D-zone, for parking in the new deck.

The parking deck will be available for use by vehicle permit holders, A, B, or D hang tags, starting Thursday, July 27. When the parking lots behind Haley Center will be closed for construction of a new student center, after the end of the summer term.

Early August, parking will be limited to vehicles with A or B hang tags.

AU will implement the new D-zone shortly before the start of fall semester on Aug. 15. On those applications for faculty and staff permits, faculty and staff may request a D-zone permit. Assignment of those permits will begin after July 14, based on a system which recognizes rank and years of continuous service and reflects the 2005-06 distribution of A and B spaces in the area.

Faculty and staff members who apply for and do not receive a D-zone permit will receive the same A or B permits as in the past. Except for some closures due to construction, A and B zones will be the same as last year, and the library parking deck will continue to be zoned for A and B parking. Students will continue to use C zones.

A-zone and D-zone parking permits will cost $60 for 2006-07, while permits for B-zone and C-zone will cost $30, the same as in 2005-06. “Issuance of D-zone permits will be managed such that permits will not in all likelihood be able to find a space in the deck at all times during the parking permit hours,” said Catherine Love of the Office of Parking Planning and Space Management.

Further details on parking permits will be provided with application forms to faculty and staff in early July. Direct comments and questions to parking@auburn.edu.

New deck to create more spaces, new parking zone

Upcoming Events

Thursday, June 22

- MO-Semester for full summer term
- Class Changes for final summer term
- Summer Term Classes end
- Final Exams for summer term (full semester)
- Graduation 10 a.m., Coliseum
- AU Report of summer
- AU Report

Friday, June 23

- FARMERS’ MARKET 3 p.m.-6 p.m., Ag Heritage Park, West Samford Avenue across from Athletic Center
- AU Report

Saturday, June 24

- Meeting Presidential Search Advisory Committee, 9 a.m., site TBA
- Meeting Auburn Alumni Association Board of Directors, 9 a.m., Room 3315, Forestry & Wildlife Sciences Building
- AU Report

Thursday, June 29

- Meeting Session Committees Board of Trustees, times TBA, AU Hotel; see www.auburn.edu/administration/trustees
- Meeting AU Board of Trustees, 8:30 a.m., AU Hotel
- Independence Day holiday observance, no classes, no AU Report, offices closed
- AU Report

Monday, July 4

- AU Report

August 4

- AU Report

August 5

- AU Report

August 6

- AU Report

August 7

- AU Report

August 10

- AU Report

August 14

- AU Report

August 17

- AU Report

August 21

- AU Report

August 24

- AU Report

August 28

- AU Report

August 31

- AU Report

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AU Researcher leads Antarctic Expedition

K en Hainly of AU’s College of Sciences and Mathematics and Rudy Scheltema of the Woods Hole Oceanographic Institution recently returned from an expedition to Antarctica and have scientists studying digital biotelemetry of marine invertebrate animals on a five-week voyage through Argentine and Antarctic waters.

The scientists examined invertebrates living in the water column and on the ocean’s bottom to learn why Antarctic animal life is so unique. The team also studied how larval forms disperse between South America and Antarctica, and if there is unrecognized genetic variation in marine Antarctic species.

They chronicled their journey through the coldest ocean on Earth under “Icy Inverts” at www.auburn.edu/antarctica.

Association elects AU administrator as treasurer for 12-state Southern Region

Bob Ritenbaugh, assistant vice president for Trademark Management and Licensing, 06 Samford Hall.

Women win AU’s first national title in track and field

T he AU women’s track and field team won their first national title on June 10 at the NCAA Outdoor Track and Field Championships, scoring 57 points. Southern California placed second with 38.5 points. The Tigers posted All-American performances in nine events, including two individual national champions and three second-place finishers, and broke two school records during the four-day event.

For Auburn, it was the first national championship in men’s or women’s track and field. Previous-ly, the women’s team’s highest finish was seventh at the 2003 Indoor Championships. The men’s team finished second at the 2002 NCAA Outdoor Championsh ips and at the 1978, 1997 and 2003 Indoor Championships.

“It’s a sweet, sweet feeling,” said Auburn head coach Ralph Spry. “It’s hard to meet. A lot of things have to happen for you to win. But our girls have been consistent all year long. I know if we came in and did what we’ve done all year long, we could put up the numbers to give us a shot at being a factor here. It’s real exciting.”

Auburn Athletics Director Jay Jacobs added, “We’re extremely proud and very excited for our women’s track and field program. You can’t say enough about the efforts of our women and the leadership from coach Ralph Spry and his staff.”

Women win AU’s first national title in track and field
Book explores science behind new developments in organic farming

S

ometime in the coming decades, most fruits and vegetables in your local supermarket could be organically grown, says an Auburn University scientist who is at the forefront of a type of research to develop natural alternatives to man-made chemicals in farming.

This emerging scientific field is examined in the new book Multigenic and Induced Systemic Resistance in Plants, edited by plant pathologist Sadik Tuzun of AU’s College of Agriculture and Elizabeth Bent of the University of California, Riverside.

In the book, published by Springer Science Media, the authors and other scientists describe the breakthroughs and potential of research to unlock the secrets by which plants can overcome disease or pathogen attack by activating their otherwise inactive defense mechanisms without the use of commercially manufactured chemicals.

The study of multigenic and induced systemic resistance combines 21st century technologies such as molecular genetics with concepts of agricultural research that were well established before the 20th century began. Tuzun, a faculty member at Auburn since 1990, said scientists using this approach to their research also look to history — plant history — as a guide.

“Plants have been around for millions of years and have developed very efficient mechanisms for identifying, resisting and defeating pathogens,” he noted. “Over the long term, these mechanisms are more effective at defeating pathogens than the methods humans take to protect their crops.”

Sadik Tuzun

In many cases, homeowners can protect their lawns by leaving them alone, Tuzun added. “People compete with their neighbors to have the prettiest lawn, but they may be doing more damage than good,” he said. “The healthiest lawn is not always the prettiest one.”

To address those concerns, land-grant universities since the mid-1970s have expanded their basic research capabilities, leading to several new branches of study in biological and other sciences.

In recent decades, many agricultural and biological scientists have taken advantage of advances in technology to try new approaches in the search for solutions to agricultural problems. The best known of these approaches, molecular genetics, with its success in isolating genes with wanted or unwanted characteristics, became a quick way to speed up generations of selective breeding.

However, many scientists recognized that too much attention to a single gene or characteristic could lead to crops that could be devastated by a single, previously unknown strain of a pathogen. Adopting a multigenic approach to produce broader natural resistance, some scientists are using combinations of genes in a pyramiding effect over generations of plants. One drawback of that method, however, is that the process may lead to plants that are resistant to more pathogens but lack the yields, market appeal or another desirable feature of plants that have been bred for a single characteristic.

A closely related discipline involves the search for ways in which plants develop and build natural resistance against pathogens, a process known as induced systemic resistance or ISR. For instance, while a new fungus or disease may wreak havoc with a crop one year, scientists have observed that subsequent crops on the same land seem to become immune to the pathogen.

This type of activated-resistance is similar to “immunization” in humans, Tuzun said; plants that survive an attack by pathogens or insects become resistant to subsequent attack. However, heavy use of chemicals against the pathogen can disable this natural phenomenon, he said.

The key, Tuzun said, involves understanding the natural defense mechanisms of plants and then using that knowledge to improve agricultural practices. “We do not need to add new genes to plants; we just need to learn to regulate them,” he said.

While the ultimate goal is to prevent plant diseases from devastating food supplies, Tuzun said gardeners, homeowners and consumers can benefit as much as farmers from what is already known about plants and their resistance to diseases. Farmers and gardeners, for instance, can help avoid future crop losses to many types of plant disease by plowing under, rather than burning fields in which diseases appear, he said.

In many cases, homeowners can protect their lawns by leaving them alone, Tuzun added. “People compete with their neighbors to have the prettiest lawn, but they may be doing more damage than good,” he said. “The healthiest lawn is not always the prettiest one.”

AU Alumni Association adds jobs site on Web

The Auburn Alumni Association has launched its ALUM Career Center, a Web-based resource through which AU graduates can network for search for or post job positions.

“This is an amazing service to be able to offer to our graduates,” said Debbie Shaw, interim vice president for alumni affairs. “Helping our alumni connect with each other is a key function of what we do, and the ALUM Career Center takes us one step further in making those connections,” Shaw added.

Auburn graduates can access the alumni networking site by going to www.aualum.org and then clicking on the link for the ALUM Career Center.

How Auburn Stacks Up

Full-time AU faculty distribution by level of education, 2005-06

Source: Institutional Research and Assessment

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