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UT INSTITUTE OF Agriculture

News for Employees, Students & Friends

April 2006



*Appalachian
Joy has blossoms with
extra bracts.*

DOGWOOD DAYS, AGAIN!

Known the world over for its full, cascading display of white, pink, or red blossoms, **flowering dogwood** is experiencing a popular resurgence after sales declined due to the chronic presence of two diseases that destroy the trees – **powdery mildew** and **dogwood anthracnose**. Researchers with the **Tennessee Agricultural Experiment Station** helped drive the new interest by developing cultivars that are resistant to these diseases.

Named for the researchers' wives and mothers, **'Kay's Appalachian Mist,'** **'Jean's Appalachian Snow,'** and **'Karen's Appalachian Blush'** are the only white-bracted cultivars known to be highly resistant to powdery mildew.

Another UT cultivar, **'Appalachian Spring,'** has proven resistant to dogwood anthracnose, but not to powdery mildew. Appalachian Spring is now available through retail suppliers, and the other cultivars may be available next spring.

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**\$4.8 million
in fourth
quarter
grants and
contracts**

See inside

THOUGHTS ON CHANGE

*by Joseph A. DiPietro
Vice President for Agriculture*



For the first several weeks after my arrival in Knoxville, I lived a bachelor's life in the university's Kingston Pike Apartments while my wife Deb stayed in Gainesville to oversee the sale of our home. During my brief time "baching it," I was relieved that a hotel-like cleaning service was available as part of the housing contract. John, the gentleman who picked up my linens, asked me to toss the used towels on the bathroom floor. "How convenient, I thought."

This became our system. It worked well for John and me. Then Deb arrived on the scene and suggested that while "the system" was probably good for the interim, it would likely not work well in our new household. I am now back to hanging up my own towels.

As I helped Deb unpack boxes in our new home, it struck me how often administrators arrive on a scene and immediately dismantle or rearrange current

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TENNESSEE RESEARCHERS DEVELOP DIAGNOSTIC TEST FOR JOHNE'S DISEASE IN CATTLE

Dr. C. A. Speer, professor of cellular and molecular immunology and director of the UT Center for Wildlife Health, directed a team of scientists who have developed an accurate and fast diagnostic test for **Johne's disease**, a contagious, chronic and fatal intestinal disease of ruminants.

In addition to Speer, other members of the research team include

Dr. Shigetoshi Eda, Ms. Cathy Scott and Mr. Brad Elliott.



*The new test for Johne's
is fast and accurate.*

The USDA estimates that approximately 22 percent of all dairy herds and eight percent of all beef herds in the United States are infected with Johne's, leading to an estimated annual economic loss of more than \$200 million to the dairy industry alone. Johne's is considered one of the

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CASNR RECOGNIZES OUTSTANDING STUDENTS, FACULTY, & STAFF

by *Mary Lewnes Albrecht, Associate Dean
UT College of Agricultural Sciences & Natural Resources*



Mary Albrecht

It's spring, and with the coming of spring, so many things happen. Lawns green up; calves are born; clocks are moved forward; and on campus, it's awards season. Every year on the first Tuesday of April, the **College of Agricultural Sciences and Natural Resources** holds its annual scholarship and awards banquet; now in its 46th year. Let's take time to recognize and thank students, faculty and staff who help make CASNR a **great place to work and learn**. Each recipient exemplifies the outstanding leadership, academics, and service contributions made by those involved in CASNR academic programs.

Outstanding CASNR Freshman—Joshua Jones, Food Science and Technology, is a member of the Pride of the Southland Band, University Honors Program, UT Student Government Association (SGA) Freshmen Council, and an undergraduate laboratory assistant for Dr. Lana Zivanovic.

Outstanding CASNR Sophomore—Sloan Regen, Food Science and Technology, is a member of the University Honors Program, Alpha Gamma Rho, Team VOLS-Knoxville Beautification Program, CASNR Student Senator to SGA, and Food Science Club.

Outstanding CASNR Junior—Dustin Lewis, Plant Sciences, is a member of Pi Alpha Xi, the horticulture honor society, president of Tennessee Turf Club, and an undergraduate research aid to Dr. Scott McElroy. This summer he will intern at the Medina Country Club, Chicago, IL, helping to prepare the golf course for the PGA Championship.

Outstanding CASNR Seniors—Lindsey Houchens, Forestry, is an undergraduate teaching assistant in the College Computer Lab, was student trainee with the U.S. Army Corps of Engineers for the past two summers, and is a member of the University Honors Program; **Ashley Pedigo, Food Science and Technology**, is a member of the University Honors Program, UT

Dairy Products Judging Team, CASNR Student Council, Food Science Club, and is an undergraduate research assistant for Dr. David Golden (3 years) and Dr. P. Michael Davidson (one year); and **Ryan Williamson, Wildlife and Fisheries Science**, is a Boy Scouts of America Eagle Scout, a volunteer with the Resource Management Group in the Great Smoky Mountains National Park, and an undergraduate research assistant with Dr. Lisa Muller. He holds an Associate of Science degree from Walters State Community College.

Outstanding Staff Member – Mr. Craig Wagoner, Biosystems Engineering and Soil Sciences, is a long-time member of the UTIA who helps faculty, staff and students in the fabrication of components for research and teaching in his capacity as the Shop Supervisor and makes substantial contributions to the success of the ASAE-Scale Tractor Design Competition, ASAE International G.B. Gunlogson Environmental Student Design Competition, AGCO National Student Design Competition, and the PADNOS National Student Design Competition.

Outstanding Faculty Advisor—Dr. Richard Heitmann, Animal Science, is the “go to” advisor in the department. With more than 100 undergraduate advisees, he directs the undergraduate animal science program and trains and mentors new faculty advisors.

W. F. and Golda Moss Outstanding Teachers – Mr. Aaron Fisher,

Animal Science, for those with 10 or fewer years of service, is an instructor that took the initiative and leadership to redesign two courses for approval as a “Communicating through Writing” course and a “Communicating Orally” course in the University General Education Program, is an undergraduate student and club advisor, and represents the department at various college and university recruitment events; and **Dr. John Mount, Food Science and Technology**, for those with greater than 10 years of service, utilizes tried and true methods of teaching while incorporating such things as oral exams for undergraduate classes and innovative uses of technologies such as wireless personal digital assistants, directs students in the development of food safety plans for local food companies, and was also a finalist for the UT National Alumni Association Outstanding Teacher Award.

Outstanding Graduate Student Teacher Award – Ms. Magdalena Rambeaud, doctoral student in Animal Science, was described by her mentor as a “natural leader within the laboratory and classroom,” served, on short notice, as the GTA for Animal Science 380 Animal Health Management, and also received the outstanding paper award for her presentation at the 2005 Conference of Research Workers in Animal Diseases of the American Association of Veterinary Immunologists.

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OUTSTANDING STUDENTS, FACULTY, & STAFF, from page 2

W.S. Overton Award – Dr. David Golden, Food Science and Technology, is a mentor and teacher of undergraduate and graduate students in the department as well as other students in the University Honors Program, has an active research program in food microbiology and safety, serves on the UT General Scholarship Committee, UT Graduate Council, chair of the UT Graduate Council Curriculum

Committee, serves on the editorial board of several prestigious food science journals, and is active on several Institute of Food Technologists committees and sections.

Distinguished Alumnus – Mr. Hollis Malone, B.S., Ornamental Horticulture and Landscape Design, is manager of horticulture at the Gaylord Opryland Resort and Convention Center, oversees the nationally recognized, award-winning conservatories

and grounds, and is a member of the Nashville Tree Foundation Board, the Tennessee Urban Forestry Council, the Nashville Airport Authority, and judge at the Philadelphia Flower Show (the nation’s oldest and largest indoor flower show). His work is judged every day by the thousands of visitors to the Opryland Resort and Convention Center. He has set a very high standard for others in the industry to achieve.

THOUGHTS, from page 1

working systems – usually importing systems similar to what they used at other institutions. Sometimes that’s a good idea. Sometimes it’s not.

Here at UTIA I am only beginning to get a feel for the various systems in place to manage interactions between the faculty, students and staff; interactions between the four units (CASNR, CVM, the Experiment Station, and UT Extension); the workings of the UT system; and our relationships with outside partners. UTIA is an impressive collection of collaborations – systems that seem to be working well.

It is said that change is inevitable and even required for continued growth and improvement. As the Institute’s new administrator, I will no doubt oversee changes to our current working systems. Let me assure you that any such changes will only be instituted after careful evaluation and with input from affected groups. I am in no hurry to institute unneeded changes.

If you have any suggestions on how we can work together to enhance UTIA, don’t hesitate to drop me an e-mail or give me a call.

All the best,
Joe

WOMEN’S HISTORY DAY CELEBRATED

*Building Communities
One Dream at a Time*

The **College of Veterinary Medicine** hosted a Women’s History Day March 15. Events were designed to celebrate and appreciate diversity. **Dr. Elizabeth Stone**, Dean of the Ontario Veterinary College, was the featured guest. Prominent women from the University and Knoxville communities participated in a panel discussion regarding past, present, and future challenges, marks of success, and opportunities for women.

Gloria Ray, President and CEO of Knoxville Tourism & Sports Corporation, said, “We are reluctant to think we might be a mentor. As a result we don’t do a mentor’s main job. That is to en-

courage and support and be part of the infrastructure saying, ‘You can do this.’ That is a real responsibility we have.”

Panelists included: Dr. Stone and Ms. Ray along with **Dr. Mili Bass**, prominent area veterinarian and member of the CVM Board of Advisors; **Ms. Mintha Roach**, President/CEO, KUB; **Dr. Camille Hall**, LCSW, College of Social Work; **Judge Brenda Waggoner**, Ret., Knox County Judicial System; and **Ms. Maureen Dunn**, Executive Vice President and General Counsel, TVA.

The events were organized to celebrate Women’s History Month by **Stephanie Swain**, along with **Veterinary Social Work** and the **CVM Office of Educational Enhancement**.

IN MEMORIAM

The Institute is mourning the loss of the UT Gardens’ feline mascot **Lotus**. Lotus died suddenly from a heart ailment March 28.



Lotus was adopted by the Gardens in 2001 as a participant in the Gardens’ **integrated pest management program**. Botanic gardens often use cats to help control rodent and rabbit populations to reduce the need for pesticide applications. Lotus excelled in performing her role. Additionally, she was a wonderful **garden ambassador**. Many of our visitors have been warmly greeted by Lotus and have been accompanied by her on a stroll through the garden beds.

Lotus served the UT Gardens with distinction. If you would like to contribute to a permanent memorial, e-mail the Gardens at utgardens@utk.edu.

Institute of Agriculture Grants and Contracts

October–November 2005

Thanks to the resourcefulness and competitiveness of our faculty, the Institute received awards totaling \$4,810,138 in grants, contracts, and cooperative agreements from external agencies for the fourth quarter of 2005. At a time when most states are operating with constrained budgets, our ability to attract dollars for research and Extension from outside sources has become especially crucial. To the principal and co-principal investigators listed below, congratulations. To everyone, we appreciate your support and efforts in seeking external funding.

Oct.

PI; Co-PI	Department	Award	Agency
Paul Ayers	Biosystems Eng & Soil Sci	46,551	US Army
Wayne Clatterbuck	Forestry, Wildlife & Fisheries	52,440 9,576	USDA Forest Service TN Department of Agriculture
Mike Dennison	Shelby County Extension	20,623	Agricenter International
Ann Draughon	Food Science & Technology	81,000	USDA
Carl Jones; Darrell Hensley	Ento & Plant Pathology	37,500	University of Florida
David Mercker	Forestry, Wildlife and Fisheries	31,806	TN Department of Agriculture
Alice Ann Moore	4-H Youth Development	70,000	Auburn University
Naima Moustaid	Animal Science/Nutrition	62,200	National Institutes of Health
Stephen Oliver	Animal Science	13,503	Pfizer
Timothy Rials; Timothy Young, Siquan Wang, William Moschler	Forestry, Wildlife & Fisheries	416,693	USDA CSREES
Xuemin Xu	Pathobiology	80,000	Alzheimer's Association

Nov.

Paul Ayers	Biosystem Eng & Soil Sci	85,096	Colorado State University
Elizabeth Babbit	Plant Sciences	18,332	TN Department of Agriculture
John Bartee	Montgomery County Extension	91,300	Fort Campbell
Ernest Bernard	Ento & Plant Pathology	31,000	Discover Life in America
David Buehler	Forestry, Wildlife & Fisheries	46,400	US Fish & Wildlife Service
Richard Davis	International Programs	4,075	USDA FAS
Daniel De La Torre Ugarte	Agricultural Economics	20,000	Oxfam America
Ann Draughon; Jennifer Richards, Harold Richards, Janie Burney, Bill Morris	Food Science & Technology Food Science Center Family and Consumer Sciences	583,750	USDA CSREES
Mark Fly	Forestry, Wildlife & Fisheries	110,000 135,303	TN Department of Agriculture USDA Forest Service
Kay Franzreb	Forestry, Wildlife & Fisheries	17,000	USDA Forest Service
Matthew Gray	Forestry, Wildlife & Fisheries	4,000	US Fish & Wildlife Service
Charles Hall; Clark Garland	Agricultural Economics	21,936	Texas A&M
Silke Hecht; Gregory Daniel	Small Animal Clinical Sciences	12,500	Veran Medical
Martha Keel	Family and Consumer Sciences	15,000	University of Georgia
Martha Keel	Family and Consumer Sciences	21,440	Centers for Disease Control
Claudia Kirk; Joe Bartges	Small Animal Clinical Sciences	58,872	Hills Nutrition
Kurt Lamour	Ento & Plant Pathology	10,024	University of Florida
Nancy McLean; Daniel Ward, Diane Hendrix, Larry Wilson	Small Animal Clinical Sciences	5,000	ACVO
William Minser	Forestry, Wildlife & Fisheries	6,000	UT Battelle
John Moulton	Ento & Plant Pathology	6,000	Discover Life in America
Betty Neilson	Henderson County Extension	15,000	LeBonheur Community Outreach
Stephen Oliver	Animal Science	234,646	Fort Dodge Animal Health
David Ostermeier; David Buehler, Donald Hodges	Forestry, Wildlife & Fisheries	21,876	The Nature Conservancy
Vincent Pantalone	Plant Sciences	88,884	Consortium for Plant Biotechnology Research (CPBR)

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Nov.

PI; Co-PI	Department	Award	Agency
Angela Thompson	Plant Sciences	82,400	University of Florida
Sharon Thompson; Matt Welborn, Fred Hopkins, Robert Holland, Tim Cross	Partnership Programs-Vet Med Admin Large Animal Extension Admin	2,022,287	Department of Homeland Security
Karen Vail	Ento & Plant Pathology	10,000	FMC Corporation
Larry Wilson	Forestry, Wildlife & Fisheries	75,000	USDA Forest Service
Timothy Young	Forestry, Wildlife & Fisheries	35,125	Georgia-Pacific Corp

JOHNE'S DISEASE, from page 1

most economically important ruminant diseases worldwide.

"We are very excited about presenting this technology to the nation's producers," Speer said. "Present diagnostic tests for Johne's cannot detect early infections and detect only 17 percent to 38 percent of chronic infections."

The new test takes just a couple of hours to perform, as opposed to some other diagnostic tests that require weeks to complete. It is highly sensitive and specific, and detects more than 95 percent of animals infected with the disease-causing bacterium *Mycobacterium avium* subspecies *paratuberculosis*. Further, the UT test can detect Johne's in young animals before they become contagious and spread the disease.

The study was funded by USDA and the Experiment Station. Collaborators outside UT include **Drs. John Bannantine** and **Ray Waters** at the National Animal Disease Center in Ames, Iowa; **Dr. Robert Whitlock** of the University of Pennsylvania Veterinary School; and **Dr. Yasuyuki Mori** of Tsukuba, Japan.

Speer said a major veterinary diagnostics company is evaluating the test. He hopes it will be commercially available in six to 12 months.

SAVING FOR THE FUTURE

April 12 was celebrated at the state capital as "**Tennessee Saves Day.**" The event included children from Lebanon's Byars Dowdy Elementary School who built and decorated **piggy banks** to store their spare change.

It's all to teach children about the importance of saving money, and to encourage all Tennesseans to do the same, said **Dr. Dena Wise**, a family and consumer specialist with **UT Extension**. UT Extension specialists are among the coordinators of the Tennessee Saves program. Extension has implemented the program in 64 counties and reached more than 300,000 Tennesseans last year with financial information. A total of 165 banks, credit unions and local financial education partners were involved in local and regional activities last year promoting Tennessee Saves.

"Our goal is for people to make saving money a habit," says Wise. "A young person who starts saving just \$50 a week right out of high school should

be able to retire a millionaire. But the key is you have to get started."

UT Extension experts say too many **Tennesseans don't save**. Tennessee is one of the top two states for personal bankruptcies for the past five years. Tennesseans – like many Americans – carry heavy consumer debt. U.S. consumers owe more than \$500 billion on credit cards, an average of about \$7,000 per household that uses revolving credit.



Tennessee Saves is expanding in 2006 into a worksite-education program. More than **75 corporations** across Tennessee have requested information about teaching employees about saving and investing.

The **Tennessee Saves Coalition** includes partnerships between UT Extension, the Tennessee Department of Financial Institutions, the Tennessee Jumpstart Coalition, the Tennessee Housing Development Agency, the Federal Reserve and other financial institutions, and education and government agencies.

UT BEEF DAY SCHEDULED

UT Beef Day will be May 2nd at the **Highland Rim Research and Education Center** in Springfield, Tenn. The event will run from 3:30-7:30 p.m. CDT, and focus on improving beef production practices such as weed control in pastures, genetic improvement in beef cattle, Persist orchardgrass, and Tennessee's animal identification program and age/source verification. For more information, visit the Web site <http://highlandrim.tennessee.edu>, or call the Center at (615) 382-3130.

DOGWOODS, from page 1

“Meanwhile, the dogwood breeding team continues to pursue the holy grail of flowering dogwood – a tree that has resistance to both diseases,” says **Dr. Mark Windham**, a professor of plant pathology and member of the **UT Dogwood Research Group**. “Efforts have been underway for the last eight years to combine resistance to both diseases into one cultivar.”

The team’s newest cultivar, ‘**Appalachian Joy**’ (patent pending), is also highly resistant to powdery mildew; however, disease resistance may not be its most marketable trait. The new cultivar’s **blossoms have extra bracts**. “Anywhere from four to seven bracts appear on different branches on the same tree,” says **Dr. Bob Trigliano**,

also a professor of plant pathology and member of the research team.

“Since normal dogwood blossoms feature only four bracts, the increase in bracts makes for a more spectacular display,” Trigliano adds.

Developing these new cultivars should be a boon to the state’s nursery industry. A study by UT Extension and Experiment Station researchers maintains that promoting disease-resistant trees in Tennessee creates an **estimated \$7.8 million** in additional revenues for nursery producers.

Of course, the beauty of the blossoms helps sell trees, too.

For more details see — *Carolyn Corley*
<http://agriculture.tennessee.edu/news>.

2006-2007 SICK LEAVE BANK OPEN ENROLLMENT

The **Sick Leave Bank** is available to member employees, who may request emergency sick leave for a serious personal illness or injury (after exhausting their own annual, sick, compensatory, and/or personal leave balances).

Employees may apply to become a member of the Sick Leave Bank. Both the UT Knoxville (UTK) and the UTIA banks are included on the application. To be eligible, you must be a regular UT employee who accrues sick leave

and have a sick leave balance of at least 48 hours or 6 days (pro-rated for regular part-time employees) by June 30, 2006. **The application deadline is June 30, 2006.**

Open enrollment is for new members only. Current members need take no further action.

For additional information, please contact *Edie Cantrell* (865) 974-6452.

UTIA PROFESSOR WINS UNSUNG HERO AWARD

Dr. **Bonnie Ownley**, an associate professor of **Entomology and Plant Pathology**, was one of three faculty members awarded the **Marian Moffett Unsung Hero Award**.

Ownley was nominated by her colleagues, **Dr. Bob Trigliano** and **Dr. Kimberly Gwinn**, who said of her, “Bonnie is one of the rarest individual on our campus – she not only maintains outstanding funded research and teaching programs, which many of us would be satisfied to have, but goes way beyond the ordinary and expected by accepting and completing activities that require time and energy commitments that often rise to heroic efforts.

Bonnie is community-minded and often sacrifices her own professional advancement to serve the University community and improve the University infrastructure – something seldom seen in the ‘age of the individual.’ She can truly be portrayed as a role model – she listens to and mentors students and faculty. She is the ideal scientist and she is an individual dedicated completely to the well-being of the University of Tennessee.”

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Send comments and suggestions to Margot Pantalone, mpantalo@utk.edu
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