

Happy
Holidays!

Taking on our challenges



Joe DiPietro

While there are many good things we can talk about throughout the Institute, we can't ignore our challenges. In the College of Veterinary Medicine, our biggest challenge is to address the Large Animal facilities' deficiencies, which were cited in a recent accreditation review. The AVMA Council on Education has placed the college on Limited Accreditation status as a result of deficiencies in our Large Animal Hospital facilities. The college has a two-year window to resolve accreditation deficiencies or make acceptable progress towards deficiency resolution.

The Large Animal Hospital has not received major renovation or building infrastructure repair since the hospital opened its doors in 1978, now 30 years ago. The LAH serves important needs of the state and has exceptionally strong programs in medicine and surgery, hyperbaric oxygen therapy, bovine foot care, and metabolic diseases, but the facilities and associated infrastructure must be upgraded. A \$20.9 million investment is needed.

While this is a large challenge that has to be dealt with quickly, we are fortunate that we have the University System's support, stakeholder support, and significant legislative support for this need. Improvement to the hospital is the number one goal on the Institute's and UT's state capital outlay priority list. While we will vigorously pursue state support for this project, we must also continue to seek support through fundraising efforts. In that regard, we are fortunate to have a strong and effective CVM and Institute-wide development team that is keyed-in on this important need. Should you know of potential donors don't hesitate to give me a call or send me a message.

All the best,

Joe



Holiday Express to visit UT Gardens

Join in the festivities this holiday season when the Holiday Express stops at the UT Gardens. Promising fun for the whole family, the event will feature garden-scale trains, lights, music, and holiday decorated scenery under 4,000 square feet of covered space. Amid the diorama, you can spot rivers and waterfalls, familiar East Tennessee landmarks, and see gristmills and other mechanical structures in operation.



Office of Bioenergy Programs

A red letter day for alternative energy

With the symbolic use of a no-till drill, ground was broken Oct. 14 in Vonore for the Tennessee Biofuel Initiative's innovative pilot-scale biorefinery and state-of-the-art research and development facility for cellulosic ethanol. On hand to celebrate the event were Tennessee Governor Phil Bredesen and numerous other state and local officials, as well as Tennessee Senator Bob Corker, U.S. Representatives Zach Wamp and John J. Duncan, Jr., and leaders of DuPont Danisco Cellulosic Ethanol LLC and the UT Research Foundation, who, through Genera Energy, LLC, will lead and manage the facility. Vice President Joe DiPietro credited the partnership of state funding and private support from DDCE that has made the biorefinery possible. "This new commodity will provide a new revenue stream for farmers, local communities, and the state as a whole," DiPietro said. "And let's not forget the critical role that a new source of transportation fuel will play in ensuring the nation's energy security."



Office of Bioenergy Programs

Holiday Express to visit UT Gardens, *Continued*

You and your family can experience the Holiday Express at the Gardens from 1 to 9 p.m. Nov. 26-29 and 1-6 p.m. Nov. 30. The Express will also be open weekends from Dec. 6 through Jan. 4, 2009 from 5-9 p.m. Fridays, 1-9 p.m. Saturdays, and 1-6 p.m. Sundays. Cost is \$5 with children under four admitted free. Special times may be arranged for group visits by contacting Mark Fuhrman at (865) 584-7666. The News Sentinel and WBIR-TV are sponsoring the event.



Prakesh Arelli

Crop Society Honors Arelli as Fellow

Adjunct Professor of Plant Science and USDA Soybean Breeder

Prakesh Arelli has been elected to the position of Fellow by the Crop Science Society of America. The honor places Arelli in an elite group, as less than one percent of the society's members may be elected Fellow. Only outstanding members with distinguished professional achievements and commendable service receive this title.

Arelli is a supervisory research geneticist and soybean breeder with USDA. He is based at the **West Tennessee AgResearch and Education Center** in Jackson. His research focuses on breeding soybeans for disease resistance and high yields, using both conventional and genetic marker technology. Arelli is currently developing a breeding line that led the yield trials in 10 southern locations last year. He will be releasing this line if it performs well this year.

Arelli has served as an associate editor for Crop Science and Journal of Plant Registrations. He has also been chair of the Soybean Germplasm Release subcommittee, as well as an active member in the society. The society is comprised of more than 4,700 members from more than 100 countries.



Tim Cross

What's new in Extension?

by Tim Cross, Dean, UT Extension

Since August, I've often been asked, "What's new in Extension?" Great question, and one that a new dean should be able to answer. Those of us who work in Extension on a daily basis may tend to think that we're much the same and it's business as usual. Spend a little time at our campus or county offices, however, and you'll find significant changes in Extension programs, people, and resources.

Our 4-H program is known for serving youth through in-school programs complemented by projects, activities, and events. Our 4-H programs focus on developing life skills, helping youth to be better prepared for successful careers, and enabling them to serve as effective leaders and citizens. Sure, we still conduct public speaking contests, livestock shows, and judging events. But we also offer specialized technology camps, engage in community-wide service projects, and reach state, regional and national audiences through a talented 4-H Performing Arts Troupe that shares cultural and historical messages about Tennessee.

Family and Consumer Sciences programs have also evolved to address timely, pressing societal issues. Tennessee is among the top-ranked states for obesity, bankruptcy, and health issues. New curriculum, new partnerships, and new delivery methods have enabled FCS specialists and agents to offer education that helps Tennessee citizens to increase their savings, reduce their weight, and improve their health. The impact is an economic one for Tennessee.

Rapid changes are occurring in agriculture and natural resource industries, requiring new programs to expand our education for farmers and rural landowners. Escalating fuel prices have led to the development of bioenergy programs to teach farmers about producing renewable feedstocks and teach forest landowners about biomass conversion. Increasing focus on the environment has created a need for education about environmental stewardship, resulting in demand for programs about the production of organic and natural crop and livestock products, best management practices to protect water quality, and new online programs to provide pesticide safety information and certification.

What hasn't changed? We still meet local needs, conduct practical demonstrations, and hold countless meetings, workshops, and other educational events. Our mission remains the same: to improve the quality of life for Tennesseans through education for farmers, families, youth, and communities. And most importantly, Extension remains committed to delivering research-based, unbiased information through county agents and University specialists.

Save the date!

The Institute is honoring Charlie Goan on his retirement and for his years of service to the university. Following receptions held for staff at the regional Extension mini-conferences earlier this month, the Institute will host a Knoxville reception from 2-4 p.m., Dec. 11, in Hollingsworth Auditorium.



WTAREC

UT President John Petersen visited the Institute's Knoxville campus on Oct. 2 and met with faculty and staff for a reception and informal question and answer session. Here AgResearch scientists Lannett Edwards, left, and Neal Schrick of Animal Science show him cow ovaries and explain how to remove the eggs to perform in vitro fertilization.

GRALK

WE LISTEN.

UT wants to identify strategies to promote a culture of continuous improvement, reengineering, and application of best practices within the university system. "To do that, we are asking all of our employees to join in identifying ways to manage our resources better," said **UT President John Petersen**.

Faculty, staff, and students are asked to offer cost-saving ideas and suggestions by visiting **UT's Committee on Effectiveness and Efficiency** for the *Future's Web* site at <http://bot.tennessee.edu/committees/cef/> or by clicking the *EEF* logo located at <http://www.tennessee.edu>.



In memoriam: Thomas B. Mayfield III

Mr. Mayfield, 88, died in Athens, Tenn., Oct. 25. He pioneered many improvements at Mayfield Dairy and was both a graduate of UT in dairy science and a prominent supporter of both CASNR and the Institute.

A helping hand to pets in need

When New Orleans residents had to evacuate due to hurricanes this summer, the Domestic Animal Rescue Team in Chattanooga quickly mobilized to provide assistance. Next to the Red Cross Shelter, they set up a **shelter for pets**, taking in 17 dogs, three cats, and nine birds, including some racing pigeons.

DART leaders say legislation was passed after Hurricane Katrina to provide shelter for pets. **Hamilton County DART leader and UT Extension County Director Ray Burden** says Katrina put a spotlight on the bond between people and their pets. Burden told local media that "one of the things that happens is that when people are forced suddenly out of their homes, many times the only things that they have is their clothes and their pets. So, it's a good way for them to remain connected." DART had veterans coming in to check on the animals throughout the day, and volunteers stayed overnight to take care of them.

Burden says the shelter will even help the county's bottom line. He says federal law requires counties to provide emergency pet sheltering if they want to get reimbursed for disaster services from the U.S. Government.

What's news

The Tennessee Forestry Association named **Sheldon Barker** of Sequatchie County as Extension Agent of the Year. Barker was praised for excelling in promoting responsible forest stewardship to youth, landowners and his community. Over the course of his 13-year career with UT Extension, he has trained over 3,000 youth in the 4-H program, including forestry and wildlife judging. In addition, in 2004 he helped organize the Sequatchie County Forestry Association. His enthusiasm, professionalism, and dedication to responsible natural resource management were cited in the award announcement. The association also honored the Decatur County Forestry Association as the CFA of the year. **Extension Agent Steve Glass** is a member and technical resource to the association. It formed in 2001 and since has held numerous educational events

including evening programs and field days. The association also developed a nature trail used regularly by youth for tree identification. Its most impressive accomplishment was hosting the 2005, 2006, and 2008 Log and Lumber Show, with over 13,000 collectively in attendance. —David Mercker

Organizers of the first **UT Pumpkin Field Day** are calling the event a smashing hit. Pumpkin growers and pumpkin lovers from across the Mid South recently participated in the hands-on educational sessions held at the **West Tennessee AgResearch and Education Center**. Researchers say the field day was beneficial for all who attended. "The Pumpkin Field Day was a huge success," says event organizer **Annette Wszelaki**, UT vegetable specialist. "We were pleased with the turnout. We look forward to having more vegetable field days in the future." The Pumpkin Field Day provided growers an opportunity to learn about research in Jack-o'-Lantern varieties, disease resistance and weed control. The field day was kicked off by Wszelaki with a discussion of the 2008 Jack-o'-Lantern variety trial. **This trial compared yield and quality characteristics of 22 varieties of pumpkins.**

Paul Kelly, Extension agent in Lawrence County, **has been called to active duty with the U.S. Army. He will serve as an air traffic controller for a tour expected to last up to 400 days.**



A total of 675 Tennessee youth took part in the 2008 Tennessee Junior Livestock Exposition. The youth, from 66 counties, showed 1,440 cattle and sheep in six different shows and participated in 120 competitions and activities in which they demonstrated the skills and knowledge developed by participating in 4-H Beef and Sheep projects. This is the 37th year for the event.

Grants & Contracts

JULY-SEPTEMBER 2008

Thanks to the resourcefulness and competitiveness of our faculty, the Institute received awards totaling \$7,933,598 in grants, contracts, and cooperative agreements from external agencies for the third quarter of 2008. 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.

JULY

PI; Co-PI	DEPARTMENT	AWARD	AGENCY
David Buehler	Forestry, Wildlife, and Fisheries	11,000	USDA Forest Service
Feng Chen	Plant Sciences	50,000	UT-Battelle
Barbara Clarke	Family and Consumer Sciences	54,900	Tennessee Department of Health
Justin Crowe; Alice Ann Moore	4-H Youth Development	90,000	National 4-H Council
Daniel De La Torre Ugarte; Burton English	Agricultural Economics	50,000	OnLocation, Inc
Matthew Gray	Forestry, Wildlife, and Fisheries	66,000	Tennessee Wildlife Resources Agency
Martha Keel	Family and Consumer Sciences	175,600	Tennessee Department of Health
Claudia Kirk	Small Animal Clinical Services	10,488	VCA Antech, Inc
Naima Moustaid-Moussa	Animal Science	2,000	USDA CSREES NIR
Stephen Oliver	Animal Science	251,756	Epitopix, LLC
Vincent Pantalone	Plant Sciences	*158,700	USDA ARS
James Parkman	Entomology and Plant Pathology	249,920	Tennessee Department of Environment and Conservation
Jeffery Phillips	Small Animal Clinical Services	17,250	National Cancer Institute
Timothy Rials	Office of Bioenergy Programs	32,000	UT-Battelle
Scott Stewart; Chris Main	Entomology and Plant Pathology Plant Sciences	9,000	LSU AgCenter

AUGUST

PI; Co-PI	DEPARTMENT	AWARD	AGENCY
John Bartee	Montgomery County	129,893	Army-Fort Campbell
Ernest Bernard	Entomology and Plant Pathology	11,267	Discover Life in America
Ann Berry	Family and Consumer Sciences	3,063	National Endowment for Financial Education
David Buehler	Forestry, Wildlife, and Fisheries	16,365	US Fish and Wildlife Service
Megan Bruch; Jennifer Dutton, Robert Holland	Center for Profitable Agriculture	25,000	Tennessee Department of Agriculture
Gene Burgess	Entomology and Plant Pathology	10,000	USDA AMS
Shigetoshi Eda	Forestry, Wildlife, and Fisheries	34,625	Penn State
Craig Harper	Forestry, Wildlife, and Fisheries	5,000	DeltAg Wildlife, LLC
William Hill	Office of Diversity-CVM	11,000	North Carolina State University
Donald Hodges	Forestry, Wildlife, and Fisheries	2,500	Tennessee Department of Agriculture
Stephen Kania	Comparative Medicine	20,000	East Tennessee Clinical Research
Martha Keel	Family and Consumer Sciences	5,500	Auburn University
Patrick Keyser	Forestry, Wildlife, and Fisheries	10,000	USDA Forest Service

*Combines multiple grants

Grants & Contracts

JULY-SEPTEMBER 2008

AUGUST

PI; Co-PI	DEPARTMENT	AWARD	AGENCY
Stephen Oliver	Animal Science	13,000	Tennessee Department of Agriculture
Jeffrey Phillips	Small Animal Clinical Sciences	4,293	Morris Animal Foundation
Scott Schlarbaum	Forestry, Wildlife, and Fisheries	17,000	USDA Forest Service
Karen Vail	Entomology and Plant Pathology	25,000	FMC Corporation
Forbes Walker; Neal Eash	Biosystems Eng. & Soil Science	99,602	USDA CSREES
Larry Wilson	Forestry, Wildlife, and Fisheries	*117,475	Blue Ridge Paper Products
Xiaofei Ye; Leming Chen	Biosystems Eng. & Soil Science	106,495	SmithBucklin Corp
Svetlana Zivanovic; John Mount, Carl Sams	Food Science and Technology Plant Sciences	130,854	Office of Naval Research, Army

SEPTEMBER

PI; Co-PI	DEPARTMENT	AWARD	AGENCY
Greg Armel	Plant Sciences	150,769	TN Department of Transportation
Paul Ayers	Biosystems Eng. & Soil Science	25,000	National Park Service
Keith Belli	Forestry, Wildlife, and Fisheries	*103,500	US Geological Survey
Steven Bost	Entomology and Plant Pathology	12,000	NC State University
David Buehler	Forestry, Wildlife, and Fisheries	52,993	US Fish and Wildlife Service
Sherry Cox; Tomas Martin-Jimenez, Tom Doherty	Comparative Medicine Large Animal Clinical Sciences	17,870	Morris Animal Foundation
Paul Denton; Hugh Savoy	Plant Sciences Biosystems Eng. & Soil Science	18,203 58,103	Philip Morris USA Philip Morris International
Jennifer Dutton; Megan Bruch, Robert Holland	Center for Profitable Agriculture	199,901	USDA Rural Development
Brad Fenwick; Rebecca Wilkes	Pathobiology	41,361	Strategic Veterinary Sciences
Mark Fly	Forestry, Wildlife, and Fisheries	150,000	USDA Forest Service
Jennifer Franklin; David Buckley	Forestry, Wildlife, and Fisheries	170,616 20,000	US Department of Interior National Coal Corporation
Reza Hajimorad	Entomology and Plant Pathology	35,000	Iowa State University
Craig Harper	Forestry, Wildlife, and Fisheries	3,500 45,000	USDA Forest Service US Fish and Wildlife Service
Robert Hayes	West TN AgResearch and Education Center	1,650	USDA ARS
Martha Keel	Family and Consumer Sciences	20,486	Centers for Disease Control and Prevention
Claudia Kirk; Angela Lusby, Joseph Bartges	Small Animal Clinical Sciences	30,000 40,133	Hills Pet Nutrition Morris Animal Foundation
Stephanie McCain; Matt Allender, Juergen Schumacher, Ed Ramsay	Small Animal Clinical Sciences	3,875	Vetoquinol USA, Inc
Darryl Millis; Marti Drum, Christine Egger	Small Animal Clinical Sciences	41,904	Morris Animal Foundation
Frank Nicholas	Large Animal Clinical Sciences	30,238	Grayson-Jockey Club Research Foundation
Stephen Oliver	Animal Science	26,078	Pfizer, Inc

*Combines multiple grants

Grants & Contracts

JULY-SEPTEMBER 2008

PI; Co-PI	DEPARTMENT	AWARD	AGENCY
Timothy Rials	Sun Grant Center	1,628,841 91,000	US Department of Transportation South Dakota State University
Scott Schlarbaum	Forestry, Wildlife, and Fisheries	58,841	USDA Forest Service
John Skinner	Entomology and Plant Pathology	25,000	USDA ARS
Lawrence Steckel; Angela Thompson	Plant Sciences	10,000	Pioneer Hi-Bred International, Inc
Sharon Thompson	CVM Partnership Programs	50,000 500,000	Knox County Department of Homeland Security
Robert Trigiano; Mark Windham	Entomology and Plant Pathology	464,520	USDA ARS
Donald Tyler	West TN REC	110,620	USDA ARS
Karen Vail	Entomology and Plant Pathology	20,000	FMC Corporation
Frank van Manen	Forestry, Wildlife, and Fisheries	30,000	Memphis Zoo
Margarita Velendia; Vickie Witcher	Agricultural Economics	28,000	Philip Morris USA
Hwa-chain Wang	Pathobiology	72,500	National Institutes of Health
Alvin Womac; William Hart, Donald Tyler, Burton English	Biosystems Eng. & Soil Science; Agricultural Economics	216,000 8,100	Deere and Company CP Products
Annette Wszelaki	Plant Sciences	2,000	University of Florida
Daniel Yoder	Biosystems Eng. & Soil Science	26,900	USDA ARS
<i>County billing accounts for 2007</i>			
Walter Battle	Western Region	113,932	Haywood County
Emmanuel Bedwell	Eastern Region	123,576	Hamblen County
Ray Burden	Eastern Region	204,452	Hamilton County
Steven Burgess	Western Region	49,339	Carroll County
Anna Layman	Eastern Region	26,880	Hancock County
Marcus McLemore	Western Region	60,243	Hardin County
James Perry	Central Region	225,164	Williamson County
Jonathan Rhea	Eastern Region	68,484	Jefferson County
Brian Signaigo	Western Region	36,326	Chester County
Timothy Smith	Western Region	82,597	Obion County
Scott Swoape	Central Region	55,298	White County
John Teague	Central Region	98,689	Bedford County
Harold Woods	Eastern Region	98,553	McMinn County

SEPTEMBER

New guidelines for UT Career Development Fund

Financial assistance from the University of Tennessee Career Development Fund (CDF) enables employees to attend professional development programs. The CDF committee reviews requests and approves funding based on the guidelines.

Several changes to the CDF took effect November 1. One change affects the eligibility of exempt university employees. In the future, only non-exempt, regular, full- or part-time may participate. The other change is that CDF only will fund participation in conferences that take place in Tennessee.

Since 1977, the CDF has been supported by annual gifts from employees. Decreased donation rates necessitated the recent policy changes. Contributions to the Career Development Fund can be made online at www.tennessee.edu/giving or at <http://givetout.tennessee.edu> or by contacting Brian Hardy, assistant vice president for annual giving, at (865) 974-5439 or by e-mail at brianhardy@tennessee.edu.

To read more information about the Career Development Fund, its guidelines, and eligibility requirements, visit the Web site at www.tennessee.edu/cdf.



Ames Plantation

Nov. 21 deadline for Research Foundation maturation funding proposals

Don't forget that the deadline for the 2009 UT Research Foundation (UTRF) Maturation Funding Program is November 21.

The second annual UTRF Maturation Funding Program helps UT researchers further develop technologies that have the potential for commercial success. Up to \$15,000 (direct costs) will be awarded to the highest ranking proposals.

Rules:

- Open to all UT researchers (faculty, staff, and students) at all campuses and institutes.
- Projects must be related to an existing UT invention/creation disclosure OR a proposal can be accompanied by a new UT invention/creation disclosure.
- Projects should provide new data or further demonstrate the technology to increase its commercial readiness.
- Funds should be directed to labor, materials, and services necessary to achieve the proposed deliverable(s).
- Proposal should not exceed three pages and should describe the technology, the plan of work, the expected results, a budget (direct expenses only), and your assessment of the commercial opportunities for the technology.
- Proposal should be submitted to your campus research office by November 21.

Judging Criteria:

- Demonstration of a path for commercial development
- Market potential
- Stage of development

Deadlines and Schedule:

Deadline for proposal submission:
November 21, 2008

Awards announced:
December 19, 2008

Project start date:
January 15, 2009

Project completion date:
October 15, 2009

Final report to UTRF:
November 16, 2009

For more information on the deliverables, rules, and judging criteria, view the document posted at <http://utrf.tennessee.edu> or contact: Stacey Patterson, (865) 974-3140 or sspatter@utk.edu.

Celebrating our heritage—Visitors of all ages enjoyed food, fun, and of course fine music at the 2008 Fall Folklore Jamboree held at the UT AgResearch and Education Center at Milan. The jamboree drew 4,009 participants, the third highest attendance since the event began 10 years ago. There were 196 demonstrators showcasing 65 different skills, both an increase from last year. At the UT AgResearch and Education Center at Ames Plantation, John Williams shows visitors the art of the blacksmith trade during the 2008 Heritage Festival and Antique Auction. In its 11th year, this event drew more than 4,000 and was sponsored by more than a dozen local and regional businesses and organizations.



Milan

Welcome to the world, Cason Mull

At five-weeks-old, Cason is just a few years away from kindergarten. But long before he ever walks into a school building, his education will already be underway, and Leitte Mull and her husband will be his first teachers.

"We just want to make sure his development is age appropriate, and he stays on the right track," Mom says. Leitte and Cason are enrolled in "Parents as Teachers"—put together by UT Extension, the Lebanon and Wilson County schools, Prospect, Inc. and a number of other partners. The program includes group meetings and home visits by specialists where they provide parents with the life skills and information to best impact their child's growth and development.

"We focus on the children from the aspects of intellectual, social, physical, and emotional development," says Penny Thompson with the Lebanon Special School District.

Doug Edlund



Cason Mull and other babies like him are getting a good start in life through the "Parents as Teachers" program. UT Extension and partner agencies in Lebanon and Wilson County put the program together and are delivering it.

Doug Edlund



Consider what's at stake in the early years. Government statistics show that if a child is below the recommended proficiency level when they start kindergarten, there's only a 25 percent chance they'll graduate high school, and a 2 percent chance they'll graduate from college.

"Our number one goal with this 'Parents as Teachers' program is school readiness," says Wilson County Extension Agent Shelly Barnes.

The program was made possible by a grant from the USDA. You can view a video story about this, and other subjects, at www.agriculture.utk.edu/video.

As for Cason, the school bell has already sounded. After all, he was born to learn.

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