third Thursday

THE UNIVERSITY of TENNESSEE UT
INSTITUTE of AGRICULTURE

MARCH 2012

Perspectives on UTIA, inside

From the Chancellor

Larry Arrington

It is with deep regret that I note the loss of Entomology and Plant Pathology Department Head Carl Jones. Dr. Jones brought to us renowned expertise and leadership that was highly valued. We mourn his passing and express gratitude for the talent, spirit and skill he brought to his department and the institute.

On a different topic, **I continue to be amazed at the quality of our UTIA programs and the excellent faculty and staff supporting these efforts.** I was fortunate to attend the recent Tennessee Soybean Promotion Board Research Review in Pigeon Forge. The UTIA faculty presented some remarkable research and support of that industry. More than 450 people attended the recent grain conference in Dyersburg. The program dealt with important issues facing grain producers in Tennessee. These are just two examples of our exciting UTIA programs.

Budget update: The legislative session in Nashville continues. **Gov. Haslam released his budget recommendations on January 30, and overall, the budget is positive for higher education in Tennessee.** We are pleased that the governor recognizes our contributions to economic development in Tennessee. The recommended budget includes funding for a 2.5 percent salary increase and funds to cover the increased cost of benefits. In addition, there is a recommendation to increase operating funds reflecting greater outcomes/productivity. The net change to our budget is a 5.4 percent increase across UTIA.

The UT system has formally kicked off a new advocacy effort to expand engagement of key individuals who can best advocate for the university with elected officials. The centerpiece of this effort will be a UT Advocacy Council divided into 10 regions throughout Tennessee. We will be working to have UTIA represented on each of the 10 regional advocacy councils. Stay tuned for more details on this important effort.

Many of you were fortunate to attend the retirement reception for Buddy Mitchell. **I hope that you will take a minute to read Buddy's perspectives on the University of Tennessee Institute of Agriculture that are included in this edition of the Third Thursday.**

Go Vols,

Remembering Carl Jones

Carl Jones, professor and head of the department of Entomology and Plant Pathology for nearly 12 years, passed away suddenly last month.

Carl Jones

Colleagues were quick to note his outstanding reputation for research, teaching and extension, established well before he joined the institute. In 2008, he received a lifetime achievement award in honor of his significant, and wide-ranging, contributions to the field of medical veterinary entomology.

"As a boss, Carl Jones was what I considered ideal," said EPP Professor John Skinner. "He was patient, intelligent and understanding. You knew he cared, and that made a big difference."

Chancellor Larry Arrington said, "Dr. Jones headed a department that is critical to the research-based information the institute disseminates to our students, producers and agribusiness. He brought to that job renowned expertise and a managerial style that was highly regarded by his colleagues, faculty and staff."

The flag in front of Morgan Hall flies at half-staff in memory of Carl Jones.

What's News

- **Entomology Professor Karen Vail is on the steering committee of the newly formed professional scientific organization, the Tennessee Mosquito and Vector Control Association.** The group's objective is to increase collaboration on mosquito and pest control across the state. Vail also serves as membership chair. **Graham Hickling,** director of the institute's Center for Wildlife Health, discussed Lyme disease in Tennessee as a featured speaker at the association's first meeting earlier this month.
- **UTK has registered its own URL shortening service so you can create short URLs that can be easily shared, tweeted or e-mailed to friends and colleagues.** Visit http://tiny.utk.edu to shorten long URLs.
- **April 23 is the deadline** for graduate students, post-docs, residents, interns and research assistant professors **to submit abstracts for the 2012 Comparative and Experimental Medicine and Public Health Research Symposium.** The event takes place May 21-22. Details at www.vet.utk.edu/research/symposium.
- **CVM's Veterinary Social Work Program is offering a spring course in mindfulness-based stress reduction.** You can learn more at http://tiny.utk.edu/mindfulness.

Money is a Tool—Mission is the Passion

Bill Brown

by Bill Brown, Dean, AgResearch

Over the past several weeks I have been reflecting on and reviewing research activity during the past year, and much of our communication has focused on money: increases in grant submissions, awards, expenditures and indirect cost (IDC) returns. All of these results are true. Since 2008, submissions have more than doubled, awards are up over 40 percent, extramural expenditures have increased from $29 million in 2008 to $40 million in 2011, and increases in IDC return help fund people and programs.

Sometimes it might appear that the focus is only on the dollar bill. Money is important and essential, but it is only a tool. Funding source can be important—a federal competitive award provides a peer validation of program quality—however, these funds are not readily available in all disciplines that our programs touch. In some cases, multi-disciplinary partnerships can be formed to seek these funds. In other cases, industry support may be just as important and perhaps more appropriate.

The more important focus is our mission. As a land-grant institution, the UT Institute of Agriculture has the mission of improving the lives of Tennesseans and people of the world. We give undergraduates, graduates, post-doctoral associates and visiting scientists the tools to solve real world problems. These students and scientists are trained by world-class faculty conducting cutting-edge research designed to solve these problems. Our people deliver this information to the public in every corner of Tennessee and around the world.

Over the past several years, **UTIA-developed soybean varieties** are having major impacts on the market. **Livestock reproductive and health technologies** developed at UTIA are increasing returns to beef and dairy producers. **New weed control and plant health technologies** are responding to the needs of crop producers. **Plant genetic research** is providing cutting-edge technology breakthroughs for use today as well as yet unknown applications into the future. Not only are **new bio based technologies for fuels, chemicals and materials** being developed at UTIA, but also our faculty are developing the national and international policy implications for their use. **New food products and processing technologies** developed by UTIA faculty are ensuring a safe and nutritious food supply. **The list goes on and on…. Extension programs are contacting more and more people** each year to deliver this needed information. **Agencies and industries seek our undergraduates and graduates** because they have the technical and interpersonal skills to succeed.

So, we need to continue to think about money; as state and federal funds come under increasing pressure, extramural funding will become increasingly important. However **we also need to keep in the front of our minds that money is only a tool. Our focus and passion is the mission.**

Perspective on the Importance and Future of the Institute

For 28 years, Buddy Mitchell has led the Institute of Agriculture as chief development and government relations officer and—three times—provided overall leadership as interim vice president. As he retires to half-time status, he shared his thoughts on the institute's importance, its major achievements and transformational points of advancement, and its status today to further serve the state and nation:

Lorna Norwood

Pictured at Ag Day 2011, Buddy Mitchell has been a familiar and friendly face across the institute and state for more than a quarter century. As a leader of the institute, he has unique insight into our operations, impacts and future.

Let me begin with the importance of our mission.

It has been my privilege to serve a small role in advancing this marvelous and incredibly productive entity that we call the University of Tennessee. **Land-grant universities such as UT were created to transmit research discovery and proven information to the people of our state and nation. The core of our mission is to conduct cutting-edge research that serves society and solves major problems that our citizens face.** Approximately 40 percent of the research discoveries that flow from UT's Research Foundation to the private sector come from UTIA. Our research does not remain within our laboratories. **UT Extension** specialists assemble this information and deliver it to our Extension offices in every county of the state where that information greatly benefits farmers, families, communities and local citizens, helping them make wise decisions based on the best information. Wise decisions lead to productive lives and an enhanced Tennessee economy.

CASNR prepares work-ready employees who both transmit and receive this information. The result has been a remarkably productive agricultural system that has increased food yields dramatically. Corn yields hovered around 20 bushels an acre at mid last century and have multiplied to more than 160 bushels per acre today. Similar gains have occurred in cotton and soybeans, as well as in cattle production. Our highly productive agriculture system has often created major surpluses of food crops that have kept retail food costs down and put more disposable income in the pockets of all citizens. However, the number of acres available for agriculture production continues to shrink through development and the degradation of farmland in other countries. Therefore, we must continue to increase the productivity of every acre of farm and forest land in Tennessee to meet the rapidly increasing needs of world demand. The emerging middle class in China and India is growing at an unprecedented rate, and they are demanding more and more high quality food. In the years ahead, American agriculture will be asked to provide not only food but also a portion of our energy needs, all from that same acre of land. For this reason, we must better fund UT agricultural research and extension that today achieves a 10-to-1 return on investments.

It is important that agriculture production take place here in Tennessee because that economic return is not just to agriculture and forestland owners, but also to our state economy and the well being of our citizens.

UTIA serves far beyond the food industry and its consumers. The institute is deeply engaged in **veterinary medicine** with its important role in serving our companion and farm animals and ensuring the safety of our food supply. We serve families and communities. We aid in the positive development of youth in our **4-H programs**, and we excel in sustainable and environmentally sound practices that preserve Tennessee natural resources. **These collective achievements of institute teaching faculty, research scientists and extension leaders are the core of UT's land-grant status and are a cornerstone of our nation's productivity, food security and outreach service to all citizens.**

There have been several particularly important turning points that have empowered the Institute of Agriculture to new levels of achievement:

- In 1970, **the title of the head of the institute**, responsible for the collective units of ag research, extension, and teaching,

was changed to vice president, reporting directly to the president of the newly established UT system.

- A transformational achievement for agriculture was realized in the 1960s and '70s when **UT AgResearchers and Extension specialists and agents played a key role in the development of no-till agriculture**. Conventional tillage utilized plowing of the land numerous times each year to control weeds and produce crops. It was highly erosive, and many fields, particularly in West Tennessee, were losing soil at the rate of 100 tons per acre per year. Under no-till production, erosion has been virtually eliminated and yields have continued to increase over time. Today this technology is very broadly applied in Tennessee and many other states and nations. This single achievement saved and healed our farmland, and its value cannot be overstated.

- **Another major achievement was the creation of the College of Veterinary Medicine in 1974.** Having this college incorporated into the structure of the Institute of Agriculture makes it fully integrated into the food animal production and health system. CVM and its Veterinary Medical Center are highly productive parts of our institute programs.

- **In the early 1990s**, the institute secured $11 million in federal funding. The state provided an additional $27 million. With this, **we built a $38 million plant biotechnology building, a forest products center and the Joe Johnson Animal Research Facility.** We had long sought those funds, and they transformed the agricultural campus to a state-of-the-art research center. **This enabled us to attract grant-competitive faculty who are leading the nation today in agricultural research.**

- In 2007, the institute launched the **UT Biofuels Initiative**, joining with the state of Tennessee and federal and industry partners to provide leadership in the emerging field of bioenergy. **Through the initiative, the federal Sun Grant Center and the institute's new Center for Renewable Carbon, our researchers, extension specialists and Tennessee farmers are advancing the science and technologies that will generate fuel and co-products from a variety of non-food biomass crops**—like switchgrass and woody biomass. They promise new opportunities for farmers and rural communities and new jobs in the bioenergy sector.

- **In 2010, the chief administrative officer for the institute was changed from vice president to chancellor** and now serves as chief academic officer for the institute as well as a member of the UT president's staff.

As these transformations occurred, the institute continued to increase its productivity and service. In my view, the institute is better poised today to achieve our mission than ever before. We are fortunate to have an exceptional chancellor, outstanding deans, department heads, directors and a truly dedicated faculty and staff. We are considered internally and externally to be an employer of choice. This reputation allows us to attract exceptional faculty, staff and administrators, even as our funds have been significantly cut in recent years. **Our future is unlimited.**

Yet our greatest challenge continues to be funding. If reductions continue, they will greatly erode and marginalize our programs in the years ahead. We must work with our legislative leaders in Nashville and Washington, D.C., to increase the investment in high-return enterprises like the Institute of Agriculture. These investments must be made even as there is great and undeniable need to cut governmental spending. The 10-to-1 return on investments that the institute provides stimulates the economy and will achieve more balanced budgets in the future as these economic benefits flow to our citizens. This is the message we must deliver to the leaders of our state and nation, and we must then respond with greater productivity, greater service and greater accomplishments. I retire into half-time status with great confidence in our leadership, the dedication of our employees and the mission we will continue to fulfill.

Morgan Hall

'The institute is better poised today to achieve our mission than ever before.'

Two High-Visibility Employees Retire

This winter, two familiar faces at the institute retired.

Wanda Russell

Two AgResearch and Education Center directors of two different eras have careers that spanned four decades. One was Ben Hazelwood of the West Tennessee center. **The director of our era, Richard Evans of the Forest Resources AgResearch and Education Center, retired last month.** He led the center since its inception in 1972. CASNR alumnus **Kevin Hoyt** succeeds Evans as center director.

In Marketing and Communications, Senior Editor Wanda Russell has retired. Russell edited and polished many of our most important publications, from brochures to books and, especially, Extension publications. Across a 27-year career, she assisted professionals throughout the institute. A search has been organized.

Richard Evans

CVM's Brian Honored for Research Impacts

David Brian, professor in the CVM's Department of Biomedical and Diagnostic Sciences, has received the 2011 Pfizer Animal Health Award for Research Excellence. The award is bestowed on researchers whose innovative studies have advanced the scientific standing of veterinary medicine.

"Since joining the veterinary college as one of its original faculty members 35 years ago, Dr. Brian has epitomized the academic research scientist," says **Mike McEntee,** head of Department of Biomedical and Diagnostic Sciences. "His passion, integrity and creativity sustain a productive research program in the field of molecular virology with continuous federal funding that produces high quality publications, graduate doctoral scientists and postdoctoral scholars."

David Brian

Brian's expertise in coronaviruses was evident as he collaborated with the Centers for Disease Control and Prevention during the worldwide SARS outbreak. His more recent novel observations in the mechanisms of the widespread human and animal pathogen's RNA replication has been reported in the prestigious publications *Proceedings of the National Academy of Sciences* and the *Journal of Virology.*

Veterinary medical students work hard to make the wildly popular Open House head and shoulders above the rest. Read about their event, set for April 14, at www.vet.utk.edu/openhouse.

CASNR Students Show Their Stuff in Farm Bureau Discussion Meet

The Tennessee Farm Bureau Federation Discussion Meet is designed to get students talking about ideas and information that hold promise to solve societal problems. In a meet held here last month, six students discussed farmers' use of social media and strategies to help curb obesity. The students were judged on their communicative and critical thinking skills.

The Farm Bureau presented cash awards to the winning participants: Doug Giles of Agricultural Leadership, Education and Communications, first place; and Agricultural and Resource Economics majors Jamie Morgan, second place; Kyle Hensley, third; and Jonathan Harrison, fourth.

Giles will now advance to compete at the Farm Bureau's state discussion meet.

Ag Econ and ALEC students compete in the Farm Bureau's Discussion Meet.

Make plans now for Ag Day—
Saturday, November 3

UTIA News is published monthly by the University of Tennessee Institute of Agriculture. Send comments and suggestions to Margot Emery, memery@tennessee.edu. The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status. Visit the Institute of Agriculture on the Internet at http://agriculture.tennessee.edu | E11-1101-00-001-12

The University of Tennessee UT
Institute of Agriculture

101 Morgan Hall
Knoxville, TN 37996-4505