



The Basic Facts

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Alumnus Brigadier General Stan Lillie Visits MTSU

The Science of Success

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Brigadier General Stan Lillie ('77) visited MTSU Tuesday, September 21. He met with ROTC cadets and cadre, spoke to the Chemistry seminar and at a reception in his honor. In addition to his MTSU chemistry major (biology minor), BG Lillie received an M.S. degree from the



National Defense University. Lillie held posts in Germany and Japan and the Office of the U. S. Secretary of Defense. He served as Chief of the Chemical Defense Division for the U. S. Army

before becoming the 23rd Chief of Chemical and Commandant of the U. S. Army Chemical School. General Lillie has received numerous awards and decorations for meritorious service including the Humanitarian Service Medal. He is married to the former Bonita Slate of Madison, Tennessee. They have two daughters, Jana and Amanda.

Stepping Up Undergraduate Research at MTSU: STEPMT

The College of Basic and Applied Sciences (CBAS) announces the funding of a NSF-STEP proposal entitled "STEPping up Undergraduate Research at MTSU," STEPMT for short, in the amount of \$1.7M over five years. The goal of STEPMT is to increase retention and graduation rates in science, technology, engineering, and mathematics (STEM) by increasing significantly discovery-based learning and undergraduate research in the STEM disciplines at MTSU. At MTSU, STEM includes biology, chemistry,

computer science, engineering technology, geosciences, mathematics and physics/astronomy. The co-principal investigators are Drs. Andrienne Friedli (CHEM), Bill Robertson (PHYS), Ginger Rowell (MATH) and Tom Cheatham (CBAS). Needless to say, we are excited about the potential of this grant to accelerate many of the teaching and undergraduate research innovations that are already occurring on campus. Funding

will be available for faculty for curriculum innovations and mentoring undergraduate research and for undergraduate students for academic year and summer research and internships. The success of the grant will depend on broad participation of faculty from across the STEM disciplines. Dr. Kathy Whatley, Associate Vice Chancellor for Natural Science at UNC Asheville, visited MTSU October 20-21 to discuss her experience with similar reforms and to help the STEPMT team plan for evaluation of the project.



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CBAS Quiz

Test your knowledge of our college!

1. Which departments have the largest percentage of female majors?
2. Which two departments have the largest percentage of male majors?
3. Which two departments have the highest percentage of minority majors?
4. What is the percentage of minority majors in CBAS? MTSU?
5. Which two departments have the largest number of majors in 03-04?
6. Which two departments have the smallest number of majors in 03-04?
7. Which three departments had one of their majors win the Provost's Award for 03-04?
8. Which two departments have won student academic performance awards seven years in a row?
9. Which two departments had 100% of faculty participating in service activities for 03-04?
10. Which two departments had the largest number of faculty/student collaborations for 03-04?



The Basic B.E.S.T. (Boastful Educators Sharing Talents)

All departments are invited to submit items for this column

Aerospace

Ten members of the Aerospace faculty and staff flew in the university airplane to Toronto, Canada, for the University Aviation Association's Fall Education Conference. **Mavis Green** moderated a "Best Practices" roundtable and made one presentation. **Wayne Dornan** made a presentation to the "Research Roundtable." **John Bertrand** and **Paul Craig** made a presentation on their NASA research to the full conference.

Agriscience/Agriscience

William Day assisted Dr. Mats Troedson from the University of Florida in a workshop on visually guided intrauterine insemination in mares using an endoscope at the Grand Opening Celebration and Conference for the Mini-tube International Center for Biotechnology.

Two Dairy Science Club members participated in the Lincoln County Dairy show winning six awards in September.

The Milk Processing Unit served as a training site for milk processing and food safety technology courses taught by Randolph and Associates, in Birmingham, Alabama, September 15.

The Farm Laboratories provided cattle and swine animals for the state FFA Judging Contest September 15 in Nashville.

In July **Johnny Haffner** lectured at the Fifth Annual Naadam Fast Horse Seminar for Veterinarians in Ulaanbaatar, Mongolia.

Tony Johnston was notified recently that he was selected for admission to the Canadian Reserve Joint Command and Staff Course. He was one of two out of 246,000 U.S. Air Force reservists selected to attend this year.

Tony Johnston attended the Southern Regional Grape Extension Exchange and Research Group meeting in Austin, TX.

Swine and beef cattle classes were provided by the MTSU Farms for the State FFA Livestock Judging Contest. Michael McClure and Colin McKaig, members of the MTSU Livestock Judg-

ing Team, served as contest officials. **Tim Redd**, **Daniel Boyer** and **Danny Troup** assisted with the contest.

Jessica Gentry was an invited speaker for the National Conference on Hoop Barns and Bedded Systems for Livestock Production hosted by Iowa State University.

Biology

Wayne Rosing published a paper titled "Myxomycetes of Cedars of Lebanon State Park, Wilson County, Tennessee" in *Castanea*.

Bill Stewart and colleagues published a paper showing that "Five Activators Can Replace the Requirement of FBS in the Adipogenesis of 3T3-L1 Cells" in *Biochem Biophys Res Commun*.

Brian Miller and a colleague presented "Identification, Habitat, and Distribution of the Tennessee Cave Salamander, *Gyrinophilus Palleucus*, in Tennessee" at the Annual Meeting of the Tennessee Cave Survey along with two papers at the Annual Meeting of the Tennessee Herpetological Society.

George Benz and a former student co-taught a two-day fish disease workshop at the Aquarium of the Pacific in Long Beach, CA, and **George Benz** presented an invited evening lecture.

Vince Cobb has received a three-year research grant of \$75,000 from the Tennessee Wildlife Resources Agency to study the ecology of freshwater turtles at Reelfoot Lake. He also received a research grant of \$7,889 from the Morris Animal Foundation to study the feasibility of using oviductal implants in nesting studies for egg-laying snakes.

Judith Shardo and colleagues published "Development, Growth, and Yolk Utilization of Hatchery-Reared Red Snapper *Lutjanus Campechanus Larvae*" in *Marine Ecology Progress Series*.

Karen Hargrove, Coordinator for the MTSU Center for Environ-

mental Education, presented a session at the Annual Conference of the Tennessee Environmental Education Association (TEEA) September 24-26 at Paris Landing State Park.

Cindi Smith-Walters has been appointed to the steering committee for Project WILD (Wildlife In Learning Design). WILD is an international education program focusing on wildlife. In Tennessee, WILD is funded by the Tennessee Wildlife Resources Agency and administered by the citizen group, the Tennessee Conservation League. The appointment runs for two years.

Rebecca Seipelt and colleagues published "Proteasome Inhibition Alters the Transcription of Multiple Yeast Genes" in *Biochimica et Biophysica Acta*.

Jeff Walck presented "Exotic Plants of the Cedar Glade Ecosystem: Invasiveness, Effects, and Management."

Chemistry

Pat Patterson hosted a training session for 6-12 grade teachers for the upcoming Science Olympiad February 19.

Linda Wilson participated in a two-day Forensic Soil Workshop at the joint meeting of the Southern Association of Forensic Scientists, the Midwestern Association of Forensic Scientists, the Mid-Atlantic Association of Forensic Scientists and the Canadian Society of Forensic Science.

Mathematical Sciences

Dovie Kimmins and **Jeremy Winters** presented "Investigative Problems to Enhance Student Interest," at the Tennessee Mathematics Teachers Association Fall Conference September 24-25 in Chattanooga.

Xiaoya Zha was a discussant at the 12th International Symposium on Graph Drawing September 29-October 1 in New York City, NY.

Max Melnikov presented the "Summation of Some Trigonometric Series" at the TMTA/CAMTA Annual Conference.

Nursing

The School of Nursing hosted the Annual Tennessee Association of Student Nurses (TASN) Convention. MTSU had the largest delegation in the state and received the Gold Medal Member Award for the largest number of members in our local SNA. An MTSU graduate, Caleb Kent, won the 2003-04 Outstanding TASN Student of the Year. **Sheila Marquart** is the advisor for MTSU's chapter.

Linda Covington presented "Facts About Heart Disease" at the Annual Nashville Health Fair in Nashville September 25.

The School of Nursing FACES project hosted a FACES student mentorship meeting in September.

Maria Smith, FACES grant PI, received \$40,000 in supplemental funds in September for nursing scholarships.

Lynn Parsons and **Maria Smith** co-chaired the School of Nursing and Xi-Alpha team for the annual Alzheimer's Association Memory Walk. Rochelle Snelling Smith assisted.

Pam Roesler has been certified in Complementary and Alternative Health Care from the University of Southern Indiana.

Anita Crockett published "Leading through Partnering: From Bedside to Community" in *Spinal Cord Injury Nursing*.

Physics & Astronomy

Robert Carlton attended (by invitation) an NSF workshop in Washington, DC, on "Undergraduate Research Centers in Chemistry."

On the first Friday of each month, the Department of Physics & Astronomy sponsors a "star party" in which an astronomer lectures then assists participants with telescopes. Future sessions are scheduled for November 5 and December 3 from 6:30-8:30 p.m. and are open to anyone who would like to attend.