



The Basic Facts

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The Basic Facts, College of Basic and Applied Sciences, Middle Tennessee State University, Murfreesboro, TN

Case & Butler Honored for Outstanding Service

The Science of Success

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Karen Case, CBAS academic advisor, was recently selected by the International Programs and Services Advisory Committee to receive the 2005 MTSU Distinguished International Service Award. Karen was nominated by faculty and staff. Dr. Abdul Rao presented Karen with a marble globe with an engraved base at the international banquet April 9. Karen was also the recipient of the Ebony



Achievement Student Organization Advisor of the Year Award presented at the Tennessee Louis Stokes Alliance for Minority Participation (TLSAMP) banquet April 19.

William H. Butler, Jr. received the Harold Love Outstanding Community Service Award at a ceremony at the Millennium Maxwell House in Nashville April 14.



Recipients of this award represent the many dimensions of community service-volunteer work,

public service, charitable service, and leadership roles in community organizations. They serve as ambassadors for community service among the many diverse higher educational communities in Tennessee. Mr. Butler has focused his attention on urban renewal and leadership roles in anti-drug organizations. His commitment to reducing crime and drug use has resulted in residents taking more pride in their community in the city of Murfreesboro.

Congratulations to Karen and William for their recognition for outstanding service!

CBAS Hosts Visitors From BlueCross BlueShield of Tennessee

Personnel in MTSU's Master of Science in Professional Science (MS-PS) degree program hosted visitors from BlueCross BlueShield of Tennessee in March. They met with Dr. Diane Miller, program coordinator, Dr. Linda McGrew, business core coordinator, Dr. Ginger Rowell, biostatistics coordinator, Dr. Becky Seipelt, biotechnology coordinator, and Dr. Pat O'Leary, healthcare informatics coordinator, to discuss the new program's mission and how both MTSU and BCBS can benefit from a partnership having the MS-PS as a central focus. Representatives from BCBS emphasized the amount of data

that is analyzed in their business and the need to employ science and mathematics majors who have a knowledge of



and appreciation for the business side of the healthcare industry. Most employees at BCBS are masters- level

prepared. They are looking for potential employees who can contribute to data-driven business decisions.

Details concerning the MS-PS program can be found at <http://mtsu.edu/~mmps>.

The representatives from BCBS indicated there are opportunities for internships in their organization. Dr. Allen Naidoo invited Dr. Miller and the concentration coordinators to visit BCBS in Chattanooga in May to make a presentation to employees who have a keen interest in the MS-PS program.

Letter of Intent Approved for i-Sciences

TBR and THEC staff recommended that MTSU proceed to develop a proposal to establish a Ph.D. in Interdisciplinary Sciences (i-Sciences). Congratulations to the committee who developed the letter of intent, all faculty members who provided input, and especially to Dr. Abdul Rao for his leadership throughout this process. The CBAS i-Sciences (CiS) Committee has reviewed six concentration

proposals for the i-Sciences Ph.D. program. The concentrations proposed were: Computational Science, Symbiosis Studies, Chemical Education, Modeling with Discrete Structures, Educational Mathematics, and Ecosystem Studies and Environmental Assessment. The first three concentrations listed have been encouraged to submit proposals by early May for inclusion in the i-Sciences proposal.

The CiS Committee has suggested that Chemical Education and Educational Mathematics consider merging their proposals into one concentration that can prepare both chemistry and mathematics educators. Once the umbrella program is approved and implemented, departments can submit a future proposal to add a concentration. This new Ph.D. program holds great promise for CBAS. All faculty members will benefit from its success.



Visit our newsletter web site to view all *The Basic Facts*' issues:

<http://www.mtsu.edu/~collbas/newsletters>



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

All departments are invited to submit items for this column

Agribusiness/Agriscience

Kevin Downs coordinated the State Poultry Contest with more than 90 FFA students from around the state competing.

The State Livestock Judging Contest was held recently at the Tennessee Livestock Center. Over 75 high school students competed in the contest coordinated by **Jessica Gentry** and **Tim Redd**.

Cliff Ricketts coordinated the State Horticulture Contest held in March. Students from various high schools throughout the state competed in identification, floriculture arrangements, and an academic quiz.

Jessica Gentry presented "Assessing and Improving Mineral Status of a Cow-Calf Herd" at the Southern Association of Agricultural Scientists Meeting in Little Rock, Arkansas, in February.

Harry Djunaidi presented "Does Institutional Loyalty Hypothesis Really Work? The Case of MTSU Students' and Employees' Preference Toward MTSU-Produced Milk" at the Annual SAAE Meeting.

Tony Johnston was invited to present "Management of Acids in Wine" at the Tennessee Viticultural and Oenological Society's Annual Meeting.

The MTSU Equestrian Team rode against the Regional Champion entries from 23 other colleges and universities from the Southeast winning the Zone 5 Championship. MTSU will send a Western Team and four individuals to the National Championships in Sunbury, Ohio, in May. MTSU will send a horse judging team to compete at the national contest.

Chemistry

Gale Clark (with Kirk Lokits) presented "AED Analysis of Sulfur Containing Compounds in Flammable and Ignitable Liquids" and "Fast GC Analysis of Flammable and Ignitable Liquids" at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, in Orlando, FL.

Computer Science

The Upsilon Pi Epsilon National Computer Science Honorary Society held its annual banquet Thursday, April 7. Eight outstanding students, four undergraduate and four graduate, were initiated as new members.

The Computer Science Student Advisory Board held its Spring 2005 meeting March 15. Nineteen students joined **Richard Detmer**, **Brenda Parker** and **Roland Untch** for pizza and a lively discussion of students' concerns.

Brenda Parker and **Chrisila Pettey** recently submitted a National Science Foundation (NSF) grant, for approximately \$1,000,000. The grant, titled "URTOPS" (Using Robots to Optimize Performance in STEM), is geared toward encouraging interest in science and math education in middle school grades.

Cen Li, **Chrisila Pettey**, **Suk Seo**, **Roland Untch**, and Graduate Assistant Jonathan Hicks, presented papers at the 43rd ACM Southeast Conference in Kennesaw, GA.

Roland Untch received a \$5,000 research award from Microsoft Corporation. The title of his research is "Integration of Audience Response Systems Into Conference XP."

Mack Thweatt is officially retiring June 22 after 40 years of service at MTSU. He will continue to teach under the Post Retirement Service Program.

Engineering Technology and Industrial Studies

Saleh Sbenaty and student Richard Hoehn presented "Designing, Building, and Testing a Microcontroller-Based System for Industrial Applications" at the American

Society for Engineering Education-Gulf Southwest Annual Conference held in Corpus Christi, TX, in March.

David Gore is working with graduate and undergraduate student teams at various local companies who are helping our students with their six sigma and lean manufacturing certifications. Companies include: EaglePicher Hillsdale Tool and Manufacturing, MAHLE Tennex, Whirlpool, and Tridon. Student Mike Tharpe received a \$1,000 scholarship from the Association of Energy Engineers in March. Pictured below are Linda Hardymon, Mike Tharpe, Gary Moody (AEE scholarship chair from Nashville Gas) and David Rehse (Siemens).



Ahad Nasab presented "Extraction of Elements From Martian Soil Simulant Using an Excimer Laser" at the Space 2005 Annual Conference in Albuquerque, NM. Ahad was elected as a member of the steering committee for next year's conference. The student robotics team (MoonRaiders) demonstrated their engineering talents in both building and operating a robot and presented a technical paper in the plenary session. They received a certificate and a monetary award.

Mathematical Sciences

Michaele Chappell has been appointed for a three-year term to the Editorial Panel for Mathematics Teaching in the Middle School.

Nursing

Shirley Cantrell and **Karen Ward** published "Pediatric Post-Resuscitation Care" in *Critical*

Care Nursing Clinics of North America.

Jenny Sauls and Tom Rone, Middle Tennessee Medical Center, published "Recommendations of the International Guidelines 2000 Conference on Cardiopulmonary and Emergency Cardiac Care: An Overview" *Critical Care Nursing Clinics of North America*.

Maria Smith published "Use of Vasopressors in the Treatment of Cardiac Arrest" in *Critical Care Nursing Clinics of North America*.

Physics and Astronomy

Nayer Eradat, along with students Ian Mitchell, Chelsea Bond and Yeon Rim, presented a poster, "Building a Two-Photon Polymerization Apparatus With Nanoscale Resolution," at the American Physical Society Annual March meeting in Los Angeles, CA.

Martha Weller presented "Impact: Science From All Sides" at the American Chemical Society meeting in San Diego, CA, along with **Judith Iriarte-Gross** (CHEM). **Martha Weller** and **Iriarte-Gross** also co-presented a talk entitled "Energy and the Environment: A Green Approach to General Studies Physical Science."

Nayer Eradat presented a poster at the American Physical Society Annual March meeting in Los Angeles, CA.

Nayer Eradat authored two papers published in *Applied Physics Letters* Numbers 85 and 86.

Ron Henderson presented "Einstein

Causality in Electronic Circuits" at the APS Four Corners Meeting in Albuquerque, NM; "Negative Group Delays Without Distortion in an Electronic Filter" at the APS March meeting in Los Angeles, CA; and a poster at the APS Southeastern Regional Meeting in Oak Ridge, TN.

