



The Basic Facts

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

EYH Celebrates Ten Years on MTSU Campus

The Science of Success

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Early fall, 1996, a new faculty member in Chemistry came to the Office of Research and Sponsored Programs and asked Dr. Myra Norman who was in charge of the EYH program at MTSU. Dr. Norman gave Dr. Judith Iriarte-Gross a very blank look and asked "What is EYH?" This was the start of Dr. Gross's involvement with the Expanding Your Horizons (EYH) program at MTSU.

The EYH program began with a community service grant from the American Association of University Women (AAUW). Judith immediately developed partnerships with AAUW, Girl Scouts, MTSU, and the EYH Network. To assist in organizing the EYH conference, she established a committee of faculty mem-

bers and of representatives from the EYH partners. The first conference was held in October of 1997. This year we celebrate the 10th year of this important program, and we are excited to be serving 340 girls in grades five through eight. Judith's vision has been invaluable: the MTSU EYH program is the only program in Tennessee and only one of three in the Southeast region. Through her hard work, hundreds of girls have had the opportunity to experience EYH. Over the past ten years, the EYH conferences at MTSU have drawn girls from Middle Tennessee, Southern Kentucky, and Chattanooga.



Judith has a passion and commit-

ment to introducing young students, especially girls, to careers in math and science. Because of this commitment, she has worked to expand the EYH program to high school girls and to other communities in Tennessee. She has received a small grant from the National EYH Network for a pilot project to expand the program to high school girls. She also has just been awarded a two-year NSF grant of \$200,000 for "GRITS - Girls Raised in Tennessee Science." The grant will allow Judith to present the EYH program across the state of Tennessee by creating two new EYH programs—one in East Tennessee and one in West Tennessee. Her work with EYH establishes Judith as a consummate leader in the efforts to get more young women involved in math and science.

This year's EYH event is Saturday, October 28, with a celebration reception on Friday, October 27.



Tennessee Lead Elimination Action Program at MTSU

The Department of Engineering Technology and Industrial Studies is one of three recipients nationwide of a 2006 U.S. Housing and Urban Development (HUD) Office of Healthy Homes and Lead Hazard Control grant award in the amount of \$1,999,826 to identify and control lead based paint hazards associated with private residential housing. This may include stabilization of



peeling and chipping paint, replacement of windows that generate lead dust when opened or closed, and soil abatement of contaminated soil containing lead particles. MTSU Basic and Applied Sciences and the ETIS Department are focused on service-learning initiatives in response to identified community need in their effort to strengthen university/community bonds and create student research and service opportunities with partnering agencies. The ETIS Tennessee Lead Elimination Action Program (TN LEAP) grant will provide training for over 400 individuals and students associated with housing renovation, interior design and landscaping trades, along with city, county and non-profit housing rehabilitation and other interested disciplines in

"Lead Safe" work practices. They will provide outreach to community health associated organizations on identification and how to address environmental hazards associated with lead. HUD funding will also be used by MTSU to conduct educational outreach events to serve over 10,000 individuals, to identify lead-poisoned children through testing, to identify lead hazards in 280 properties, and to make a minimum of 156 homes across the state lead safe with the potential to impact over 500 children.

Drs. Kathy Mathis and Carol Boraiko are the sponsoring faculty for this second round of grant funding. ETIS graduate Faye Ralston manages the program for the department.

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<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

Biology

Jeffrey Walck and his graduate student, Shea Cofer, presented papers at the Annual Meeting of the Botanical Society of America in Chico, California, between July 30 and August 2. The papers were entitled "Germination Ecology of Bulbils From the Exotic Vine *Dioscorea Oppositifolia* (Dioscoreaceae)" and "Determinants of Species Richness and Exotic Species Invasion on Cedar Glades in Middle Tennessee."

Cindi Smith-Walters and **Karen Hargrove** represented the Center for Environmental Education at the North American Association of Environmental Education Conference (NAAEE) October 10-14 in Minneapolis, Minnesota. They co-presented a session about the first Tennessee environmental education summit held at MTSU last April and the statewide EE partnership outcomes. **Karen Hargrove** also represented Tennessee at the NAAEE affiliates meeting October 10-11.

Kim Clearly Sadler and **Karen Metius-House** presented a poster titled "Hands-On and Hypothesis-Based Learning in the Middle Tennessee Cedar Glades" October 10 at the Fourth Annual NAAEE (North American Association for Environmental Education) Research Symposium in St. Paul, Minnesota. Dr. Sadler currently serves as a member of the NAAEE Research Commission.

Kim Clearly Sadler co-presented a session with a colleague from UNC titled "Mentoring Laboratory Graduate Students in Inquiry-Based Methods" October 12 at the National Association of Biology Teachers Conference in Albuquerque, New Mexico. Dr. Sadler currently serves on the four-year college section committee for NABT.

Chemistry

John DiVincenzo, in collaboration with Albert Ogden in Geosciences and a former graduate student, published "A Water Quality Study in Rutherford

County, Tennessee: Student Group Project" in the *Journal of Natural Resources & Life Sciences Education* (Volume 35, 2006). The project involved several undergraduate students delineating groundwater flow patterns and chemically analyzing water samples over a 14-month period.

Engineering Technology/Industrial Studies

The Bridgestone-Firestone Tire and Rubber Company (BFUSA), is working with the ETIS Department to establish closer ties and more collaboration on technical projects in safety, lean manufacturing, plant layout and six sigma. This semester three graduate students are working on three different six sigma projects, and two undergraduates are working on a plant layout project.

The MTSU CIM program won first place in the ACI International Concrete Construction Competition for fall 2006. The winning team was made up of Nick Edwards, project manager, Rob Masteller, Erik Payne, John Vaughn, and Christian Warren. **Heather Brown** was the faculty advisor. The team will travel to Denver, Colorado, November 5-7 to accept their award and present the winning entry.

Mathematical Sciences

E. Ray Phillips, **Mary Martin**, and **Dovie Kimmins** have been appointed to serve on the State P-16 Council Math Curricula Alignment Committee. The State P-16 Council provides the oversight for

state-level initiatives that will incorporate and supplement the work of local P-16 councils which work to improve education from pre-kindergarten through college. The goal of the Math Curricula Alignment Committee is to establish a "seamless" set of standards for student learning with K-12 and higher education meeting accountability within their policy arenas.

Diane Miller presented "A Profile of McNair Students: Beyond the Eligibility Criteria" at the 2006 Fall Joint Conference of the Tennessee Association of Special Programs and the Kentucky Association of Educational Opportunity Program Personnel (TASP/KAEOPP) in Chattanooga October 19.

Diane Miller presented a paper titled "What the Literature Says About the Use of Writing to Teach and Learn Mathematics" at the annual meeting of the School Science and Mathematics Association in Missoula, Montana, October 27.

During Summer 2006, **Don Hong** visited China for a conference and research collaborations. He was invited to speak at the International Conference on Applicable Harmonic Analysis: Approximation and Computation in Beijing, China. He also presented papers at the Symposium of Computations in Bioinformatics and

Bioscience at Hangzhou and the First International Conference on Computational Systems Biology at Shanghai. During his stay in China, Dr. Hong visited nine Chinese universities where he presented talks and exchanged research ideas with colleagues.

Nursing

Maria Smith has been named as the first National League for Nursing (NLN) ambassador from the MTSU School of Nursing! The ambassador program will help the nursing education community advance excellence and transform nursing education by keeping nurse educators informed about NLN programs and the many ways they can be involved in our education-focused initiatives.



CBAS

Many thanks to the those who served on the panel for the TLSAMP Health Careers Forum in September. Panel members included MTSU alumnae LaTonya Knott, MD, and Ogechi Anuna, RN. Also serving on the panel were Frank Wade, MD; Aldrich Perry, DDS; Cecil Cohen, MD; Kyle Cromrie, a Meharry Medical student; Nancy Joseph, MTSU biology major; and Tamara Augustine, MTSU chemistry major.



CBAS to Participate in Tennessee's Best Alumni Tailgate

The College of Basic and Applied Sciences will participate in Tennessee's Best Alumni Tailgate on homecoming day, Saturday, November 4. We invite you to drop by our tent to catch up with CBAS graduates, current students, faculty and staff. Bring your family and enjoy refreshments, fun football giveaways and register for \$50 gift certificates!

The tent for the College of Basic and Applied Sciences will be located in Walnut Grove between the Cope Administration Building and Peck Hall. The tailgate will begin at 12:00 followed by the football game at 2:30. Come out and support the Blue Raiders!

For more information, please contact
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