



The Basic Facts

Volume 7, Issue 6, June 2006

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

Experimental Vehicle Programs Compete

Ricketts Testifies Before Congress

The Science of Success

Inside this issue:	
Experimental Vehicle Programs Compete	1
Ricketts Testifies Before Congress	1
In-Flight Summer Discovery Institute	1
Biology Professor Recognized	1
Our Best	2



The Department of Engineering Technology is proud of the accomplishments of the students participating in the Experimental Vehicles Program. Two of their research projects, the Mini Baja Vehicle and Solar Vehicle, were entered into national and international competitions in May. There are three separate Mini Baja competitions: the West (incorporates a rock crawl event), the East (includes a water event), and the Midwest (the largest). MTSU finished in the top 15 percent of the 142 teams participating within the Midwest competition. The Solar Vehicle also did very well in its competition, placing second in its division and third overall. Dr. Saeed Foroudastan, the faculty advisor of the EVP, would like to give special thanks to Rick Taylor for his assistance in the machine shop, to Ken Sergeant for supporting the students at the Solar Vehicle competition, and to the entire ETIS faculty. Very special thanks to the student participants who showed great dedication and hard work with the projects.

Dr. Cliff Ricketts (ABAS) was one of six national experts testifying before the Science Committee about alternate fuels. For over 20 years, Dr. Ricketts and his students have been building/modifying engines to run off various alternate fuels. It was an honor for Dr. Ricketts to be invited to speak to the Science Committee about his work.



2006 Geier In-Flight Summer Discovery Institute

Paul Craig and the Aerospace faculty held a week of aviation studies and "college life" for approximately 40 African-American high school students at this year's In-Flight Summer Discovery Institute June 5-9. Students participated in various activities, including flying an

airplane. Research activities were also conducted for presentations given at the end of the week. Three students received awards for "best research," "most creative," and "best inspiration." Drs. Bonner,



Foroudastan, and Omachonu attended the last day's festivities in order to judge the presentations and to encourage the students in making the decision to go to college.

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

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

Biology Professor's Contributions Recognized

In his honor and in recognition of his contributions to elasmobranch parasitology, Dr. George Benz, Associate Professor of Biology, had a parasite named after him. This is the second time he has been given this honor. The new parasite,



Selachohemecus benzi, is a parasite that lives in the heart and kidney of the black tip shark. Dr. Benz notes that it is an interesting species for several reasons, the first being that it might be useful as a biological tag to help differentiate be-

tween black tip sharks living in various locations within the Gulf of Mexico. The second interesting fact concerning this species is that as a blood fluke, *S. benzi* belongs to a group of parasites that has had a profound impact on species, including humans. This naming is a great honor and one of the best a biologist can receive. Congratulations, Dr. Benz!



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

All departments are invited to submit items for this column

Aerospace

The Aerospace Department was granted membership into the FAA's Center of Excellence for General Aviation Research (CGAR). CGAR is a consortium of universities that conducts a range of research projects from airport safety and security to advanced aircraft engines and materials. MTSU's specialty is flight training and we will work with the University of North Dakota and Embry Riddle Aeronautical University on flight training and safety-related projects



Agribusiness / Agriscience

Warren Anderson attended the 2006 Southern Region Master Gardener Conference in Chattanooga June 8 and was a Secret Garden host at stop 5 for the Optimistic Gardener's Club Secret Garden Tour June 10. The Rutherford County Environmental Education Cooperative (REEC) met in the Horticulture Facility June 14 to observe the "rain garden" the MTSU students in ABAS 3370 and 4370 constructed last year. Mr. Galibreath from the Tennessee Department of Agriculture made a presentation on the environmental implications of using a rain garden.



Tony Johnston traveled to Central Honduras with a group of 30 faculty and students in May. Along with ABAS, the group was represented by Speech & Theater, Social Work, and Art. Dr. Johnston's primary mission was to determine how faculty and students of the School of ABAS could further interact with the citizens of Honduras. The planting of a native fruit orchard introduced Dr. Johnston to the staff of the local agricultural institute



WaterWorks! program Director Karen Hargrove and Deputy Commissioner Paul Sloan show the baseball Paul threw out as the first pitch before the Nashville Sounds vs. Omaha Royals game on Car Care Night.

which is responsible for agricultural teaching and technology transfer in the region. Vital contacts were made at the institute and plans are being made to make a return trip with additional ABAS faculty and students to capitalize on this experiential learning opportunity.

Biology

In keeping with its long tradition of being the environmental education/conservation education leader in Tennessee, the MTSU Center for Environmental Education (CEE) co-sponsored the first-ever environmental education summit in Tennessee April 27-28. Formal and non-formal educators from across the state convened at the MTSU CEE to share best practices for teaching about the environment. Dr. Kaylene Gebert welcomed over 60 participants to MTSU. CEE directors Padgett Kelly and Cindi Smith-Walters, both long-time environmental educators in Tennessee, led discussions and shared the history of environmental education in Tennessee. Deputy Commissioner from the Tennessee Department of Environment and Conservation, Paul Sloan, delivered a passionate keynote address and personal mini documentary.



Kim Cleary Sadler conducted a workshop June 7 to fourth graders participating in the Murfreesboro City Schools PRISM program. Students learned basic microscope skills and examined objects that may be part of crime scene investigations such as hair and eyelash samples.

Karen Hargrove, WaterWorks! Program Director, presented a session on MTSU's water quality education program at the 35th

Annual Solid and Hazardous Waste Conference in Gatlinburg May 3-5. Karen also collaborated with TDEC during Car Care Night at a Nashville Sounds game to spread the word about her involvement with WaterWorks! and the TDEC Used Oil Program.

CEE staff members Amanda Sherlin and Cindi Smith-Walters conducted a forestry study for approximately 100 Webelo Cub Scouts during Cub Scout Day Camp at Barfield Park June 6 to help the scouts earn their forestry badge. They discussed how trees grow, how to interpret tree cross-sections, and showed visual aids showcasing different types of trees.



Chemistry

In association with the THEC Improving Teacher Quality Grant, "Connecting Physical Science Concepts," Pat Patterson, Amy Phelps and Linda Gilbert conducted three workshops at Blackman Middle School between April 29 and June 9. One additional workshop will be held August 26.

Military Science

Fifteen MTSU Army ROTC Cadets will attend the National Cadet Command Leadership Development Assessment Course at Ft. Lewis, Washington, with three receiving their commission as a second lieutenant upon completion. Three cadets will attend the Leadership Training Course at Ft. Knox, five cadets will attend Airborne School at Ft. Benning, Georgia, two cadets will attend Air Assault School at Ft. Campbell, and one cadet will train in Germany. These cadets are preparing mentally and physically for these challenging and adventurous military schools.

Nursing

Maria Smith has been selected to

serve on the Thomson Delmar Learning's Nursing Advisory Board for 2006. She will attend the 2006 meeting June 21-23 in Clifton Park, NY.

Sheila Marquart presented "End of Life: A Time for Caring" at the MTSU School of Nursing for the Nursing Alumni Chapter May 20.

Karen Ward, Shirley Cantrell and MSN student Sharon Van Wicklin published "Implementing a Research Utilization Plan for Prevention of Deep Vein Thrombosis" in *American Operating Room Nurse (AORN)*.

Suzanne Prevost and J. Brandon Wallace published "Two Methods for Predicting Limited Life Expectancy in Nursing Homes" in the *Journal of Nursing Scholarship*.

Maria Smith presented "On the Nightshift: Online Teaching/Learning - Faculty and Student Perspectives" June 1 at the e-Learning Academy Faculty Development Retreat in Dickson.

Pam Taylor presented "Online Case Studies 101: A Match Made in Heavenly Cyberspace" June 1 at the e-Learning Academy Faculty Development Retreat.

Pam Taylor and Maria Smith presented "Use of Front Page" June 2 at the e-Learning Academy Faculty Development Retreat.

The Nursing Department received notification of a grant that has been awarded by Health Resources and Services Administration (HRSA) in the amount of \$159,266. The grant is for scholarships for disadvantaged students.

CBAS

The James M. Buchanan Scholarship recognizes ten of the most outstanding new freshmen applicants who qualified as National Merit Finalist, Chancellor, Presidential, Otis L. Floyd, or National Achievement Finalist recipients. This year, three of these recipients are CBAS majors and were each Presidential Scholarship recipients. The scholarship is \$1,000 per academic year.