



The Basic Facts

Volume 7, Issue 3, March 2006

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

Former Astronauts Visit CBAS Classes

The Science of Success

Inside this issue:	
Former Astronauts Visit CBAS Classes	1
Joe Hawkins Receives National Award	1
TVA Provides Gift	1
Our Best	2

The Ronald E. McNair Post-Baccalaureate Achievement Program sponsored the visit of former astronauts Dr. Rhea Seddon and Commander Hoot Gibson to MTSU February 28. Dr. Seddon was raised in Murfreesboro and earned her medical doctorate at the University of Tennessee. She was selected by NASA to become an astronaut in 1979, has flown on both Discovery and Columbia missions, and has spent a total of



Pictured Above: Commander Hoot Gibson, Dr. Rhea Seddon and Dr. Diane Miller, McNair Director

722 hours in space. Dr. Seddon visited classes in the School of Nursing. She is currently Assistant Chief Medical Officer at Vanderbilt Medical Group. Gibson became an astronaut in 1979, serving as commander and pilot on five shuttle missions. He successfully guided the Atlantis

station exactly on schedule, June 29, 1995. Prior to his NASA career, he served in the U.S. Navy, graduating from the Naval Fighter Weapons School, also known as Topgun. Commander Gibson visited classes in the Department of Aerospace. During lunch, both guests talked with students in the MTSU McNair Program, sharing their experiences as astronauts and encouraging the students to persevere in following their dreams.

Joe Hawkins: 2006 National Aviation Maintenance Tech of the Year

Joseph C. "Joe" Hawkins of the MTSU Aerospace Department made aviation history for Tennessee as the state's first-



ever award winner as the National Aviation Maintenance Technician of the Year for 2006. Hawkins was nominated

for the award by the Tennessee Aviation Association's Aviation Maintenance Conference Steering Committee. FAA Administrator Marion Blakey will present Hawkins the award during EAA's 2006 Airventure at Oshkosh, Wisconsin, July 24-30.



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

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

TVA Provides Gift for Manufacturing Excellence Conference

The MTSU/Tennessee Valley Authority (TVA) partnership continues with a TVA donation of \$2,000 for the second Manufacturing Excellence Conference which will be held from 8:00 a.m. - 3:00 p.m. Thursday, March 16, at the World Outreach Church conference facilities in Murfreesboro. Jim Keiffer, TVA

director of marketing, delivered the check to Dr. Charles Perry, holder of the Russell Chair of Manufacturing Excellence, and Dr. Tom Cheatham March 7. The proceeds from the conference will benefit the Marvin Runyon Scholarship Fund.



Marvin Runyon was a former TVA chairman. He played a major role in the foundation of where TVA is today.



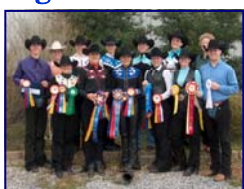
The Basic B.E.S.T. (Boastful Educators Sharing Talents)

All departments are invited to submit items for this column

Aerospace

Paul Craig received notification that his grant titled "Conduct of Qualification Training of FAA Aviation Safety Inspectors" has been funded for over \$35,000 by Embry-Riddle Aeronautical University.

Agriscience



Qualified Western riders from eight of the eleven colleges and universities in Zone 5, Region 1 of the Intercollegiate Horse Shows Association gathered at Murray State University's Agriculture Exposition Center March 11 to compete for Regional Champion status in the first tier of post-season competition. The top three riders in each division qualified for the opportunity to advance to the Zone Championship Show April 8 and 9. The Blue Raider team earned the lion's share of the awards with a full team plus seven individual riders advancing to the Zone Championship show, the second tier and last step to National Championship competition.

Biology

Michael Thompson and Rebecca Seipelt co-authored a research article with two undergraduate students titled "A Conserved Tyrosine Residue of *Saccharomyces Cerevisiae* Leukotriene A4 Hydrolase Stabilizes the Transition State of the Peptidase Activity" and was accepted for publication in *Pep-tides*.

George Benz co-taught a two-day fish health workshop held at the Mandalay Bay Hotel in Las Vegas, NV. He also presented four invited public lectures on his Greenland shark research at the Monterey Bay Aquarium in Monterey, CA, as part of the Aquarium's shark awareness week.

Kim Clearly Sadler was featured in

Winter 2006, No. 1 edition of *Society for College Science Teachers*. She was profiled as a new state membership coordinator for Tennessee.

Cindi Smith-Walters has been busy doing a series of microscope workshops for fifth graders in Metro Schools introducing over 200 students to the wonderful world of the small.

Chemistry

Pat Patterson, Amy Phelps and **Linda Gilbert** (Educational Leadership) received a 2006 Improving Teacher Quality Grant from THEC entitled "Connecting Physical Science Concepts: A Total Approach to Increasing Student Achievement" in the amount of \$74,970.

The 2006 Science Olympiad Regional Competition was held February 18 with over 350 participants. Over 60 people volunteered their time and talents. State Farm Insurance contributed \$3,450 for scholarships for teams at this year's Science Olympiad.

Computer Science

Jungsoon Yoo and Sung Yoo presented "Adaptive Tutor for Online Learning" at the SIGSCE 2006 ACM Conference held in Houston, TX, March 2-4. **Jungsoon Yoo** also presented "Student Progress Monitoring Tool Using Treeview" co-authored with graduate student **Chris Lance** and **Judy Hankins**. **Sung Yoo** attended Cisco Network Security Bootcamp in Louisville, KY, January 13-16.

Ralph Butler traveled to Argonne National Laboratory in Chicago, IL, in January to conduct research on a parallel computing project.

Suk Jai Seo presented "The Competition Number of Directed Cycled in a Graph" co-authored with **P. Slater** at the 37th Southeastern International Conference on Com-

binatorics Graph Theory and Computing in March in Boca Raton, FL. At the 44th ACM Southeast Conference in Melbourne, FL, in March, **Suk Jai Seo** presented "An Introduction to Proper-Coupled-Domination in Graphs (R#49)" co-authored with **P. Slater**. **Jungsoon Yoo** presented "Intelligent Tutoring System for CS-I and II Laboratory" co-authored with **Chrisila Pettey, Sung Yoo, Judy Hankins, Cen Li** and **Suk Jai Seo**. **Cen Li** presented "Modeling Student Online Learning Using Clustering" co-authored with **Jungsoon Yoo**.

Engineering Technology and Industrial Studies

Ronald McBride has been awarded a grant from SolidWorks Corporation with support from Research and Sponsored Programs. The grant is for 500 seats of SolidWorks CAD software which will be used in the Computer Aided Drafting class as well as student design projects.

Math

Michaele Chappell and **Mary Anderson** were panel presenters at the Association of Mathematics Teacher Educators in Tampa, FL, January 26-28. Their presentation was "Strengthening the Content Understanding of Teachers through Pedagogical Explorations." **Mary Anderson** was also an organizer for this conference. **Diane Miller** was a keynote speaker at the Smokey Mountain Mathematics Education Association February 4 in Kingston. Her presentation was "Mathematics - A Global Affair."

Lisa Green gave an invited lecture on "Decomposing Probability Measures Into Mixtures of Measures With Equal Variance" at the International Symposium for Mathematical Modeling Applied to the Sciences (SIMMAC) in San Jose, Costa Rica.

Don Hong and graduate student **Jiansheng Cao** recently published "Parameterized Piecewise Linear Pre-Wavelets Over Type-3 Triangulations" in *Splines and Wavelets*. **Don Hong** and a colleague were guest editors of a special issue on "Wavelets and Applications" in the *Journal of Concrete and Applicable Mathematics*, Vol. 4, No. 4, 2006.

Military Science

Brigadier General **Bill Phillips**, Army officer and MTSU 1976 alumnus, was



the guest speaker at the Army ROTC Military Ball February 25.

Nursing

Linda Wofford presented "Assessment Tips With School-Agers" to the Rutherford County school nurses March 10.

C BAS

Tamara Augustine, a Chemistry major and TLSAMP student, was invited to attend the Invitational Visit for Juniors, Seniors, and Recent Graduates of Color March 12-14 at the ETSU Division of Health Sciences in Johnson City.

In conjunction with African American History Month, TLSAMP students enjoyed a civil rights tour in Atlanta February 24-26. The tour included a visit to Spelman and More-



TLSAMP chaperones

house Colleges. The students were also enriched with information from the Dr. Martin Luther King, Jr., Museum, CNN Headquarters, Atlanta Cyclorama, Jimmy Carter Museum, and the World of Coca-Cola.