

PATHFINDERS MONTHLY

Newsletter of the Office of Grants and Program Review
June 2007

Dr. Ron Bailey and CECS Bring Advanced Transportation Technologies to UTC Campus

Working with several partners, **Dr. Ron Bailey**, Dean and Guerry Professor in UTC's College of Engineering and Computer Science (CECS), has secured \$852,000 from the U.S. Department of Transportation's Federal Transit Administration (FTA) to implement an Advanced Technologies for Transportation Research Program (ATTRP) on campus. The ATTRP will leverage the technical skills of UTC faculty and the expertise of the Advanced Transportation Technology Institute (ATTI) to complete several projects that will focus on advanced technology and alternative fuel options for public transit. Results from these projects will help develop a new transportation plan for UTC that will utilize cutting-edge technologies to support national efforts to improve air quality and reduce dependency on foreign oil. Mark Hairr will serve as Program Director for the ATTRP, and Dan Simpson will serve as Research Scientist. As part of this effort, TVA will lease its vehicle test track to

UTC for long-term use in the ATTRP program; the FTA awarded additional funds to TVA to facilitate the lease agreement.

CECS faculty and students will also play a critical role in implementing this program. Dr. Ignatius Fomunung, Associate Professor of Engineering, will supervise UTC engineering students as they coordinate with CARTA and the City of Chattanooga to develop a short and long term transportation plan for the UTC campus. The number of riders on the campus CARTA route is increasing each semester, and UTC engineering students will develop a marketing plan to fully capitalize on the potential of this campus service. UTC undergraduate and graduate students will also provide development and installation support for CARTA's Intelligent Transportation System on the UTC campus. These projects will offer educational benefits which may lead to future employment and research opportunities in public transportation for UTC students.

Dr. Bailey and project staff will also design, fabricate, and test a new data acquisition system for electric and hybrid-electric vehicles. This new system will enable operating agencies to monitor battery functions on these vehicles in real-time, improving the efficiency of public transportation. Dr. Bailey and project staff will also provide technical assistance to support public transit agencies, universities, national parks, and other entities interested in utilizing advanced transportation technologies.

Through the efforts of Dr. Bailey and CECS faculty and students, the Advanced Technologies for Transportation Research Program will place UTC at the forefront of the national effort to provide cleaner public transportation. This important initiative showcases UTC's commitment to providing valuable applied research experiences for students and exemplifies UTC's mission as an engaged metropolitan university.

FUNDED GRANTS AND RESEARCH

JUNE 1, 2007 – JUNE 30, 2007

COLLEGE OF ARTS & SCIENCES

DR. GREG GRANT

Research Corporation

Self-assembled Platinum (II) and Palladium (III)
Molecular Squares Containing Trithiacrown
Complexes as Vertices

\$35,218

PROFESSOR MATT GREENWELL

Lyndhurst Foundation

Enhanced Curriculum and Instruction in Graphic Arts

\$75,000

DR. NICK HONERKAMP

Georgia Department of Natural
Resources

Archaeological Field Studies at Chocolate Plantation

\$2,348

COLLEGE OF BUSINESS ADMINISTRATION

DR. RICHARD BECHERER

Fulbright/Center for the
International Exchange of Scholars

Fulbright Award to Czech Republic

\$55,500

COLLEGE OF HEALTH, EDUCATION & PROFESSIONAL STUDIES

DR. VALERIE RADU

Tennessee Center on Child Welfare

Social Work Stipend Program

\$350,996

United Way of Bradley County

Needs Assessment Project

\$9,644