

DORED

Points of Pride Fall 2017



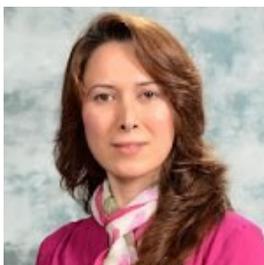
1601 East Market St. Greensboro, NC 27411 Fort IRC Building 336.334.7995 NCAT.edu/research NCATresearch.org

Sang Brings Novel Aspirin Derivatives to the Marketplace

Patients who require the benefits of aspirin without the accompanying stomach irritation are a step closer to comfort and cures with the signing of an exclusive licensing agreement. Dr. Shengmin Sang, a food scientist with N.C. A&T, licensed his patent for a family of novel aspirin-derived compounds to SARISA Therapeutics, an Invenshure Company out of Minneapolis, MN. Sang's patented compounds may be useful in treating or preventing colon cancer, heart disease and other disorders. Through this commercialization effort, more patients may be able to receive the benefits of aspirin without incurring adverse side effects.

Fini Named Lemelson Invention Ambassador

Dr. Elham Fini, associate professor of engineering at N.C. A&T, has been named to the 2017-2018 class of the



Lemelson Invention Ambassadors of the American Association for the Advancement of Science (AAAS). Fini is the inventor of bio-adhesive technology, co-founder of the Bio-Adhesive Alliance Inc., director of the sustainable infrastructure materials lab and J. W. Fulbright Scholar at N.C. A&T.

Cross Campus Collaboration Nets \$7.5 Million Contract with U.S. Dept. of Labor



DORED, in conjunction with Lead Principal Investigator Dr. Cameron Seay in the College of Science and Technology, announced it secured a federal contract through the U.S. Department of Labor. The five-year contract, with a value of \$7.5 million, commenced in late 2016 with the goal of increasing the numbers of underrepresented minorities and women in science, technology, engineering and mathematics (STEM) related fields. The contract focuses specifically on information technology as it relates to talent development for mainframe computers, on which the global economy depends.



Center for Energy Research and Technology
North Carolina A&T State University

DORED manages N.C. A&T's research enterprise. We provide services to faculty, postdoctoral research associates, student researchers, current and potential research partners, funding agencies and economic development agencies. **DORED** serves the university and its Research efforts through research services and project management, compliance and ethics guidelines, aiding in the submission of research proposals, handling financial and regulatory administration of all contracts and grants awarded to N.C. A&T, management of the university's technology transfer and commercialization programs and promoting opportunities for undergraduates to conduct research.

By the Numbers

\$62.5M

in Sponsored Research

R2

Research Classification

#3

in Sponsored Research
in UNC System

The **Center for Energy Research and Technology (CERT)** hosted its 8th Annual Energy Day celebration for over 2,000 local K-12 students at the former Hayes-Taylor YMCA on the N.C. A&T Campus. The Energy Day Celebration is designed to expose the upcoming generation to alternate energy sources and energy-related technologies.

Burks Elected to the Oak Ridge Associated Universities' Board of Directors

Dr. Barry Burks, N.C. A&T's Vice Chancellor for Research, was elected to the Oak Ridge Associated Universities' (ORAU) Board of Directors during the 72nd annual meeting of its Council of Sponsoring Institutions. The board provides policy and fiduciary oversight of ORAU operations for its membership, as well as innovative scientific and technical solutions to advance national priorities in science, education, security and health. Through specialized teams of experts, unique laboratory capabilities and access to a consortium of more than 100 major Ph.D.-granting institutions, ORAU works with federal, state, local and commercial customers to advance national priorities and serve the public interest.

TECHLAV Celebrates Second Annual Meeting

Around 90 professionals representing academia, government and industry descended upon the N.C. A&T campus to assess and celebrate the second-year achievements of the TECHLAV Center. The Center conducts collaborative and integrated research and education programs surrounding the Testing, Evaluation and Control of Heterogeneous Large-Scale Systems of Autonomous Vehicles. The team is comprised of students and faculty from N.C. A&T, University of Texas- San Antonio, and the Southwestern Indian Polytechnic Institute.

Research Celebrated at University's Annual Awards Banquet

Eight N.C.A&T faculty members received the university's five research awards at the 2017 Faculty Excellence Awards Program. The annual event celebrates achievement across the spectrum of teaching, community service, intellectual property and research. The winner of the Senior Researcher Award is Dr. Solomon Bili-lign, Professor of Physics in the College of Science and Technology. The recipient of the Outstanding Young Investigator Award is Dr. Mahour Mellat-Parast, Assistant Professor of Applied Engineering Technology in the College of Science and Technology. The winner of the Rookie of the Year Award is Dr. Andrea Ofori-Boadu, Assistant Professor of Built Environment in the College of Science and Technology. The recipient of the Intellectual Property Award is Dr. Shengmin Sang, Associate Professor in the Center for Excellence in Post-Harvest Technologies in the College of Agriculture and Environmental Sciences. The Interdisciplinary Team Award went to Dr. Ram Mohan, Professor of Nanoengineering in the Joint School of Nanoscience and Nanoengineering; Dr. Sameer Hamoush, Professor of Civil, Architectural and Environmental Engineering in the College of Engineering; Dr. Ajit Kelkar, Professor of Nanoengineering in the Joint School of Nanoscience and Nanoengineering; and Dr. Miguel Picornell-Darder, Professor of Civil, Architectural and Environmental Engineering in the College of Engineering.

Did You Know?

DORED's Office of Undergraduate Research exists to encourage, facilitate, support, and promote all types of undergraduate research and scholarly inquiry. Hundreds of students engage in undergraduate research, and participation continues to increase each year!



N.C. A&T Secures \$5.3 Million Defense Contract

DORED secured a federal contract through the Test Resource Management Center within the U.S. Department of Defense. The four-year contract, with a value of \$5.3 million, commenced in January 2017. The goal is to create a data-driven intelligent prediction tool for the testing and evaluation (T&E) of unmanned autonomous systems (UAS), such as drones, rovers or other air and ground vehicles. The contract will be completed in three phases; the development of T&E algorithms, simulation and soft-testing, and finally the implementation of the algorithms on actual Department of Defense platforms. For phases one and two, the Georgia Tech Research Institute will provide a team of unmanned vehicles for the project, with the ability to collaboratively search for ground targets using onboard vision processing.

Desai Wins ASEE's DuPont Minorities in Engineering Award

Dr. Salil Desai, Professor in the Department of Industrial & Systems Engineering at N.C. A&T, received the DuPont Minorities in Engineering



Award. This award is given to engineering educators who are charged with the responsibility for motivating underrepresented students to enter and continue in engineering curricula at the university level, and comes with a \$1,500 honorarium.