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## Awards & Accomplishments

A group of Texas Tech researchers is part of a larger compilation of institutions receiving a grant to help beginning farmers and ranchers market their products and businesses. Erica Irlbeck, an assistant professor of agricultural communications in the Department of Agricultural Education and Communications, has secured the \$600,000 grant from U.S. Department of Agriculture (USDA) as part of its [Beginning Farmer and Rancher Initiative](#). Courtney Meyers, an assistant professor, and Cindy Akers, a professor, both in agricultural communications, are involved in the project, as well as researchers from the University of Illinois, University of Georgia and Kansas State University.

Texas Tech researchers are part of a water conservation team that has received \$500,000 from the USDA's Natural Resources Conservation Service. The Conservation Innovation Grant provides three years of funding to support a large-scale demonstration effort in the South Plains and northern Panhandle. The project also includes experts from the North Plains Groundwater Conservation District, High Plains Underground Water Conservation District, Texas Alliance for Water Conservation and Texas AgriLife Extension.

As a result of a recently awarded \$1.1 million grant from the Texas Council for Developmental Disabilities, Texas Tech will soon house Project CASE, a program whose goal is to help students with developmental disabilities navigate through the higher education system. Project CASE (Connections for Academic Success and Employment) will link the Burkhart Center for Autism Education and Research at Texas Tech with South Plains College, the Texas Department of Assistive and Rehabilitation Services, and local business partners to offer a wider array of coordinated supports and services than typically provided in higher education for students with disabilities.

In July, the Texas Tech University School of Law announced Darby Dickerson as the new dean. Dickerson joined Texas Tech after serving as vice president and dean at Stetson University College of Law in Tampa Bay, Fla. She received her B.A. and M.A. from the College of William and Mary and earned her J.D. in 1988 from Vanderbilt Law School, where she served as senior managing editor of the Vanderbilt Law Review and as a member of the Moot Court Board. After law school, Dickerson clerked for the Honorable Harry W. Wellford of the United States Court of Appeals for the Sixth Circuit and then worked as a litigation associate for six years at the Dallas firm of Locke Purnell Rain Harrell (now Locke Lord). In 1995, she was named both Outstanding Director of the Texas Young Lawyers Association and the Outstanding Young Lawyer in Dallas. [Read More.](#)

A Texas Tech instructional technology professor received a \$112,762 grant from the Next Generation Learning Challenges to implement an adaptive Web-based tutorial aimed at improving K-12 students' abilities in mathematics problem solving. Fethi Inan, assistant professor in the Department of Educational Psychology and Leadership, will use the grant to incorporate his previously designed tutorial, [aps4math.com](#), into high school and junior high school math classrooms. His work focuses on increasing students' math state test scores and algebra word problem-solving skills.

The Bob L. Herd Department of Petroleum Engineering received a \$45.1 million gift from Schlumberger. The gift, approved by the Texas Tech University System Board of Regents during a meeting on May 12, will provide students and faculty with access to state-of-the-art visualization software. Included in the gift are new software modules that add functionality to 100 licenses of Schlumberger's ECLIPSE software currently used by the department. Schlumberger is the world's leading oilfield services company, supplying technology, information solutions and integrated project management to customers in the oil and gas industry.

Seiichi Nagihara, associate professor of geosciences, received a research grant of \$833,024 for 3 years from NASA. The research project is titled "Low-power, Low-mass Geothermal Heat Flow Instrumentation for Small Robotic Landers." Nagihara is the principal investigator. He has co-investigators from Honeybee Robotics Space Flight Mechanism Corporation in California and NASA Goddard Space Flight Center in Maryland.

For the second year in a row, Texas Tech's Wind Science and Engineering Research Center (WISE) is listed in Popular Science magazine as one of the best places to pursue science in the United States. WISE appears in a photo gallery in the article "[You Call This College? The 25 Coolest Labs in the Country.](#)" The

photo, the eighth of 25, depicts atmospheric science students as they observe Texas Tech's wind cannon hurling planks at a wall to measure hurricane damage.

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Stacy Carter, an associate professor in special education, was recently awarded a five-year grant for more than \$266,000 from the Department of Aging and Disability Services and Lubbock State Supported Living Center to provide services and conduct research on behavior analysis treatment approaches.

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Biochemistry professor Robert Shaw and his former graduate student K.M. Kim were issued a patent titled "Inhibition of Metallo- $\beta$ -lactamase by RNA" (U.S. Patent #11/663713) in August. It is the third patent in a series issued to Shaw dealing with technology that is aimed at reducing the serious medical and pharmaceutical problem of antibiotic resistance in pathogenic bacteria.

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Texas Tech chemistry researcher Guigen Li received a four-year, \$1.06 million grant from the National Institutes of Health to study more effective methods for creating compounds used in pharmaceuticals. The professor in the Department of Chemistry and Biochemistry, will use the grant to discover faster, more cost-effective ways to sterilize the compounds used to make pharmaceuticals.

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A 2010 graduate of the doctoral program in Personal Financial Planning at Texas Tech presented research from his doctoral dissertation at the New York Stock Exchange during the annual board meeting of the Journal of Indexes in June. David Nanigian's research, titled "The Impact of Passive Investing on Corporate Valuations," finds that periods of high investment into S&P 500 index mutual funds led to temporary increases in the prices of stock in the index.

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The Institute of Environmental and Human Health (TIEHH) at Texas Tech has received a \$1.1 million research award from the U.S. Army's Research, Development and Engineering Command to continue funding the Admiral Elmo R. Zumwalt Jr. National Program for Countermeasures to Biological and Chemical Threats. Ron Kendall, director of TIEHH, said this was the first funding cycle of a new three-year contract for the program, which was chartered at Texas Tech in 1999.

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Texas Tech researchers received a \$115,000 grant from the Gulf of Mexico Research Initiative in a joint research project with Tulane University to collect samples of a common bait fish a year after the Deepwater Horizon oil spill. James A. Carr, a professor in the Department of Biological Sciences, serves as the lead investigator for the project. He said he and other researchers will collect the Gulf killifish, or *Fundulus grandis*, which serves as a sentinel species.

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TIEHH researchers recently received \$846,000 to fund three studies looking at diminishing bobwhite quail populations across the state. The money is part of \$1.97 million allocated to Texas Tech as well as Texas A&M University by the Rolling Plains Quail Research Foundation to discover the culprit as to why these quail populations have dwindled to the lowest on record.

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A 3-D film featuring a Texas Tech paleontologist recently earned an award from the British Academy of Film and Television Arts (BAFTA). Sankar Chatterjee, curator of paleontology at the Museum of Texas Tech and expert on how pterosaurs flew, was featured in Sky1's "Flying Monsters 3D," narrated by Sir David Attenborough. The film is the first 3-D film ever to earn a BAFTA award in the Specialist Factual category, and it beat out the BBC's "Human Planet."

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A dragonfly designed by Texas Tech engineering students was a winner in this year's design contest for novel microelectromechanical systems (MEMS), held at Sandia National Laboratories. The gadget opens new possibilities in the design of aerial surveillance devices, whose uses include from quantifying the radiation leaking from damaged Japanese nuclear reactors and delineating enemy positions.

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Four Texas Tech professors received a four-year \$1.2 million grant from the Office of Naval Research to develop more effective detection systems for finding explosive material. The grant funds a project titled "Resolving the Complexity of Hot Spots Caused by Weak Energy Concentration and Coupling in Composite Energetic Materials." Recipients of the competitive grant include Louisa Hope-Weeks, an associate professor in the Department of Chemistry and Biochemistry; Brandon Weeks, an associate professor in the Department of Chemical Engineering; Greg McKenna, a Horn Professor and holder of the John R. Bradford Chair in Engineering in the Department of Chemical Engineering; and Michelle Pantoya, a professor in the Department of Mechanical Engineering.

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Texas Tech University System officials announced in June the receipt of an anonymous \$1.2 million gift to the Texas Tech Department of Economics to create the Institute for the Teaching and Study of Free Market Economics. The gift, which is part of the system's billion-dollar Vision & Tradition campaign,

provides funds for the department to hire three new faculty members, including one full professor and two junior faculty.

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