



OU Secures \$8.7M Award for Air Force-backed Metal Additive Manufacturing Research Project

OU has received an \$8.7 million award through the Air Force Research Laboratory in partnership with the Air Force Sustainment Center, Oklahoma City Air Logistics Complex, and GE Additive. The award aims to fund a comprehensive metal additive manufacturing research project to test the design and fabrication of replacement parts that could meet the certification requirements for airworthiness qualification by the U.S. Air Force. [Full story.](#)

Faculty News

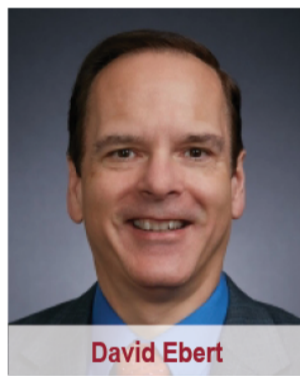
Revolutionizing Supply-Demand Analysis: DARPA Backs \$3.7M Project

Andrés D. González is leading a research effort funded by the Defense Advanced Research Projects Agency. During the four-year \$3.7 million project, the team aims to build a comprehensive computational and visual analytics system. They will employ cutting-edge modeling, prediction techniques and visualizations like graphs, charts and maps to detect vulnerabilities and patterns. [Full story.](#)



DoD System of Systems Consortium Funds SCRM Study

A team led by David Ebert and Charles Nicholson aims to develop an AI-enhanced information search and risk analysis system, focused on evaluating supplier vulnerabilities and establishing risk indexes for U.S. Air Force suppliers. The \$642,244 grant from the Department of Defense supported System of Systems Consortium supports a project titled "Intelligent Supply Chain Risk Management Industry Study." [Full story.](#)



David Ebert



Charles Nicholson

OU Engineering 1 of 28 Teams to Receive DEPSCoR Support

Reza Foudazi was selected to receive a Defense Established Program to Stimulate Competitive Research grant of up to \$600,000 from the DoD. One of 28 academic teams across the nation to be selected for the grant, OU will use the funds to study the transport of multivalent ions in thermoresponsive ionogel electrolytes from lyotropic liquid crystals. [More about the award.](#)



Study Focuses on Enhancing Composite Supply Chains

John Klier and Yingtao Liu (photo) will spearhead a project utilizing ultrasonic additive manufacturing to investigate defense supply chains. The project goal is to enhance composite supply chains and decrease dependence on external suppliers in the U.S. defense sector. They recently received seed grant funding from the [Oklahoma Aerospace and Defense Innovation Institute](#) and the [Data Institute for Societal Challenges](#). [Full story.](#)



Coming Soon: Sooner Advanced Manufacturing Lab

The Sooner Advanced Manufacturing Lab, a cutting-edge facility poised to support sustainment research, will soon begin operations in Norman. The 5,000-foot-square lab will house a multi-disciplinary research team and feature state-of-the-art metal additive manufacturing machines alongside characterization and testing equipment. Capabilities will extend to the production of titanium and stainless-steel components through direct metal laser sintering. Backed by recent grants, the lab will enhance collaboration with [Air Force Research Laboratory](#) and the [Oklahoma City Air Logistics Complex](#) at Tinker Air Force Base.

Student News

In their inaugural year of participation in the Aerospace Propulsion Outreach Program, seven OU Engineering undergrads embarked on a year-long project organized by the Air Force Research Laboratory. Their goal was to develop a power generation system capable of delivering 500 watts of direct current power during engine operation while enhancing thrust. The team included Emma Biskup, Sam Bronson, Tom Cruickshank, Alias John, Hollan Morris, Kaiden Nelson and Dain Ross, guided by faculty advisers Srikanth Basetty and Chris Dalton. [Video here.](#)



OU Engineering doctoral student Jonathan Knowles has been awarded a National Defense Science and Engineering Graduate Fellowship from the DoD. Advised by Jay McDaniel, Knowles is developing a framework for distributed sensor navigation that could improve the accuracy of mobile radar nodes with and without GPS access. [Full story.](#)



Celebrating International Women in Engineering



International Women in Engineering Day, sponsored by the Women's Engineering Society, celebrates its 10th year in 2023. OU Engineer Li Song oversees the Gallogly College of Engineering's Building Energy Efficiency Laboratory. She discusses her research and provides advice to new female engineering students. [Video here.](#)

1945

Following the conclusion of World War II on September 2, 1945, the Naval Air Station in Norman, Oklahoma, ceased its operations. Situated in close proximity to OU, the site underwent a transformation and was subsequently recognized as OU's North Campus, encompassing the Max Westheimer Airport. The facility has remained operational and continues to serve its purpose to this day.

Source: *OU College of Engineering: A 70-Year History*, By Tom J. Love Jr., George Lynn Cross Professor Emeritus, OU School of Aerospace and Mechanical Engineering,

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