

Wednesday, October 22, 2008 - 3:01 PM CDT

UNT to be home of new research institute

Dallas Business Journal

Researchers at the [University of North Texas](#) are expected to play a key role in the development of the Air Force's next generation of jet engines. To that end, the university is receiving a multimillion-dollar government grant to study jet engine failure.

UNT will be partnering with the [U.S. Air Force Research Laboratory](#) in Ohio to fund the new Institute for Science and Engineering Simulation at the university. The goal of the institute's research will be to understand the causes of jet engine failure — with the end goal being the creation of more durable Air Force jet engines. The university obtained \$2.2 million in funding for the project this year and is expected to receive an additional \$6.36 million from the U.S. Air Force Research Laboratory in 2009.

U.S. Sen. Kay Bailey Hutchison, R-Texas, and U.S. Rep. Michael Burgess, R-Lewisville, pushed for the funding and announced the partnership Wednesday.

Congressional appropriations are supporting the project. The research will be executed through the combined efforts of the Air Force and professors and researchers working within UNT's materials science and engineering and chemistry departments.

“With wars in Iraq and Afghanistan, a great deal of stress is being placed on the country's aircraft,” said Raj Banerjee, the director of ISES and UNT associate professor of materials science and engineering. “The research at UNT will help maintain and extend the life of aging aircraft, prevent catastrophic engine failure and aid the Air Force in developing better materials for the next generation of aircraft.”

UNT's Advanced Research and Technology center, as well as the [Center for Advanced Scientific Computing](#) and Modeling, will play a role in the research.

As part of their study, researchers will evaluate how jet engines and their individual components respond to adverse conditions.

Though the research is for military use, UNT researchers say discoveries made could impact the broader aerospace industry.