

The University of Texas at El Paso
College of Engineering
500 W University Ave
El Paso, TX 79968
Phone: 915-747-6444
Fax: 915-747-5437



News Release

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Contact: Ingrid Wright

UTEP Students Prepare for Flight Aboard NASA's Reduced Gravity Aircraft

Five students will venture to NASA Johnson Space Center's Ellington Field in Houston to conduct experiments aboard the reduced gravity aircraft Nov. 8-15.

The Reduced Gravity Education Flight Program (RGEFP) gives undergraduate students the opportunity to propose, build and fly experiments in reduced gravity. The teams will perform the experiments aboard a microgravity aircraft, which produces periods of weightlessness for up to 25 seconds at a time by executing a series of approximately 30 roller coaster-like parabolas over the Gulf of Mexico. During the free falls, the students will to gather data in the unique environment that mimics space.

UTEP's team's opportunity to participate is the result of the hard work and commitment of team leader Arturo Acosta-Zamora, mechanical engineering major, Isaac Cereceres, electrical engineering major, Jose Luis Mena, mechanical engineer major, Alejandra Vargas, electrical engineer major, Kimberly Hogge, mechanical engineer major and Ashley Rivas, electrical engineer major. The team was advised by Dr. Evgeny Shafirovich, Assistant Professor of Mechanical Engineering.

The team was selected based on scientific merit and educational outreach potential from more than 67 proposals. They have put many hours into researching and building their experiment. They are also taking time to reach out to other students and the community to share their unique experiences and discoveries.

"We are excited that our program provides once-in-a-lifetime opportunities for aspiring scientists and engineers to study and understand their craft. The students gain useful skills by participating

in the program through collaborative planning and teamwork,” said Frank Prochaska, RGEFP Manager.

The UTEP student team will arrive at Ellington Field, where astronauts do their T-38 training, on Nov. 8. They will then go through required training and safety briefs and then will fly their experiments during the week of November 8-15, 2013. This experiment will seek to start the development of compact and reliable microbe monitoring systems for crew cabinet environment. Microbes provide a health hazard for astronauts while on orbit, therefore a monitoring system will facilitate astronauts to know about the microbial levels. Sterilized and cleaned metal samples will be impacted with cabin air during the microgravity flight. Post-flight analysis will determine whether or not the system and sample materials used during the experiments are suited for microbial monitor systems.

Following their flight, the team will evaluate findings, draw conclusions and provide the results to NASA.

For more information about the Reduced Gravity Education Flight Program, visit:

<http://reducedgravity.jsc.nasa.gov>

Or contact Ciandra Jackson at NASA Johnson Space Center’s Public Affairs Office, at 281-483-2924, or ciandra.t.jackson@nasa.gov .