



College of Engineering Students Will Head to Johnson Space Center this Summer as Finalists in the Micro-g NExT Challenge

University of South Florida College of Engineering students are finalists in NASA's new microgravity program called *Micro-g Neutral Buoyancy Experiment Design Teams (Micro-g NExT)*.

Micro-g NExT challenges students to work in teams to design and build prototypes of tools that will address authentic, current space exploration problems. The three student teams are part of the Bioastronautics class, a mixed graduate and undergraduate course taught by Mechanical Engineering Assistant Research Professor, Stephanie Carey.. Each team prepared a proposal for the NASA's Micro-G competition as a class assignment, and several teams expanded their projects to meet the constraints of the proposal and submitted their proposals to the competition. More than 100 teams from across the nation entered the competition, but only 19 were selected for the test operations, and three of the 19 are teams from USF.

The evaluation phase of the competition will bring the student teams and their prototypes to the Neutral Buoyancy Laboratory (NBL) at the Johnson Space Center in Houston. There NBL scientists and astronauts will evaluate use of the prototype devices during underwater sampling events designed to mimic a spacewalk on an asteroid. It's not all about the device sampling: The week-long visit at the JSC will provide students opportunities to collaborate with the JSC scientists, astronauts and other team competitors, and explore space careers with NASA. The three USF teams comprised of undergraduate students, graduate advisors and faculty mentors, and their prototype devices are:

Bulls in Space demonstrates Bull's Float Sample Grabber

Brittany Mott, junior industrial engineering; Chris Willis, junior mechanical engineering; Brant Meier, senior mechanical engineering; Chris Weaver, senior mechanical engineering; Eva Fernandez, College of Engineering advisor and master of science in biomedical engineering graduate student and team advisor; Jonathan Gaines, Ph.D., faculty advisor.

Precision Astro Geo demonstrates Hammer Head

Tyler Isaacs, senior mechanical engineering; Riley Trumble, senior mechanical engineering; Christian Rossi, senior mechanical engineering; Tyler Reed, senior mechanical engineering; Louis Melgar, rehab engineer staff CARRT, master of science in biomedical engineering graduate student and team advisor; Ajit Mujumdar, Ph.D. faculty advisor.

The Rock Biters demonstrate Repeatable Operation Chipper & Container (ROCC)

Josh Steinrock, junior mechanical engineering; Kyle Mott, senior mechanical engineering; Kaitlin Lostroscio, junior mechanical engineering; Jonathan Gaines, Ph.D., faculty advisor.

The USF teams are collaborating to obtain the funds necessary for final fabrication of their devices and their travel to Houston. To support our teams or to learn more information, contact [Eva Fernandez](#).

For more information on Micro-g NExT go to [Microgravity University](#).