The Complete Undergraduate Research Experience Inspired by NASA’s Microgravity University

TIMOTHY RITTER, The University of North Carolina at Pembroke — In a typical undergraduate research experience the student is often assigned a small portion of a more comprehensive endeavor. While they may complete their assigned portion of the project, the larger investigation is usually one that was active prior to the student’s arrival in the lab and will continue once the student has left. What we present here are the results, lessons, and experiences from a multidisciplinary, multicampus, undergraduate microgravity research program. This unique experience requires a team of students to go from the idea stage to final report writing in one year. During the entire process the team is also conducting a vigorous outreach program. The research is conducted as part of NASA’s highly competitive Reduced Gravity Student Flight Opportunities Program. Because of its unique features, we believe our program provides the student with a broader, more comprehensive, and more stimulating research experience than a traditional undergraduate research experience.

Timothy Ritter
The University of North Carolina at Pembroke

Date submitted: 27 Nov 2007