Grant will boost student research efforts

Georgia Southern physics professor Sarah Higdon has been awarded a \$179,376 grant from the National Science Foundation (NSF) to further undergraduate research at the University.

The five-year collaborative grant is designed to help develop research opportunities for undergraduate students who will have an opportunity to work with scientists from around the world on a major astronomy project.

The grant provides students and faculty at Georgia Southern and 13 other institutions access to the Arecibo Legacy Fast ALFA (ALFAL-FA) survey, an ongoing project that is expected to detect 20,000 galaxies out to a distance of 750 million light years.

"This grant makes it possible for undergraduates to contribute to the scientific output of the ALFALFA extragalactic survey and follow-up studies," said Higdon, a professor of astronomy in the Department of Physics. "At the same time, the students will learn valuable lessons about the way that science collaboration functions through their interactions with their faculty mentors, their peers and the leaders of the project."

Led by Cornell University astronomers Riccardo Giovanelli and Martha Haynes, the ALFAL-FA survey is based at the Arecibo Observatory in Puerto Rico. Using the world's largest radio telescope, the survey is mapping a large part of the sky by using radio wavelengths that are appropriate for the detection of neutral hydrogen



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Physics professor Sarah Higdon was awarded a grant from the National Science Foundation.

gas in other galaxies.

"One of the main goals of the project is to discover low-mass, 'starless' galaxies, which contain hydrogen gas, but have not yet formed stars," Higdon said. "The abundance of these 'dark' galaxies, their characteristics and their locations are key clues to understanding how galaxies form and evolve throughout the universe."

Higdon has been contributing to the ALFALFA survey by providing data on star formation, gas properties of merging galaxies, and the formation of tidal dwarf galaxies.

Higdon is working with Colgate University professor Tom Balonek and Union College professor Rebecca Koopman. Together, they are developing an undergraduate student program that includes four core components:

- An annual group workshop at Arecibo that eatures observing sessions, lectures and group activities.
- Observing time at Arecibo for several groups of students per year.
- An annual summer research stipend program that will support seven students who will make a presentation at a national meeting.
- Funding to provide computers to each of the 14 consortium schools.

As part of the grant, Higdon will also collaborate on curriculum and public outreach endeavors with Jose Alonso, the director of the Angel Ramos Foundation Visitors Center at Arecibo.

Two Georgia Southern students are already involved in the ALFALFA survey. Physics majors Josh Davidson and Daniel Richey accompanied Higdon to Arecibo and gained experience with the radio telescope in January.

Theatre professor Dartt is 2007-2008 Ruffin Cup recipient

Theatre professor Gary Dartt is the 2007-2008 winner of the College of Liberal Arts and Social Sciences' annual Ruffin Cup award.

The Ruffin Cup is presented to a CLASS faculty member who exemplifies the goals of the college, has given distinguished service to the University for at least 10 years, and excels in teaching and service to students, in scholarship, and in contributions to the spirit of the liberal arts.

Since joining Georgia Southern's faculty in 1988, Dartt has taught more than 20 different theatre courses. He has directed more than 15 plays and musicals, and served as the production designer for over 55 performances. He received the CLASS Award for Distinction in Creativity in 2003. As the winner of the Cup, Dartt will have his name engraved, and he will retain it for a year. He will also receive \$1,000 for use in the enhancement of his teaching and scholarship through travel, the purchase of teaching materials and equipment, or other means.

Prior to arriving at Georgia Southern, Dartt served as an associate professor of theatre at Fordham University and Lycoming College.

Dartt earned a B.S. degree with a major in art and a minor in theatre from Augustana College. He received an Master of Fine Arts degree from the University of Minnesota.

The cup was endowed by the late Professor Emeritus of English David A. Ruffin.



Gary Dartt, left, accepts the 2007-08 Ruffin Cup from foreign language professor David Alley, last year's recipient.