M.A.T. candidates selected for Georgia Southern University NSF-ENERGY advanced research experience

April 25, 2017

Pictured (l-r): Rocio Alba-Flores, Ph.D., associate professor of electrical engineering; Molly Hopper, MAT candidate; Lindsey Snowden, MAT candidate; and Valentin Soloiu; Ph.D., professor of mechanical engineering.

Master of Arts in Teaching (M.A.T.) candidates Molly Hopper and Lindsay Snowden from Georgia Southern University’s College of Education have been selected to participate in a seven-week advanced research experience for teachers at the University sponsored by the National Science Foundation. This experience will involve conducting solar water heater research under the direction of Valentin Soloiu, Ph.D. along with faculty member David Calamas, Ph.D. Georgia Southern faculty involved in the project state that having secondary teachers research with them in the labs allows these teachers to better prepare the next generation of engineering students and make students more aware of the real world applications of engineering and technology.

Hopper and Snowden are two of 10 Georgia teachers selected for this summer experience.

“I am honored and excited to be selected to participate in the ENERGY program,” said Hopper. “I have always had a passion for environmental sustainability, and I feel like this program will show me real world applications for the importance of sustainability.”

Snowden also expressed her excitement in being a part of the program.
“It was an incredible feeling to be selected,” she said. “I am most looking forward to being able to apply what I learned to my classroom. I want my classes to be fun for students by trying to stay away from lectures and allow students to learn by doing.”

Both Hopper and Snowden conveyed the value this program can bring to their instruction in the classroom.

“This research will focus on renewable energy in the fields of wind, biofuels, and solar power in advanced engineering labs around the Georgia Southern campus,” said Snowden. “This program will help assist me in becoming a stronger teacher because I will be able to take this experience into the classroom and pass it to my students in a hands-on learning approach.”

“Hands-on learning is extremely important for students,” said Hopper. “After completing this program I know I will have various experiences and information to share with my students, and even encourage them to explore sustainable solutions to problems they may see in their lifetime.”

Hopper and Snowden are completing the M.A.T. Secondary Education program in the area of biology. They both also hold undergraduate degrees in biology from the University.

ENERGY program founders Soloiu, professor of mechanical engineering and Allen E. Paulson Distinguished Chair of Renewable Energy (PI), and Rocio Alba-Flores, associate professor of electrical engineering (co-PI), were awarded a three-year grant by the National Science Foundation (NSF) for their project entitled “ENgaging Educators in Renewable enerGY (ENERGY).” The NSF grant is part of the Research Experiences for Teachers (RET) program.

The grant includes that the goals of the RET program are to “help build long-term collaborative partnerships between K-12 STEM teachers, community college faculty, and the NSF university research community by involving the teachers and community college faculty in advanced engineering and computer science research and helping them translate their research experiences and new knowledge into classroom activities.”

The Allen E. Paulson College of Engineering and Information Technology is dedicated to increasing the level of STEM education throughout Georgia with projects like ENERGY. The grant program will be offered for the next three years.

Share:

Posted in Student Highlights

Tags: Lindsay Snowden, Molly Hopper
Five College of Education undergraduates present at NCUR 2017

April 25, 2017

Pictured (l-r) Cassi Villers, middle grades education major; Meca Williams-Johnson, Ph.D; Anna Dowdell, early childhood education major; Kayleigh Hunter, early childhood education major.

Georgia Southern University College of Education faculty and students presented at the 31st annual National Conference on Undergraduate Research held April 6-8 in Memphis, TN.

Associate Professors Kymberly Harris, Ph.D., Department of Teaching and Learning and Meca Williams-Johnson, Ph.D., Department of Curriculum, Foundations, and Reading served as faculty mentors for five undergraduate students who were accepted to present at the conference.

“There were several students from across the United States presenting intriguing research from a wide variety of disciplines,” Williams-Johnson said of the conference. “I was impressed with the level of sophistication and complexity when the students presented their research.”

Early childhood education major Anna Dowdell presented “Preferred Behavioral Management Strategies in 3rd – 5th Grade Teachers.” Her research examined classroom management procedures and strategies
by interviewing teachers about their behavioral management plans and observing the teacher’s classroom to see their plans in action.

Kayleigh Hunter, early childhood education major, presented a session titled, “Technology and Student Achievement in STEM Subjects: Perspectives from Teachers in Grades 3rd–5th.” Her presentation centered around teachers’ perspectives of their roles and responsibilities of integrating technology in the classroom and the influence technology has on the achievement of students.

Middle grades education major Cassandra Villers presented information on middle school students’ thoughts and perspectives of what motivates them in the classroom. Her session, titled “Characteristics of an Engaging Middle Grades Classroom,” explored students’ suggestions of what they would like to see from their teachers in terms of engagement and stimulation that could improve learning quality.

Pictured (l-r): Kymberly Harris, Ph.D.; special education majors Samantha D’Amato and Kaitlin Spell.

Special education majors Kaitlin Spell and Samantha D’Amato participated in a poster presentation. Their presentation, titled “Effects of Student Teachers on Students with Emotional Behavior Disorder,” explored the presence of student teachers in the classroom and the adverse effect it had on a student with emotional behavior disorder after leaving the classroom at the end of their six-week rotation.

Harris explained that for the students, especially in the special education field, research influences their careers.

“It was especially telling to hear students say ‘teachers work with data all the time, and using data to make decisions about student outcomes is important.’ The recognition that their profession is indeed
research-driven is extremely important when determining what and how to teach in classrooms,” Harris said.

Williams-Johnson has observed several undergraduate students participating in research and believes these projects help to develop students’ interest in graduate study and advances their professional development.

“Additionally, undergraduate students presenting research increases awareness about their chosen profession and their confidence,” said Williams-Johnson. “Many students are drawn into researching topics of interest and begin to ask critical questions that will explore how we can make a meaningful and measurable differences.”

Williams-Johnson and Harris also presented a session for faculty attendees at the conference titled, “Making Research Authentic: Data Collection in an Undergrad Special Education Program.” During the presentation, they presented information from both their personal and colleagues’ experiences in implementing a redesign of the undergraduate special education curriculum to include research components.

The National Conference on Undergraduate Research is hosted each year by the Council on Undergraduate Research (CUR). CUR focuses on providing undergraduate research opportunities for faculty and students. CUR provides support for faculty, administrator, and student development.