

## Physics students install solar panel at Baldwin County High School

A group of Georgia College physics majors recently installed a solar panel at Baldwin County High School (BCHS). They represented all four years of college—from freshman to a senior who graduated last May. It was the university's first off-campus solar project—delayed slightly from the spring, due to COVID-19.

"This was the most exciting part for me, seeing the transfer of knowledge from my physics scholar, Bo, on down to Evan, our freshman," said Dr. Hasitha Mahabaduge, assistant professor of physics.

Every year, Mahabaduge gives a seminar on physics to honors students, who have that "little extra something" about them. The seminars are a recruitment tool for Mahabaduge. Inevitably, after each, a student will email him looking to do more. This time, it was a freshman from Acworth, Evan Dunnam.

Dunnam zeroed in on a point Mahabaduge made regarding his solar panel research. He emailed the professor to ask if there were any solar projects coming up. Mahabaduge said, "Yes, there's one this weekend."

Last month, Dunnam joined three other students: alumnus Bo Cavender, who works at a textile manufacturing company while applying to graduate schools; junior Catherine Boyd and sophomore Caleb Cardinally. Dunnam never thought he'd be doing research and working with upper-classmen so early in college.

Now, he's interested in pursuing aerospace engineering.

"It's opened up a couple doors for projects in the future," Dunnam said. "I came in not knowing the first thing about solar panels. The most interesting part for me was doing hands-on work with a breaker box that was connected to the solar panel and a charge controller, an inverter and stuff I'd never even heard of."

"It helped me learn about electricity," he said, "and it got me curious to get into it a little bit more, because there's so much I don't know that I'd like to know."

In 2019, BCHS officials approached Georgia College's Office of Sustainability for help installing a solar panel they received as a donation. They wanted to bring power to a small shed used for gardening projects at the school.

Sustainability officers got in touch with Mahabaduge, who had his students come up with a list of materials they needed to do the job. Then, Cavender scripted a plan and acted as supervisor, delegating work to the other students.

All plans seem perfect on paper, Mahabaduge said. But, in life, problems arise. The first obstacle was the shed faced the wrong direction. For all-day sunlight, it needed to be moved to a new cement foundation facing south.

Once that was done, the students arrived for installation and soon discovered they had mis-measured the roof's angle. Nail holes, made in wrong places, had to be resealed. Boxes were opened, only for students to find parts missing. A half-day project took all day.

Having to "think on their feet" and solve unexpected problems is part of the learning process,



Mahabaduge said. It reflects what students will experience in the real workplace.

In the end, the panel was mounted with nuts and bolts at the right angle to catch the sun. It connects to two batteries, which will generate up to 300 watts of energy—giving the BCHS shed enough "off-the-grid" electricity to power tools and a light for several hours a day.

This collaborative effort with BCHS "provides a lasting economic impact and will hopefully inspire local students to pursue careers in science," said Dr. Chavonda Mills, chair of physics, chemistry and astronomy.

Inspiring others is one reason Boyd got involved with the project. The Columbus resident thinks it's important to be a role model for high school girls—showing them women can be successful in science. Like Dunnam, Boyd started in Mahabaduge's research lab as a freshman. She's on track to get a dual degree in mechanical engineering at the Georgia Institute of Technology, and she'd like to work at NASA.

"It was surprising to jump right into research my first year. I didn't know that was unusual, until I started presenting at conferences, and people would ask if I was a junior," said Boyd. "By giving us the opportunity to do research as an undergrad, Dr. Mahabaduge has definitely given us a step-up on other students."

## School of Nursing holds White Coat Ceremony for Class of 2022



Photo above from last year's ceremony.

Georgia College School of Nursing (SON) hosted its White Coat Ceremony Oct. 29, a rite of passage to emphasize the importance of compassionate patient care at the very start of training.

This is the year of the nurse and the midwife, who both play a vital role in providing health services. These students decided to devote their lives to caring for mothers and children; giving lifesaving immunizations and health advice; looking after older people and meeting everyday essential health needs. They may become the first and only point of care in their communities. The world needs 9 million more nurses and midwives if it is to achieve universal health coverage by 2030.

Due to the COVID-19 pandemic, the ceremony this year was a hybrid, with students socially distanced and family and friends watching remotely. Fifty-six new students recited an oath with a commitment to humanistic, compassionate, collaborative and scientifically excellent patient care.

Students came forward during the ceremony to be "cloaked" by Dr. Sheri Noviello, dean of the College of Health Sciences, Dr. Deborah MacMillan, director of SON, Dr. Debbie Greene, assistant director SON, Dr. Jennifer Goldsberry and Dr. Catherine Fowler. They then stood before family and friends in the iconic white coat that signifies their status as healthcare professionals.

Students received a lapel pin from the Gold Foundation to serve as a visual reminder to keep the human elements in the care of their patients at all times. The ceremony ended with a candlelight service during which the student recited their oath. Students reported being mindful of the importance of the nursing profession and the seriousness of the study they are undertaking.

The first White Coat Ceremony took place in 1993 at the Columbia University College of Physicians &

Surgeons. At the time, Dr. Arnold Gold, co-founder of The Arnold P. Gold Foundation, was also a professor of Clinical Neurology and professor of Clinical Pediatrics at the school. Gold, a passionate advocate for humanistic healthcare, believed that the oath taken by new physicians at the end of medical school came too late. Through the nonprofit organization dedicated to humanistic healthcare that he and his wife, Dr. Sandra Gold, started, The Arnold P. Gold Foundation has expanded the White Coat Ceremony around the globe.

Today, hundreds of nursing schools, nearly every medical school in the United States, and many other health profession schools around the globe participate in this tradition of humanistic care.

"Since 1993, the White Coat Ceremony has been an early and essential touchpoint of humanism on the path of a healthcare professional," said Dr. Richard I. Levin, President and CEO of The Gold Foundation. "Today, as we are facing the dual pandemics of COVID-19 and racism, the White Coat Ceremony is all the more relevant in emphasizing the importance of the human connection in healthcare. We are grateful for the leadership of Georgia College SON in elevating the message, both during the ceremony and throughout the years of education, that empathy and respect are critical parts of optimal care."

The Gold Foundation champions the human connection in healthcare. The foundation engages schools and their students, health systems, companies, and individual clinicians in the joy and meaning of humanistic healthcare, so that patients and their families can be partners in collaborative, compassionate and scientifically excellent care.

For more information about the White Coat Ceremony and the Gold Foundation, visit [www.gold-foundation.org](http://www.gold-foundation.org).

## Jazz Band performances this week

The Georgia College Jazz Band will livestream its fall concert Thursday and Friday, Nov. 5-6 at 7:30 p.m. both nights.

The band will perform "Take the Virtual Train" with classic sounds from charts by Antônio Carlos Jobim, Billy Strayhorn, Oliver Nelson, Miles Davis and Peter Pearson.

The concert title is taken from Strayhorn's "Take the A Train," which will be performed along with other compositions from the 20th century, like Jobim's "Desafinado," Nelson's "Hoe-Down," Davis' "Seven Steps to Heaven" and Pearson's "Sweet Honey Bee."

Since the COVID-19 pandemic, the Jazz Band has not met in person. All rehearsals, recordings and concerts are done by distance using technology. This has been a "steep learning curve" for his students, said Band Director Dr. Clifford Towner. He believes this has made them stronger and more independent musicians. Tune in to hear the results at [facebook.com/GCMusicDepartment](https://facebook.com/GCMusicDepartment).

A \$5 donation is encouraged. Online donations can be made at [alumni.gcsu.edu/music](http://alumni.gcsu.edu/music). All proceeds benefit music scholarships or the GC Department of Music through GCSU Foundation, Inc. For more information, please email [music@gcsu.edu](mailto:music@gcsu.edu) or call 478-445-8289.



## Did you know?

Georgia College recently became a member of the Engagement Scholarship Consortium (ECS). According to their website, all institutions of higher education are invited to become ECS members if they have demonstrated a commitment to engaged scholarship, as evidenced by the Carnegie Foundation's Elective Classification in Community Engagement, or by other demonstrated evidence, as evaluated by the ECS Membership Committee.

"Participation in this national consortium will support our institutional efforts in GC Journeys as well as provide an opportunity for our faculty and students to attend the annual conference and publish in two peer-reviewed journals," said Dr. Costas Spirou, provost and vice president of academic affairs.

"This is also a recognition of our continuous efforts and commitment to community-based engaged and experiential learning," he added.

ECS hosts an annual conference and supports regional conferences and symposiums sponsored by member institutions. The organization also provides intensive training for Emerging Engagement Scholars (graduate students and new faculty) as well as professional development for engagement professional staff during the annual conference.

For more information, visit [engagementscholarship.org](http://engagementscholarship.org).



The Andalusia Institute will host a virtual reading and discussion by Angela O'Donnell on Thursday, November 5 at 7 p.m.

O'Donnell will discuss her work, "Andalusian Hours: Poems from the Front Porch of Flannery O'Connor." In this sonnet series, she examines the possible inner life of Flannery O'Connor through a series of meditative poems.

Please pre-register for the event at <https://bit.ly/2TP4zPS> or call 478-445-3514.

The Andalusia Institute, the public arts and humanities center of Georgia College, supports Flannery O'Connor scholarship, nourishes writing and the creative arts, and engages community members with the arts and humanities.