

North Carolina Agricultural and Technical State University



2025

HIGHLIGHTS

Greetings from the <u>College of Science and</u> <u>Technology</u> (CoST) at N.C. A&T State University.

In this edition of N.C. A&T's CoST Highlights, we congratulate CoST students who received baccalaureate, master's and doctoral degrees in memorable graduate and undergraduate commencement ceremonies Friday, May 9, and Saturday, May 10, here in Greensboro.

CoST students continue to shine in the classroom, the laboratory, competitions and leadership, representing N.C. A&T in selective research and internship programs around the country. We are bursting with Aggie Pride, and I'm sure you will, too

Please enjoy a few of the many extraordinary stories our students and faculty have to share, and feel free to share your story with us, too!



Abdellah Ahmidouch, Ph.D., Dean, College of Science and Technology

SciTech Week 2025



CoST hosted its highly anticipated annual SciTech Week March 17-22, bringing together a community of innovators, researchers, professionals and students. SciTech Week is the college's premier event promoting and advancing innovation, research, professional development, and collaboration. This year's event attracted more than 250 students, faculty, staff and alumni and more than 20 industry partners.

Spanning eight sessions, the week featured thought-provoking discussions, career-focused workshops, and cutting-edge demonstrations and research showcases. SciTech Week's theme, "Why Not Me?", challenged and empowered attendees to see themselves as scientists and technologists capable of leading, innovating and making an impact.

Keynote speakers Cynthia Johnson and Dr. Nia Banks captured the theme perfectly as they spoke to resilience, perseverance and innovation as key pillars of entrepreneurial success in addition to stepping into the room regardless of who says you shouldn't be there.

Team Women in STEM (left to right) Chariti Washington, Jayla Bryant and Destini Washington — (IT Students) with Prof. Karreem Hogan (far left). Students truly exemplified the theme, not only presenting stimulating research and innovation pitches but also inspiring other students that they could do the same.

Industry partners played an integral role throughout the week, offering mentorship, judging the Innovation Challenge pitches, and participating in the Career & Graduate School Expo where students were not only primed for but presented with various experiential learning opportunities.

SciTech Week educated its attendees, fostered new connections, and opened doors to various opportunities. It inspired everyone to remain curious, cultivate bold ideas, and ask "Why not me?" in pursuit of innovation. SciTech Week underscored The College of Science and Technology's commitment to fostering a culture of innovation and learning.

Kaylyn Reese Honored with the N.C. A&T Outstanding Master's Graduate Teaching Assistant Award

Kaylyn Reese, a M.S. graduate student in the Department of Physics, was honored with the

university-wide Outstanding Master's Graduate Teaching Assistant (GTA) Award on April 10, 2025. This award recognizes students who exhibit excellence through outstanding student engagement and support and demonstrate commitment to enhancing student learning and effective teaching strategies.

Reese earned this award through her outstanding performance as a physics laboratory section leader and tutor during the 2024-25 academic year under the supervision of Dr. Hallie Trauger, faculty in charge of lab instruction in physics. As a GTA, Reese also conducted research with the support and guidance of Dr. Athina Meli, assistant professor of physics.

In the fall, Reese will continue to work with Dr. Meli on computational studies of relativistic jets from black holes and active galaxies in the Applied Science and Technology (AST) PhD program.



Kaylyn Reese accepting the N.C. A&T Outstanding Master's Graduate Teaching Assistant Award at the 2025 Graduate Student Awards Recognition Banquet (left to right: Drs. Clay Closter and Abdellah Ahmidouch, Kaylyn Reese, and Dr. Shelly Lesher)

Smart Stats Team Takes 1st Place at CoST AlConnect Competition



CoST is happy to announce that the graduate team Smart Stats from the Department of Mathematics and Statistics earned first place in the CoST AlConnect Competition held April 4, 2025.

The Smart Stats team achieved 100% accuracy in the shortest time on a challenging multi-class classification task. The team included Mutiyat Usman (M.S. in Applied Mathematics), Chinedu Nzekwe (Ph.D., AST-DASA), and Oluwatobi Lucas Akinbode (Ph.D., AST-DASA). Their exceptional performance demonstrated both technical excellence and rapid problem-solving skills under pressure.

The AlConnect Competition, a key feature of the broader AlConnect event, challenged students in both undergraduate and graduate tracks to develop accurate classification models.

Team members left to right: Chinedu Nzekwe, Oluwatobi Akinbode, and Mutiyat Usman are joined by CoST faculty and Al Committee members Dr. Fawakherji and Dr. Patooghy.

Teams were evaluated based on both the accuracy of their models and the time taken to complete the challenge. This year's competition drew participation from 12 teams —six graduate and six undergraduate — with students representing a range of disciplines, including computer science, electrical and computer engineering, mathematics and economics. Congratulations to all participants for their outstanding work and dedication.

Alexis Moody Takes 2nd Place at the Annual COE Graduate Research Competition

Alexis Moody, a third-year Ph.D. student from the Applied Science and Technology (AST) Ph.D. program with a bioscience concentration, presented her poster research presentation, "Enhancing Cell Growth, Migration and Fibroblast Differentiation Using Surface Modified PCL/Zinc Scaffolds," at the College of Engineering (COE) Graduate Research Competition in March, earning 2nd place in the event.

Moody's research focuses on creating scaffolds from a biodegradable polymer and zinc, which coat the body's natural support system, the extracellular matrix. This specially coated scaffold helps cells grow, move and contribute to wound healing. Moody said the goal is to develop better materials for repairing damaged tissues and promoting faster healing.

Moody earned her bachelor's degree in biology from Rutgers University and her master's in



Alexis Moody presented her poster focusing on scaffolds made from a biodegradable polymer and zinc.

biology from Hampton University. Her current research, under the supervision of Dr. Narayan Bhattarai, focuses on cell and tissue biology and materials-science aiming to develop biomaterialbased, wound-healing treatments. She explores how surface-modified biomaterial scaffolds, coated with the body's natural extracellular matrix can enhance cell growth and migration for improved tissue regeneration.



Physics Students Earn Prestigious Internships

The Department of Physics is proud to announce the following students will spend the summer pursuing opportunities to expand their knowledge outside of the classroom:

Demi Butler (PHYS:ENG) will spend the summer at the University of Alabama at Birmingham as part of their REU program.

Anasi Coleman (PHYS:ENGR & AET), Joshua Neal (PHY), Breanna Robinson (PHY:ENG), Maria Taylor (PHY:ENG), and Chance Whipkey (PHY) will be conducting research at the University of California-San Diego as part of N.C. A&T's Partnership for Research and Education in Materials (PREM) grant.

Misbahou Jalloh (PHYS:INTER), Bryce Joseph (PHYS:ENGR), and Zion Smith (PHY) have been selected as Du Bois Scholars pursuing research at Harvard College for eight weeks this summer.

Taylor Ligon (PHYS) was awarded a NASA internship at the Marshall Space Flight Center in Huntsville, Alabama, funded by a scholarship from the North Carolina Space Grant Consortium.

Kaylyn Reese (PHYS MS, 2025, incoming Ph.D. student) has been accepted into the Astronomy Department summer internship program at Boston University. She will be working with Dr Carlos Martinis on research relating to ionospheric physics and plasma irregularities in the thermosphere/ionosphere.

Jasmine Reyes (ASME) will be interning with Lead Meteorologist Michelle Kennedy at WXII-TV in Winston-Salem, North Carolina.

Robert (Bobby) Scott (PHYS:BIO) will be working with Dr Ben Miller at the University of Rochester through the Optics & Photonics REU program sponsored by the National Science Foundation.

Jordan Shegog (PHYS), Mariemika Thengenus (PHY & MATH), and Justice Watson (PHY) will spend 10 weeks at the University of Notre Dame Institute for Nuclear Structure with Dr Shelly Lesher as part of an NSF sponsored research program in experimental nuclear physics.

Alexis Spence (PHYS) will be funded by the Department of Energy SULI program for the summer at the SLAC National Accelerator Laboratory at Stanford.

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