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POLICY AND GLOBAL AFFAIRS DIVISION
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SPEAKER BIOS (in alphabetical order)
VIRTUAL TOWN HALL with North Carolina Agricultural and Technical University

Building the Next Generation of STEM Leaders

Webcast Live here: <https://www.nationalacademies.org/event/10-08-2020/north-carolina-a-t-state-university-town-hall>

October 8, 2020 | 2:00 – 4:30PM ET

Dr. Abdellah Ahmidouch is a Professor of Physics and Founding Dean of the College of Science and Technology at North Carolina A&T State University. Before this appointment, Dr. Ahmidouch served as Chair of the Department of Physics at the same institution. Dr. Ahmidouch holds a Ph.D. in experimental nuclear physics from the University of Geneva and an MS-physics degree from the University of Grenoble-France. He worked on highly-rated experiments at major European and American laboratories. These include CERN (Switzerland), CEA-Saclay (Paris), PSI (Switzerland), MIT-Bates, IUCF (Indiana), and JLab (Virginia). Dr. Ahmidouch's research interests include experimental nuclear physics, nuclear nonproliferation, medical imaging, nuclear energy, and STEM education. Major highlights of his work include the study of the spin structure of the nucleon-nucleon and nucleon-antinucleon scattering, measurement of the deuteron tensor parameter t_{20} , the investigation of the nucleon electromagnetic structure, the measurement of the π_0 meson lifetime, the investigation of the proton spin structure, the study of the efficacy of the SCALE-UP active learning teaching pedagogy in an HBCU environment, and the study of student success models in the STEM disciplines. Dr. Ahmidouch was awarded the College of Arts and Sciences Dean's Special Recognition Award and the College of Arts and Sciences Senior Researcher Award. Dr. Ahmidouch has led several NSF- and DoE-funded projects, including a current S-STEM project in the College of Science and Technology, focused on the success of minority students in mathematics, physics, chemistry, and electronics technology. He has advised, and co-advised in research over fifty undergraduate and graduate students and has been on jury panels for several Ph.D. and MS-theses. His contribution to the STEM field is evidenced by his extensive publication record with over 130 publications. Under Dean Ahmidouch's leadership, the College of Science and Technology experienced considerable growth. This includes establishing new degree programs like the Ph.D. in Applied Science and Technology and the BS in Computer Graphics Technology, and the ABET accreditation of five degree programs. On the student success front, the college's student retention improved by 11 points while the college's undergraduate enrollment increased by close to 29% in 4 years.

Meghan C. Berger is a third year doctoral student in the Rehabilitation Counseling and Rehabilitation Counselor Education program. Ms. Berger works as a graduate research assistant on a NSF project (1828172 and 1828559) exploring racial and gender microaggressions towards underrepresented minority students within engineering programs. This Fall semester, Ms. Berger has been awarded supplemental support from the NSF Intern program, to integrate her clinical skills and research knowledge to facilitate neuroscience-informed mindfulness groups for women of color within the STEM workforce. In 2013, Ms. Berger earned her Bachelor of Science in Neuroscience and Psychology at the University of Texas at Dallas. Returning to her hometown, she earned her Master of Arts in Clinical Mental Health Counseling at Xavier University of Louisiana in 2017. While at Xavier, she was

introduced to engineering education as a graduate research assistant and project coordinator on an NSF project (Grant No. 1648609) that explored the non-cognitive factors impacting African-American students in engineering education. Her graduate assistantship included coordinating culturally responsive programs and leading trauma-informed service learning projects at the Xavier University Community Outreach Center. Ms. Berger is a Licensed Clinical Mental Health Counselor Associate in the state of North Carolina and National Certified Counselor. With the support of the NSF Intern program, she is trained in Brainspotting phase 1. Ms. Berger serves as a volunteer clinician with the Social Justice Emotional Response Collective in Greensboro. Ms. Berger is a member of the American Counseling Association's Committee on Research and Knowledge and holds professional membership in American Counseling Association (ACA), Association of Multicultural Counseling and Development (AMCD), and Association of Counselor Educators (ACES).

Dr. Robin N. Cogger is Dean and Professor of the College of Engineering. Her research expertise is in solving design and performance problems related to tissue engineered organs. Her work has resulted in journal and conference publications in the areas of liver tissue engineering and cryopreservation; one patent, and another pending. She is a fellow of the American Society of Mechanical Engineers and of the American Institute for Medical and Biological Engineering. She is also a Board member of the Greensboro Chamber of Commerce, FIRST, and the Advancing Minorities Interest in Engineering (AMIEpartnerships.org) organization. She is also a member of editorial board of ASEE's PRISM. Her work has resulted in journal and conference publications in the areas of liver tissue engineering and cryopreservation; plus a patent, and another patent pending. She earned a Bachelor of Science from Cornell University, and her Master of Science and Doctoral degrees from the University of California – Berkeley, all in Mechanical Engineering. Dr. Cogger also completed her post-doctoral research as a fellow at Harvard Medical School and the Department of Surgery at Massachusetts General Hospital in Boston.

Dr. Kathy Cousins-Cooper is a Professor of Mathematics at N.C. A&T in the Department of Mathematics and Statistics. Dr. Cousins-Cooper earned a B.S. degree in Electrical Engineering from Virginia Tech, a M.S. degree in Mathematics Education from N.C. A&T State University, a Ph.D. in Mathematics Education from the University of South Florida, and a J.D. from N.C. Central University School of Law. She also serves as Undergraduate Coordinator for the Secondary Education (Mathematics) Program and Course Coordinator for college algebra and trigonometry. Dr. Cousins-Cooper was selected as Teacher of the Year for the College of Arts & Sciences for the 2014-15 academic year. Dr. Kathy Cousins-Cooper's primary research area is in the field of mathematics education and more specifically, she conducts research in the area of analyzing the effect of various instructional models on student performance in college algebra and how to improve student performance in mathematics. Dr. Cousins-Cooper, along with several of her colleagues, worked to implement the math emporium instructional method within the department's college algebra and trigonometry courses. She has served as PI and co-PI on several funded projects to study methods to improve student performance and disposition toward mathematics. In addition, she is interested in other factors that affect students' performance in mathematics from diverse populations. Dr. Cousins-Cooper is also interested in investigating how to improve the mathematical performance of historically underrepresented groups. Currently, Dr. Cousins-Cooper and several of her colleagues are working on a research project on how students' performance in mathematics has been affected during the time of emergency remote instruction due to the COVID-19 pandemic. Dr. Cousins-Cooper, a native Virginian, is married to Dr. Hector W. Cooper, a radiologist, and they have two sons and two dogs. Dr. Cousins-Cooper enjoys traveling, cooking, and spending time with her family.

Jeremiah Jones is a first-year graduate student at North Carolina A&T State University going for his M.S. in Electrical Engineering. Just before the summer, Jeremiah obtained his B.S. in Electrical Engineering here. During the summer, he did a remote internship with the DoD and worked with material scientists at the Army's Research Laboratory to help better understand the application benefits of some newly developed capacitors. He is working towards his thesis and will be graduating from the program in 2022. Born in Columbus, GA, he did not stay there his entire life. He spent most of his youth years in Georgia and Alabama. After his first year of high school, Jeremiah then moved to Columbia, South Carolina for six months and then eventually finished high school at Jack Britt High in Fayetteville, NC. He graduated from Jack Britt and chose to attend North Carolina A&T State University because of their exceptional engineering program. He is passionate about sports and enjoys rooting for the Boston Celtics and Philadelphia Eagles. During his undergrad years, Jeremiah was able to take part in many organizations, gain internship experiences, and even took part in undergraduate research for the ACIT Institution under Dr. Abdollah Homaifar. He became heavily involved as a community person through social organizations such as the Aggie Student Alumni Association and his fraternity. A spring 2018 initiate into Phi Beta Sigma Fraternity, Inc., Jeremiah has much love for the fraternity as he served as the first VP. He spent his last semester of college taking twenty-one credit hours to graduate and took a leadership role as Membership Intake Chair for the initiates of spring 2020. Jeremiah acquired his first internship his sophomore year with GE Renewable Energy. He actually had two summer opportunities back to back in Greenville, SC where he worked on tasks dealing with software simulations, 3D modeling, and data management. This past summer, he worked remotely with a team of scientists from the ARL where he was responsible for modeling the effects of a special capacitor by performing circuit simulations. His undergraduate research has significance in his development also which focuses on autonomy. He committed his research time to implement an unmanned air vehicle for autonomous assistance in a cargo plane inspection. He has worked on using a cloud-based server for the processing of data from the drone itself to an automated cloud system. As this project is still ongoing, he expects to learn much more out of this opportunity and deliver a remarkable project. After graduation in 2022, Jeremiah plans to take his work and knowledge and continue his focus in the field of autonomy.

Dr. Stephanie Luster-Teasley is presently serving as the Interim Vice-Provost for Undergraduate Education. Before her present role, she was Professor and Chair of the Department of Civil, Architectural and Environmental Engineering. She graduated from North Carolina A&T State University in 1996 with a B.S. in Chemical Engineering. She continued her graduate studies at Michigan State University where she received her MS in Chemical Engineering and PhD in Environmental Engineering. She joined NCA&T in 2004 after working in private industry as an environmental engineer. Her research specializations include environmental remediation, water sustainability, and engineering education. Over the last sixteen years, she has been driven by a deep commitment and care for her students and lauded for bringing the excitement of real-world, hands-on experience into all of her engineering courses and mentoring activities. Dr. Luster-Teasley has demonstrated excellence in teaching, research, and service. Her honors include the 2005 National Women of Color in Technology Educational Leadership Award, the 2006 NC A&T State University Rookie Researcher of the Year Award, and the 2008 NC A&T State University Junior Faculty Teaching Excellence Award. In May 2013, her teaching and engineering education work resulted in her receiving the 2013 UNC Board of Governors Teaching Excellence Award. This honor is one of the highest awards conferred for teaching in the UNC System. In 2014, she received the Dupont Minorities in Engineering Award at the National American Society for Engineering Education National Conference. In 2018, she was recognized as a recipient of the Black Engineer of the Year Innovation Award. In 2020, she received the Michigan State University Civil and Environmental Engineering Distinguished Alumni Award in recognition of her

professional accomplishments and was recently invited to serve on the MSU College of Engineering Alumni Advisory Board. Dr. Luster-Teasley's research accomplishments include receiving patents from the United States, Great Britain, and Canada for her development of a controlled release chemical oxidation polymer system for the remediation of water and wastewater. This recognition designates her as the first African-American woman and the first faculty member at NCA&T to receive international patents. Her technology was licensed in 2017 by a company to market nationally as an emerging remediation method for groundwater and soil contamination. For service to the community, Dr. Luster-Teasley has led several major initiatives. In 2010, she led the NCA&T team that developed the winning National 4-H Science Youth Day experiment used by millions of K-8 students worldwide. This outreach activity taught students about global warming and energy use. During her career, Dr. Luster-Teasley has received funding from the Department of Education for developing a mentoring program for students in STEM disciplines, the National Science Foundation for developing and implementing case studies modules in science labs, and the Burroughs Wellcome Fund to implement science programs for middle school girls. She is part of the NCA&T ADVANCE-IT grant where she serves as a co-PI. This grant seeks to increase equity and help implement programs for female faculty to successfully progress through academia from assistant to full professorship. Overall, her disciplinary, science education research, and professional development grants have yielded over \$7.5 million in funding. Dr. Luster-Teasley is the mother of two children, Edward Teasley, II, who recently completed his BS Computer Science degree at NCA&T and William Teasley who presently attends NCA&T to major in Industrial Engineering.

Dr. Harold Lee Martin, Sr. was elected the 12th chancellor of North Carolina Agricultural and Technical State University on May 22, 2009, and formally began his tenure on June 8, 2009. Martin brought more than 30 years of transformative leadership experience in higher education to the role. He is the first alumnus to serve as the university's chief executive. Martin's leadership has been distinguished by a focus on long-range strategic planning and tactical leadership that have dramatically improved North Carolina A&T's standing among the nation's land grant, doctoral research universities, as well as among historically black colleges and universities (HBCU). The initial strategic plan implemented under Martin's direction, "A&T Preeminence 2020: Embracing Our Past, Creating Our Future," saw A&T expand research contract and grant funding, boost its status as one of North Carolina's top three public research institutions, reorganize its colleges and academic programs, increase endowment holdings by 150 percent and become the nation's largest HBCU. Having surpassed numerous goals in that plan three years ahead of schedule, Martin introduced a refreshed plan in 2018, "A&T Preeminence: Taking the Momentum to 2023," which creates bold new aspirations in student success, affordability, enrollment, research, diversity and more. More than ever, the university's planning under Martin's management sets it on a course for making a significant difference in the lives of its constituents and the communities they serve. Martin has also been instrumental in establishing and fostering strategic partnerships such as the Joint School of Nanoscience and Nanoengineering at the Gateway University Research Park (South Campus) and playing a significant role in Opportunity Greensboro, the city's alliance between the seven colleges and universities and the business community that is intended to make Greensboro a national model for collaboration in knowledge-based economic development. Before his election as chancellor of A&T, Martin served as senior vice president for academic affairs for the UNC system. He also served as the 11th chief administrator and seventh chancellor of Winston-Salem State University and in a number of administrative posts at A&T including vice chancellor for the Division of Academic Affairs, dean of the College of Engineering and chairman of the Department of Electrical Engineering. A proponent of community engagement, Martin lends himself to service on various boards including the American Council on Education, the Association of Public and Land-Grant Universities, Southern Association of Colleges and Schools Review Advisory Board,

Research Triangle Institute, Piedmont Triad Regional Development Council, National Collegiate Athletic Association Limited-Resource Institutions Advisory Group. The Winston-Salem, N.C., native received his B.S. and M.S. degrees in electrical engineering from A&T and a Ph.D. in electrical engineering from Virginia Polytechnic Institute and State University. He and his wife Davida, the former county attorney for Forsyth County, N.C., have two adult sons—Harold, Jr., a graduate and former interim president of Morehouse College, as well as an alumnus of Harvard Business School and Yale Law School; and Walter, a graduate of Hampton University and the University of Maryland Dental School—and three grandchildren.

Dr. Beryl McEwen is the provost and executive vice chancellor for academic affairs at North Carolina Agricultural and Technical State University. The provost is the chief academic officer for the university. Dr. McEwen's responsibilities include reviewing, evaluating, and recommending changes in academic policies and programs. Dr. McEwen relies on the support of an administrative staff of vice provosts, associate vice provosts, and directors of academic affairs to supervise a wide range of North Carolina A&T programs and initiatives. A recognized leader in business, strategic planning, academic accreditation, and classroom teaching, Dr. McEwen has served in multiple roles at North Carolina A&T over the past 23 years, including chair of the Department of Business Education, vice provost for strategic planning and institutional effectiveness, dean of the College of Business and Economics, and most recently, interim provost and vice chancellor of academic affairs. During her tenure as vice provost for strategic planning and institutional effectiveness, Dr. McEwen oversaw North Carolina A&T's accreditation efforts. She played an essential role in monitoring institutional progress around the university's strategic plan, *Preeminence 2020*, and built systems to facilitate learning outcomes assessments important to the university's progress on the plan's goals and accreditation standards. As dean, Dr. McEwen managed a business college that serves more than 1,400 undergraduate and graduate students with departments in Accounting and Finance, Business Education, Economics, Management, and Marketing Transportation and Supply Chain Management. It is one of only 700 such colleges globally to hold the prestigious AACSB International accreditation and one of only 200 to hold that accreditation for its Accounting program. Under her leadership, the college earned reaffirmation of its accreditation and successfully launched both the M.B.A. and M.B.A. Online programs. Her work has been recognized by such organizations as the National Business Education Association, the North Carolina Department of Public Instruction Business Education Hall of Fame, and the Triad Business Journal, which honored her with an Outstanding Women in Business Award in 2017. Dr. McEwen holds a bachelor's degree in business education from the University of Technology, Jamaica, and a master's degree and doctorate in business education from Southern Illinois University at Carbondale.

Dr. Eric Muth is trained as an Experimental Psychologist and has over 20 years' experience post-degree leading a wide variety of research and development projects in both the laboratory and the field. Eric spent three years as a uniformed researcher in the U.S. Navy and performed data collection aboard ship, in aircraft and aircraft simulators. Eric spent 19 years of his career at Clemson University and has been associated with over 7 million dollars of funded research and 100 publications, with the last portion of his career working on translational research in the area of mobile health technologies. At North Carolina Agricultural and Technical State University, Eric now serves as the Vice Chancellor for Research and Economic Development with the goal of helping others grow their research acumen and programs. Eric's graduate training was in Gastrointestinal Psychophysiology. He completed his dissertation at The Pennsylvania State University Hershey Medical Center. His dissertation and early publications were related to functional gastrointestinal disorders. From August 2008-2009, Eric spent the year on sabbatical in Germany, funded on a Humboldt Research Fellowship working at the Universität Tübingen in the Psychosomatic Medicine Department. There he continued working on

projects associated with functional gastrointestinal disorders and obesity. In 2019, Eric was accepted as a member of the Academy of Behavioral Medicine Research. In addition to his behavioral medicine work, Eric is an internationally known expert in the area of motion sickness. His work over the years in this area focused on understanding the causes, symptoms, physiology and prevention of motion sickness with specific attention on user experience and performance while wearing head-mounted displays.

Dr. Sherine Obare is the Dean of the Joint School of Nanoscience and Nanoengineering, an innovative collaboration between North Carolina Agricultural and Technical State University and the University of North Carolina at Greensboro (UNC Greensboro). She is also a Full Professor of Nanoscience at UNC Greensboro. She received a Bachelor of Science degree in Chemistry from West Virginia State University, obtained a Doctor of Philosophy degree in Chemistry from the University of South Carolina, and thereafter, was a Camille and Henry Dreyfus Postdoctoral fellow at The Johns Hopkins University. Dr. Obare is an environmental chemist whose research focuses on nanotechnology. Her work has led to innovations in the detection and remediation of environmental contaminants, designing nanoscale materials for drug delivery, improved healthcare, biomass conversion, and alternative energy, as well as understanding the fate, transport and toxicity of anthropogenic nanomaterials. She began her career at Western Michigan University as Assistant Professor of Chemistry in 2004, was promoted to Associate Professor in 2009, and to Full Professor in 2014. At Western Michigan University, she served in leadership roles as Associate Dean for Research in the College of Arts and Sciences and as Associate Vice President for Research. Dr. Obare's research program has been funded by the National Science Foundation, the Department of Defense, the Army Research Office, the National Institutes of Health, the Department of Education, and the Michigan Economic Development Corporation. Dr. Obare was recognized as a 2020 Outstanding Woman in Business, and a 2019 Power Player, by the Triad Business Journal. She is a 2019 Fellow of the American Chemical Society, a 2018 Fellow of the Council on Research of the Association of Public and Land-Grant Universities, the recipient of the 2009 International Union of Pure and Applied Chemistry (IUPAC) Young Observer Award, and a National Science Foundation CAREER award winner. She received the 2010 Lloyd N. Ferguson Young Scientist Award, and the 2010 National Science Foundation Division of Materials Research American Competitiveness and Innovation (ACI) Fellowship. In 2013, Obare was named as one of the top 25 Women Professors in Michigan. She was also recognized as a Science Spectrum Magazine *Trailblazer* in 2010, 2011, and 2012. Dr. Obare has published over 100 publications in peer-reviewed journals and has served as editor for five books, including '*Green Technologies for the Environment* (2014)', '*The Power and Promise of Early Research* (2016)' and '*Chemistry Education for a Sustainable Society* (2020)'. She has mentored a large number of postdoctoral fellows, doctoral, masters, undergraduate and high school students in research. She has been highly active promoting science to elementary and middle school students locally and nationally. Dr. Obare serves as an Associate Editor for the *Journal of Nanomaterials*.

Dr. Paula Groves Price is Dean of the College of Education at North Carolina Agricultural and Technical State University. Dr. Price's areas of expertise are in Culturally Responsive and Sustaining Pedagogies, Critical Race Theory in Education, Critical STEM Education, and Qualitative Research Methodologies. Her recent work is in the area of Critical Anti-Racist Mathematics Education and Critical STEM Education. She is currently the principal investigator for a \$2.5 million National Science Foundation grant entitled "Culturally Responsive Indigenous Science: Connecting Land, Language, and Culture." Dr. Price has published dozens of articles and book chapters, and is the editor of the forthcoming *Oxford Research Encyclopedia of Race and Education*. She is also a section editor for the *Second International Handbook of Urban Education* (2017) and the *Handbook of Research in Social*

Foundations of Education (2011). Dr. Price is also currently editor in chief of the interdisciplinary *Western Journal of Black Studies* and co-editor of *Professing Education*. Dr. Price earned a PhD from the University of North Carolina at Chapel Hill in the Social Foundations of Education, and BA's from the University of California Berkeley in Social Welfare and Interdisciplinary Field Studies. She is currently President-elect of the American Educational Studies Association (AESA).

Dr. Tonya Smith-Jackson began her position as Senior Vice Provost for Academic Affairs at NC A&T State University in May of 2019. She is a Professor and former chair of the Industrial and Systems Engineering Department. She served as a rotator at the National Science Foundation in the Computer and Information Science and Engineering (CISE) Directorate (Information and Intelligent Systems Division/Cyber-Human Systems Program) and the Cultivating Cultures in Ethical STEM program. She is currently co-chairing a National Academies study of the FAA Cybersecurity Workforce. Dr. Smith-Jackson earned MS and PhD degrees from NC State University, her BS degree from UNC-Chapel Hill, and graduated from the inaugural class of the NC School of Science and Mathematics. She is a Fellow in two professional societies: The Institute of Industrial and Systems Engineers and the Human Factors and Ergonomics Society. Her faculty positions in academia include universities and community colleges in New York, North Carolina, Virginia and Germany. Her career path also includes government and industry. Dr. Smith-Jackson served as a usability engineer for IBM and Ericsson Mobile Communications (now Sony-Ericsson), and as an expert witness in systems safety, usability and accident analysis litigation. She has served as a manager in county, state and federal government agencies, including the European Command (Germany) and the U.S. Consumer Product Safety Commission. She has earned department, college, university, civil and community service awards for excellence and innovation in teaching, research, advising, diversity and inclusion, and outreach to communities. She has been awarded a university women's leadership award; interdisciplinary collaboration awards; and a Command General's Award for advancing women in the U.S. Army Command. Gov. Roy Cooper appointed her to the NC Board of Science, Technology and Innovation in 2020. Her ultimate goal is to advance equity in opportunity and respect for HBCU-initiated research, teaching, scholarship and outreach.

Dr. Guoqing Tang is a professor of mathematics and chairman of the mathematics department at North Carolina A&T State University. He obtained a BS degree in applied mathematics from Anhui University in 1982, an MS in operations research from Nanjing University of Science and Technology in 1984, and a Ph.D. in mathematics from Rutgers University in 1992. His research interests lie in the areas of dynamical control systems, nonlinear differential geometric optimal control, signal processing, mathematical modeling, scientific computing, mathematical and computational geosciences, and mathematics education. His research is interdisciplinary, and he has collaborated with mathematicians, scientists and engineers in numerous projects on or off campus. As a PI/co-PI, he has secured over \$19.6 million dollars of research grants from NSF, NASA, NSA, NOAA, US DoED, Sloan and GSK Foundations. He has published over 32 papers in refereed journals and conference proceedings and one book, presented numerous invited or contributed talks in professional conferences or at other institutions, served as a panelist or reviewer for various funding agencies or professional journals/conferences, supported and supervised two post-doctorate research associates, and advised 30 graduate students and 60 undergraduate research trainees.

Ray Trapp currently serves as the Director of External Affairs for North Carolina A&T State University. The Office of External Affairs works to promote the university's legislative outreach to federal, state and local elected officials, state agencies, higher education stakeholders, alumni and others who play a role in advancing and supporting policy and legislation that align with the priorities of University. He

previously served as a Guilford County Commissioner representing District 8 from 2012 – 2017. He won his first election to the County Commission in 2012 and was re-elected without opposition in 2016. Trapp's volunteer public service has been extensive. He has chaired the Greensboro Zoning Commission and served on the boards of the Greensboro Minimum Housing Standards Commission, Affordable Housing Management, the Greensboro Convention and Visitors Bureau and the Welfare Reform Liaison Project. His professional work and service have earned numerous awards, including the National Association of Counties' 2016 Public Health Achievement Award for the "Food Desert Storm" project addressing food insecurity in Guilford County, and his inclusion in the Triad Business Journal's 2011 "40 Business Leaders Under 40." Trapp served in the U.S. Navy as an Interior Communications Specialist aboard the USS Harry S. Truman (CVN 75). He is a proud alumnus of North Carolina Agricultural and Technical State University where he completed his Master of Science in Agricultural Education.

Dr. Mulumebet "Millie" Worku is professor of animal sciences and director of the office of undergraduate research. She is the institutional coordinator with the Leadership Alliance and representative on the Council for Undergraduate Research. She is the advisor for the interdisciplinary undergraduate certificate in biotechnology and served as Graduate coordinator for the Integrated Animal Health Systems Masters. She was named the 2007 Teacher of the Year in the School of Agriculture and Environmental Science, the University Senior Researcher of the Year in 2011 and is also a recipient of the USDA ARS Merit Award. Dr. Worku came to North Carolina A&T in 1999 as a visiting professor and instructor in microbiology. She previously served as a researcher with the U.S. Department of Agriculture and the Food and Drug Administration. She was an International Atomic Energy Agency research fellow at the University of Glasgow in Scotland. She has had national and international experience in research and education, including 25 years in teaching. Dr. Worku holds a Ph.D. and master's degree, both in animal sciences, from the University of Maryland, and a Bachelor of Science degree from the University of Alemaya in Ethiopia, also in animal sciences. Dr. Millie Worku's research program focuses on the molecular basis for important biological traits with a special emphasis on host response to pathogens causing inflammation in ruminants. This effort contributes to global food security and the provision of a diverse well-prepared workforce. Her research "Molecular signatures and regulatory checkpoints for animal health" is funded through the USDA. Currently funded training efforts include preparation of STEM women and multicultural scholars and online curriculum development. Dr. Worku has published journal papers, review articles and book chapters in the area of inflammation in animal health. She has served on many advisory boards, federal and international research grant panels and scientific organizing committees of international conferences. She teaches courses including Agricultural Genetics (ANSC 214) Techniques in Biotechnology (ANSC 665), Global livestock systems (ANSC 713) Bioinformatics and Genome Analysis's (ANSC 771) and has co-taught AGRI 800 Sustainable and local food systems. She leads an active research laboratory, including undergraduate and graduate students and postdocs, research associates and mentors high school research apprenticeships students. She oversees the Bioinformatics learning facility and is director of the laboratory for Animal Genomic Diversity and biotechnology. She participates in STEM outreach to schools and stakeholders.