

NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

2014

ANNUAL REPORT CARD

A&T PREEMINENCE 2020:
Embracing Our Past, Creating Our Future





MESSAGE FROM THE CHANCELLOR

In 2011, when North Carolina Agricultural and Technical State University started down the path to strategically position the university at a higher level of excellence, the plan, A&T Preeminence 2020, developed a set of goals, objectives and benchmarks to measure our success. It is my pleasure to report that we have built on the great progress of the previous two years.

This plan has been rooted in the university's vision to be recognized as a preeminent land-grant university and the institution of choice for high-achieving, right-fit students. To reflect that vision, the University of North Carolina (UNC) Board of Governors approved N.C. A&T's new mission statement in February that accurately articulates the university's commitment to student success and preparing our students to be the global leaders and change agents of tomorrow:

North Carolina Agricultural and Technical State University is an 1890 land-grant doctoral research university dedicated to learning, discovery, and community engagement. The University provides a wide range of educational opportunities from bachelors to doctoral degrees in both traditional and online environments. With an emphasis on preeminence in STEM and a commitment to excellence in all its educational, research, and outreach programs, North Carolina A&T fosters a climate of economic competitiveness that prepares students for the global society.

A&T Preeminence 2020 also includes six core values — learning, excellence, integrity, creativity, engagement and service — and we have made them fundamental to how we lead the university. Our incorporation of these values as a part of our daily lives is one of the primary reasons we have met and are exceeding our goals in some areas, while we endeavor to overcome challenges in other areas.

Please take a moment to view some of our accomplishments that motivate us to do more in the coming years.

In 2013-14:

- Ranked No. 1 public historically black college or university (HBCU) in the nation by U.S. News and World Report, No. 8 overall (up from 11th in 2013) and No. 1 in North Carolina
- Topped the list among HBCUs, according to the 2014 Best Online Education Program rankings by U.S. News and World Report
- The U.S. Patent and Trademark Office approved two patents: (1) Dr. Salil Desai's U.S. 8,573,757, "Methods and apparatus of manufacturing micro and nanoscale features," and (2) Dr. Stephanie Luster-Teasley's U.S. 8,519,061, "Controlled Release Remediation System and Composition"
- Negotiated an exclusive license with Xemerge Inc., a Toronto-based firm that commercializes emerging technologies in food, agriculture, and a variety of other fields, to bring hypoallergenic peanuts, peanut butter and other peanut products to grocery store shelves; the patented process licensed by the university reduces allergens in peanuts by 98 percent
- Exceeded goal number of graduates in STEM (science, technology, engineering and mathematics) disciplines by 7 percent
- Introduced two new Ph.D. programs: (1) computer science and (2) rehabilitation counseling and rehabilitation counselor education
- Two new master's degree programs approved—business administration (M.B.A.) and agriculture and environmental systems—and one bachelor's degree program in information technology
- UNC Board of Governors approved N.C. A&T's proposal to increase its out-of-state capacity for new freshmen from 18 percent to 25 percent

As we celebrate these accolades and the ones listed later in this document, we will continue the work that is necessary to build upon our progress while finding innovative ways for realigning our key priorities for 2014-15: student engagement, strengthening institutional effectiveness, transforming regional development integration and broadening resource generation.

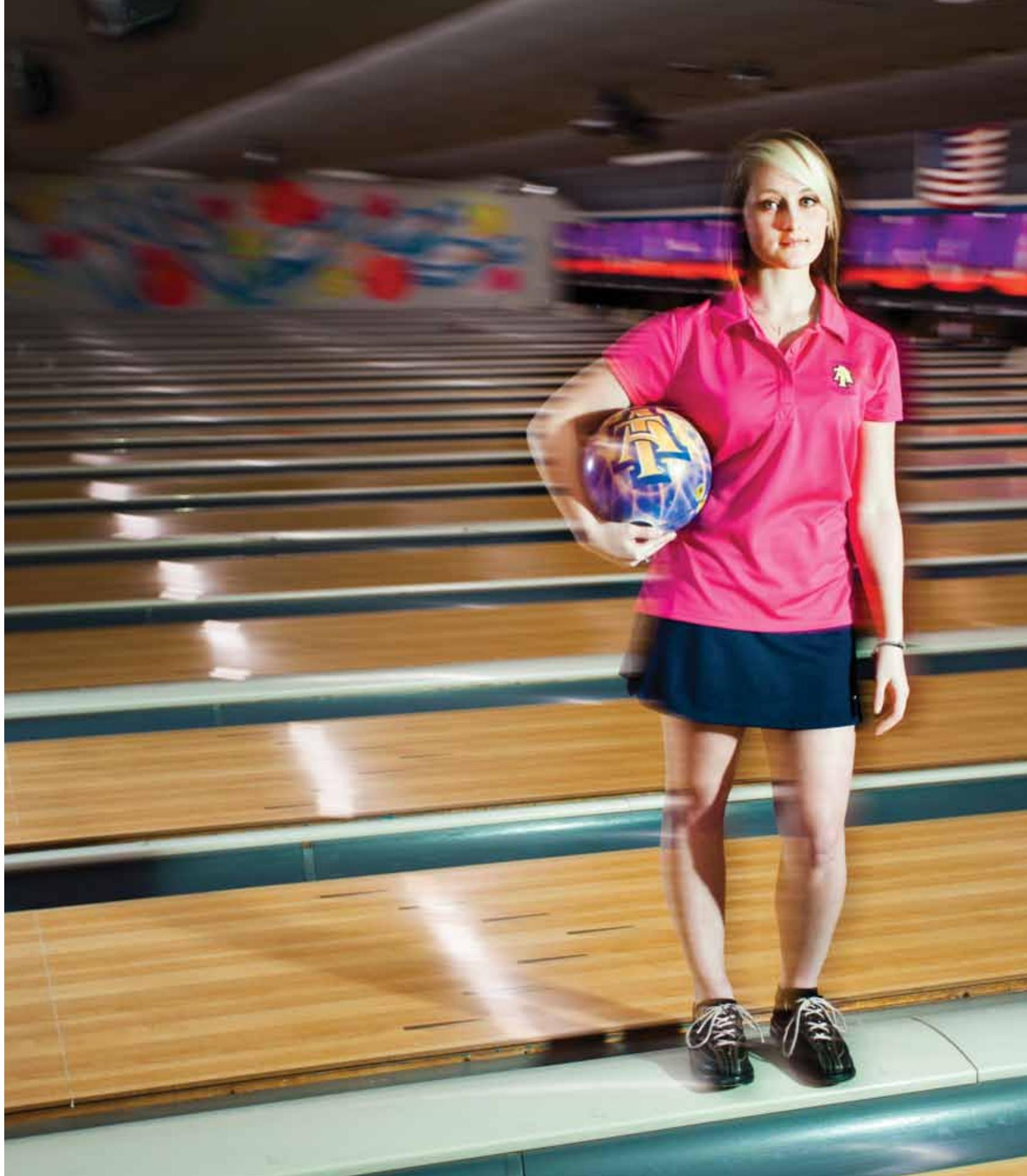
In a world of constant social, economic and global changes and challenges, the N.C. A&T family is actively engaged in preparing our students and faculty to meet these changes and challenges head on. As we reaffirm our commitment to achieving preeminence, we ask our constituents to stay the course as we monitor our progress, measure our success and strategically adapt when unforeseen circumstances require a different course of action.

Because A&T Preeminence 2020 is our collective vision for excellence, we implore you to do your part in learning more, teaching more, doing more and giving more—because that's what Aggies Do!

With Aggie Pride,



Harold L. Martin Sr. '74



VISION

North Carolina A&T State University will be recognized as a preeminent land-grant university and the institution of choice for high-achieving students who are inspired by outstanding teaching and learning, civic engagement, transformative research, and creative scholarship to solve societal challenges.

MISSION

North Carolina Agricultural and Technical State University is an 1890 land-grant doctoral research university dedicated to learning, discovery, and community engagement. The University provides a wide range of educational opportunities from bachelor's to doctoral degrees in both traditional and online environments. With an emphasis on preeminence in STEM and a commitment to excellence in all its educational, research, and outreach programs, North Carolina A&T fosters a climate of economic competitiveness that prepares students for the global society.

(Approved by the UNC Board of Governors, February 21, 2014)

CORE VALUES

Learning, Excellence, Integrity, Respect, Creativity, Engagement and Service



GOAL 1: *Create an intellectual climate that encourages the creative exchange of ideas and increases the quality of the professional environment.*

ENROLLMENT OF DOCTORAL STUDENTS GREW

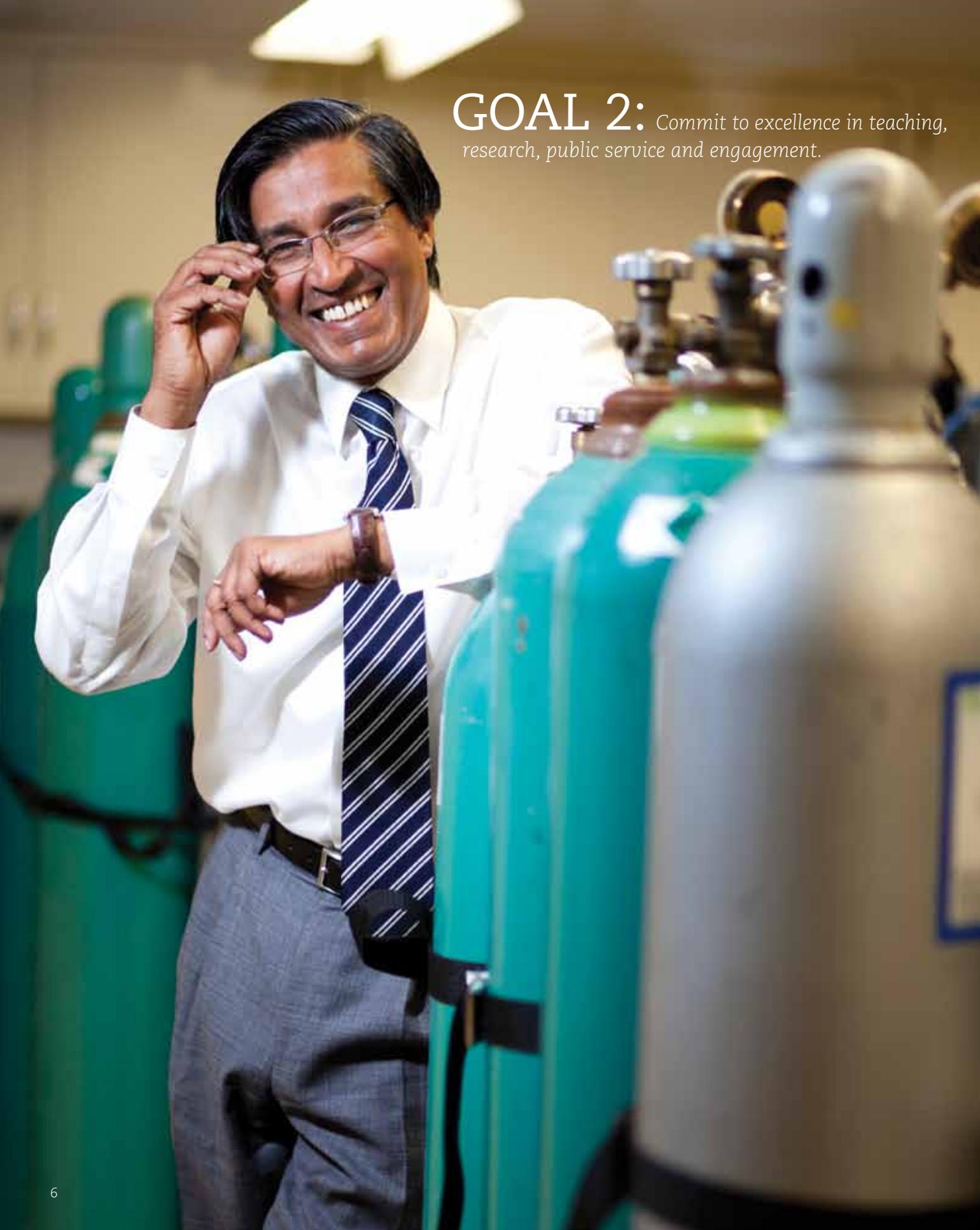
18%

GOALS AND STRATEGIES

- A.** Instill a passion for academic excellence and lifelong learning by creating a learning-centered environment with dynamic intellectual exchange.
- B.** Enhance the quality of the faculty and staff through aggressive recruitment and continuing support of talented leaders in their disciplines.
- C.** Enhance the student experience through faculty-student interaction, distinctive co-curricular activities, engaging undergraduates in research activities, and expanding high quality living-learning communities through the use of effective instructional technologies.
- D.** Create a stimulating, discovery-driven academic environment that provides financial support to attract graduate students who are competitive at leading research institutions.
- E.** Maintain an environment that upholds ethical values, honor, respect and integrity.
- F.** Recruit and retain gifted students by providing an academically challenging environment.
- G.** Enhance intellectual environment through creative use of physical and virtual space.

Goal 1 Accomplishments in 2013-14

- Electrical and computer engineering senior, Destenie Nock, was awarded the Namaskar Award, the highest honor a College of Engineering student can earn. Nock was a George J. Mitchell Fellow, which allows her to pursue the master's degree at Queen's University Belfast in Northern Ireland studying sustainable electrical energy systems.
- Three electrical and computer engineering students and a first-year master's civil architectural and environmental engineering student distinguished themselves by earning National Science Foundation (NSF) Graduate Student Research Fellowships.
- Research partnerships established with Virginia Tech, UC-Davis and Texas A&M were developed or strengthened through the USAID Feed the Future Innovation Laboratories to study irrigation technologies for small holder farmers, especially women in Central America, Southeast Asia and Africa.
- Graduate students received over \$4.8 million in scholarship support from various sources for the 2013-14 academic year.
- Enrollment of doctoral students grew 18 percent.
- Thirty-one honor stoles and certificates were awarded to military veteran graduates.



GOAL 2: *Commit to excellence in teaching, research, public service and engagement.*

5th

N.C. A&T WAS RANKED 5TH IN THE STATE OF NORTH CAROLINA FOR THE MOST AFFORDABLE ONLINE DEGREE PROGRAMS

GOALS AND STRATEGIES

- A.** Create and sustain a culture that supports teaching excellence across all academic units.
- B.** Develop university-wide systems to encourage and promote nationally-recognized faculty achievements in teaching, research, and public service.
- C.** Provide greater support for faculty development opportunities to enhance innovative instructional methods, course design, and curricular development.
- D.** Increase recognition of institutional quality and distinction among top research universities.
- E.** Enhance faculty use of systems to effectively monitor student progress and facilitate early interventions to improve academic excellence.
- F.** Strengthen the educational impact of international opportunities and experiences for university students, faculty, and staff.

Goal 2 Accomplishments in 2013-14

- The number of doctoral degrees awarded increased 38 percent from the previous year, and the enrollment of doctoral students increased 18 percent. In addition, the number of master's degrees awarded increased 19 percent from the previous year.
- According to the U.S. News & World Report 2014 Best Online Education Program rankings, N.C. A&T was placed in the top five among The University of North Carolina system schools mentioned for online bachelor's programs, the Master of Science in Information Technology (MSIT) online program moved from 18th overall last year to 15th this year in graduate Computer Information Technology Programs, and the university was mentioned among only six UNC schools ranked for online graduate education programs.
- AffordableCollegesOnline.org (AC Online) identified the colleges and universities with the most affordable online degree programs in the state of North Carolina and N.C. A&T was ranked fifth.
- The Child Development Family Studies Certificate for Family Life Educator curriculum was approved and renewed by the National Council on Family Relations.
- Dr. Jagannathan Sankar (pictured), Distinguished University Professor, Department of Mechanical Engineering, was recognized by The Business Journal (Nov. 20, 2013) as "One of the Most Influential People in the Triad for 2014." This is the sixth time he has received this recognition.
- A visit by the chancellor and faculty from the College of Engineering to Henan Polytechnic University in China resulted in a 2+2 agreement for degree completion in electrical and mechanical engineering.
- A course on global understanding was developed in collaboration with Mahatma Gandhi University, Kerala, India (includes teleconference connections with students in India).
- In the Department of Visual and Performing Arts, four students and one faculty member participated in Study Abroad Dance 2013 and traveled to Kingston, Jamaica, to study and conduct research; three theater majors were selected to participate in the Mid-Summer Oxford program through British American Drama Academy; and visual arts students traveled to Cyprus, London and Japan to study for a semester.
- The School of Technology signed an MOU with the Beijing Jiaotong University, China, to promote faculty, staff and student exchange, collaborative research, organization of conferences and cultural activities.



GOAL 3: *Position the university to be a national, premier research-intensive, doctoral, science and technology-focused learning institution.*

GOALS AND STRATEGIES

- A.** Enhance and develop new relationships with research funding entities to broaden the university's research portfolio and increase related funding.
- B.** Expand the breadth of faculty and student involvement in funded research.
- C.** Enhance and leverage the active engagement of faculty technology transfer and translational research.
- D.** Promote a vigorous STEM-oriented academic environment and increase the number of students entering STEM careers.
- E.** Strengthen the capacity and quality of STEM-oriented graduate/professional degree programs and the number of overall graduate student enrollment.

Goal 3 Accomplishments in 2013-14

- Faculty members in the Department of Chemistry collaborated with Wake Forest University, Virginia Polytechnic Institute and State University, Oak Ridge National Laboratory, U.S. Army Construction Engineering Laboratory and the Indian Institute of Technology Kharagpur.
- The Department of Accounting and Finance began offering the accounting concentration in the Master of Science in Management (M.S.M.) program. This program will help students obtain the 150 credit hours of course work needed to sit for the CPA exam.
- Researchers at the Center for Excellence in Post-Harvest Technologies at the North Carolina Research Campus in Kannapolis explored cancer-fighting properties in bioactive food components.
- Shakeria Fudge, senior laboratory animal sciences major, and Leon White, doctoral mechanical engineering student, were two of 75 nationwide to participate in the White House Initiative on Historically Black Colleges and Universities for its first class of HBCU All-Stars. The All-Stars served as ambassadors of the Initiative by providing outreach and communication with their fellow students about the value of education and the Initiative as a networking resource.
- During the 2013-14 academic year, 58 undeclared students declared a STEM major. In addition, the goal number of graduates in STEM disciplines was exceeded by 7 percent.
- A graduate course on renewable energy, three new courses in nano-bio technology and a research experience for students were developed to enhance STEM offerings in the departments of chemistry, biology and bioengineering.

7
**PERCENT OF GOAL NUMBER EXCEEDED FOR GRADUATES
IN STEM DISCIPLINES**



GOAL 4: *Embrace an entrepreneurial spirit that intentionally engages university and community partners to expand economic development and civic engagement.*

GOALS AND STRATEGIES

- A.** Become a driver of regional revitalization in economic development, health, education, culture, and civic quality.
- B.** Actively participate and leverage the intellectual portfolio of the university to facilitate capacity building within local communities, and to create replicable models for long-term growth.
- C.** Become a recognized regional leader to support critical clusters related to biological, life, and environmental sciences in the Piedmont Triad technology corridor.
- D.** Create programs that support educational credentialing of adult workers.
- E.** Engage in research, teaching, and community outreach activities that strengthen programs for K-12 education in the region.
- F.** Strengthen strategic relationships with community colleges and other educational partners.
- G.** Encourage support and recognize the high-quality, interdisciplinary entrepreneurial endeavors of students, faculty, staff and administrators.

Goal 4 Accomplishments in 2013-14

- Over 180 undergraduate and graduate sociology and social work students provided more than 79,200 hours of volunteer service to the region to support the workplace in fields related to health, mental health, rehabilitation and economic self-sufficiency.
- The nanoengineering department initiated a strategic relationship with local industries in the areas of automotive, aerospace and textiles.
- Through the Financial Trading Room, the Financially Fit Aggie program assisted students, faculty, staff and the community with financial literacy training. Furthermore, The Department of Economics hired its first Financially Fit Aggie Scholar, senior Mark Croston. This unique scholarship was made possible through a grant from a local sorority with the purpose of transferring knowledge to the community on financial literacy concepts.
- The Human Development and Services Center for Behavioral Health and Wellness (clinic), along with the Rehabilitation of Racial and Ethnic Minorities and Behavioral Addictions (REMBA) conference, worked to improve addictions, trauma and mental health disparities in the region.
- The new Be SAFE grant is working on nullifying HIV/AIDS among college students.
- The School of Agriculture and Environmental Sciences assisted in rehabilitating a stream near the campus with the goal of organizing field tours/trips and leveraging it as an experiential learning site for biological, life and environmental sciences.
- The Center for Academic Excellence's Students Inspiring Success Through Education Reform and Service (SISTERS) program formed a partnership with Aycock Middle School where members were partnered with at-risk female students to promote academic success and foster educational planning.
- The Joint School of Nanoscience and Nanoengineering, which is actively involved in nano-bio, nano-toxicity and safety research, has developed relationships with Forsyth Technical Community College and Guilford Technical Community (GTCC). As a result, a GTCC student conducted research in the area of nanomaterials.

180+

UNDERGRADUATE AND GRADUATE SOCIOLOGY AND SOCIAL WORK STUDENTS PROVIDED MORE THAN 79,200 HOURS OF VOLUNTEER SERVICE



GOAL 5: *Foster a more diverse and inclusive campus community by promoting cultural awareness, collegiality, and by cultivating respect for diverse people and cultures.*

GOALS AND STRATEGIES

- A.** Encourage the development of programs that demonstrate the value of varied global perspectives and supports international collaborations, research alliances and partnerships.
- B.** Graduate our students with global credentials through experiences abroad, international studies, and domestic and international internships.
- C.** Develop curricula that impart global relevance in a manner that increases knowledge of people, cultures and nations.
- D.** Exhibit and enhance educational and workplace practices that exemplify an acceptance of differences in the heritage and beliefs of others, and supports opportunities to achieve professional and personal goals.

Goal 5 Accomplishments in 2013-14

- Dr. Osei-Agyemang Yeboah is the project director and a co-principal director for two international projects (one in the Philippines and Cambodia and the other in Ghana) that have several alliances including the Ministry of Food and Agriculture; Savannah Agricultural Research Institute (Ghana); South East Asia Agro Forestry Center (University of the Philippines, Los Palmas); University of Bantangmba (Cambodia); Kwame Nkrumah University of Science and Technology (Ghana); and Cambodia Agricultural University.
- N.C. A&T, through funding from the Sustainable Agriculture and Natural Resource Management Innovation Lab, is a key partner in the establishment of the Conservation Agriculture with Trees Center in the Philippines in collaboration with the World Agroforestry Center and several other institutions. CAWT is the only center of its kind in Southeast Asia.
- The Department of Nanoengineering, Joint School of Nanoscience and Nanoengineering, initiated an international student exchange program with Xi'an Jiaotong University in China. The MOU was signed in the fall of 2013.
- The Office of Undergraduate Admissions now has bilingual counselors to assist students and parents in the admissions process.

GOAL 6: *Achieve excellence in academic and operational effectiveness and efficiency.*



GOALS AND STRATEGIES

- A.** Enhance institutional research to facilitate effective data-driven decisions, with dash board measurements for tracking performance.
- B.** Enhance and expand the performance-based management system for faculty, staff, and student employees.
- C.** Utilize best practices and technological enhancements to improve program effectiveness and efficiency.
- D.** Develop and implement transparent and consistent policies to enhance the recruitment, retention, and graduation of students.
- E.** Improve front-line capabilities to fulfill the university's commitment to quality service and responsiveness.
- F.** Enact processes to create an environment that is accessible and welcoming to students, staff, faculty, retirees, alumni and the greater community.

Goal 6 Accomplishments in 2013-14

- The College of Engineering (COE) implemented the use of the software i-Dashboard to aid its faculty and staff in readily accessing data and statistics to make informed decisions. The COE also implemented a graduate student tuition allocation model that accounts for enrollment, graduation, masters' level theses and projected new student enrollment targets and actual counts.
- The Office of Undergraduate Admissions improved the student application portal to track where prospective students are in the admission pipeline.
- The 2013-14 first-year retention rate increased more than 6 percent from 73.6 percent to 79.8 percent.
- Enrollment declined by one percent from 10,636 in fall 2012 to 10,561 in fall of 2013; however, a higher caliber of students was enrolled in the fall 2013 with an average high school grade point average of 3.34 (versus 3.25).

**A HIGHER CALIBER OF STUDENTS ENROLLED IN
FALL 2013 WITH AN AVERAGE HIGH SCHOOL GRADE POINT AVERAGE OF**

3.34

SCORECARD 2014

	NC A&T (2010)	BOG PEERS MEAN	UNC PEERS MEAN	GOAL 2020	NC A&T (FALL 2012)	NC A&T (FALL 2013)	SELF- ASSESSMENT	
ENROLLMENT								
Fall Enrollment (headcount)	10,795	14,055	23,872	13,500	10,636	10,561	■	NA Not Applicable
Undergraduate	9,151	11,239	18,786	10,000	8,923	8,872	■	- Not Available
Graduate	1,644	2,816	5,086	3,500	1,713	1,689	■	
Master's	1,338	3,500	3,399	3,000	1,460	1,390	■	■ Above Target
Doctoral	204	1,200	673	500	253	299	■	■ On Target
New Freshmen—Average SAT	895	1,036	1,039	1,040	906	919	■	■ Much Work Needed
New Freshmen—Average ACT	19	22	21	22	19	18	■	
New Freshmen—Average High School GPA	3.04	3.24	3.60	3.4	3.25	3.34	■	
New Transfer Enrollment	419	1,009	1,759	1,500	409	430	■	
RESEARCH AND DEVELOPMENT								
Contract and Grants Award Dollars (millions)	\$60.14	-	\$43.71	\$85	\$56.7	\$52.75	■	
Number of New U.S. Patents and Licenses Based on N.C. A&T Research Per Year	1	-	-	14	2	3	■	
Royalties Per Year (thousands)	\$1.70	-	-	\$250	0	\$2	■	
STUDENT SUCCESS								
First-Year Retention Rate	72.0%	73.9%	78.6%	85%	73.6%	79.8%	■	
Four-Year Graduation Rate	15.0%	18.9%	28.4%	35%	20.2%	20.4%	■	
Six-Year Graduation Rate	38.0%	44.4%	54.9%	55%	42.2%	42.9%	■	
Number of Renowned Scholars (Marshall, Fulbright, Rhodes, etc.)	0	-	-	5	8	17	■	
Number of National Fellowships	0	-	-	5	3	12	■	
Degrees Awarded by Fiscal Year	1,726	2,481	4,618	2,700	1,673	1,798	■	
Bachelor's	1,349	1,737	3,305	2,000	1,286	1,313	■	
Master's	356	640	1,195	645	358	456	■	
Doctorates	21	40	86	55	29	40	■	
STEM Disciplines	397	530	501	500	531	534	■	
ATHLETIC SUCCESS								
Number of MEAC Championships	0	NA	NA	5	1	0	■	
Graduation Success Rates for Athletes	50.0%	63.3%	76.6%	65%	56%	59%	■	
FINANCIAL RESOURCES								
Endowment Market Value (millions)	\$24.01	\$61.23	\$131.02	\$75	\$34	\$40.2	■	
Alumni Participation Rate	-	-	20%	-	8.8%	6.58%	■	
HUMAN CAPITAL (Faculty and Staff Recognition)								
Number of Members in National Academies	0	-	-	2	12	9	■	
Number of Members Receiving National and International Awards	2	-	-	8	27	16	■	
Number of Endowed Professorships	4	-	-	8	10	12	■	
Highly Cited [Faculty] Staff [scholarly works cited by more than 200 peers]	0	-	-	10	41	27	■	
RANKING AND RECOGNITION								
U.S. News Best College—Overall Rank (national universities)	Unranked	2 nd Tier	1 st Tier	2 nd Tier	Not Published	Unranked	■	
U.S. News Best College—Historically Black Colleges and Universities Rank	12	NA	NA	Top 5	11	8	■	North Carolina Agricultural and Technical State University is an AA/EEO employer and an ADA compliant institution.
DIVERSITY								
Student Demographic—Percent African American	87%	28%	21%	70%	85.4%	81.7%	■	2,500 copies of this public document were printed at a cost of \$2,975, or \$1.19 per copy.
Student Demographic—Percent Non-African American	13%	72%	79%	30%	14.6%	18.2%	■	

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