New Academic Year
It was a record-setting year for NC State as the number of applications submitted jumped nearly 25 percent to an all-time-high of 26,000. We admitted 43.7 percent of this year’s freshman applicants. The Class of 2020 represents all 100 North Carolina counties, all 50 states, and 70 countries from around the world. The Graduate School has 2,659 new students. That includes: 2,025 new master’s students, 523 new doctoral students and 111 certificate students.

Packapalooza
NC State’s signature welcome-back week event – Packapalooza – now in its fifth year, was a huge success. The event drew 75,000 people, all enjoying musical performances, vendors, artists, and street performers.

Plant Sciences Initiative’s Boost from the Golden LEAF Foundation
The Golden LEAF Foundation has awarded NC State with a $45 million grant to help fund and support the new research facility for the North Carolina Plant Sciences Initiative. This marks the largest donation to date for the College of Agriculture and Life Sciences and ranks among the top donations to the university. The Golden LEAF Foundation’s grant alongside $9 million additionally contributed by 42 different agricultural groups across the state and the $85 million approved by voters through the Connect NC Bond have allowed the project to move forward.

Scholarly Research Ranking
The magazine Nature recently released their rankings of scholarly output of universities and research institutions and placed NC State at #31 in the world and #3 in North America. The publication noted NC State’s large increase in the number of contributions to noted journals.

NCSU Alumni Win World Food Prize
Two NC State alumni are winners of the 2016 World Food Prize, one of the most impressive and sought after international awards in agriculture. Maria Andrade and Robert Mwanga, who received Ph.D.’s in horticultural science from NC State, were two of the four recipients. The pair work on breeding orange-fleshed sweet potato varieties resistant to pests, drought and heat – all qualities designed to improve crop growth in sub-Saharan Africa.

NC State’s Creative Writers Honored
NC State faculty, students, and alumni were recently recognized by the editors of the Best American Science Fiction and Fantasy series and will be published in the anthology. The works of three recent alums, a current student and a faculty member of NC State’s MFA in Creative Writing Program made the list of notable stories selected by award-winning editor John Joseph Adams and author Karen Joy Fowler.
Apple Security Vulnerabilities Discovered
A team of researchers, including those from NC State, have discovered vulnerabilities in iOS – the operating system used in Apple’s iPhone and iPad devices. William Enck, an associate professor of computer science at North Carolina State University and co-author of a paper, said they wanted to identify any potential problems before they became real-world problem. They discovered a weakness that could allow attacks through third-party apps. The researchers are working with Apple to resolve the issue.

Professor Receives National Award in Chemical Instrumentation
Kenan Distinguished Professor and the head of the UNC-NC State Joint Department of Biomedical Engineering Dr. Nancy Allbritton received the prestigious 2016 Award in Chemical Instrumentation from the American Chemical Society’s Division of Analytical Chemistry. The award honors individuals who have made significant advances in the field of chemical instrumentation. Dr. Allbritton’s research focuses primarily on microdevices and pharmacoengineering, specifically in signaling in single cells and microfabricated systems for cellular analysis.

Campus Police Enlist New Recruits
University Police will begin using specially trained “person-borne” explosive detection dogs on campus, at athletic events and special events at NC State. With the addition of Labrador retrievers Reed and Ford, University Police has become the first police department in the state of North Carolina to enlist the use of person-borne explosive detection dogs. The dogs can detect the odor of explosives or gunpowder on a person as that person approaches the venue and they can then track that individual as he or she moves through the crowd.

Improving Firefighter Safety
The colleges of Textiles and Natural Resources have teamed up to try to improve the portable shelters firefighters carry when fighting wildfires. The tent-like structures are firefighters’ last defense and are only deployed when wildfires have them surrounded. The T-PACC has been testing the existing fire shelters and some new materials in a large-scale wildland fire simulator at the College of Textiles. The Center is also establishing testing protocols. The ultimate goal is to optimize the shelters’ performance and raise the probability of firefighter survival.

NC State at the Olympics
Wolfpack athletics were well represented at the Olympics in Rio de Janeiro. Swimmer Ryan Held brought home gold in the 4x100 freestyle relay. Ryan made several broadcast newscasts including the Today Show and NBC Nightly News. Also competing in the games were swimmers Anton Ispen and Soren Dahl, representing Denmark, and Simonas Bilis, representing Lithuania. Also representing NC State was senior air rifle specialist Lucas Kozeniesky of Fairfax, Virginia, the first NC State shooter to ever qualify for the U.S. Olympic shooting team.
Strategic Planning

Goal 1: Student Success

While balancing access with quality, NC State must ensure that our students make timely progress toward an NC State degree, and along the way, must provide educational opportunities that inspire them to lead, to serve, to challenge, to take responsibility, to build problem-solving skills, and to engage with complex problems.

- The competition for a spot in the freshman class this year was the most intense ever. Freshman applications have increased by 24.5 percent from last year to 26,015. NC State admitted less than half (43.7 percent) of this year’s freshmen applicants. The 4,300 incoming freshmen have an average weighted GPA of 4.49 and an average two-part SAT score of 1255. Just over 50 percent of admitted students were in the top 10% of their class. As always, diversity is a key objective in recruitment and enrollment efforts within the University, and this year’s class represents all 100 North Carolina counties, 50 states of the U.S., and 70 countries from around the world. Additionally, NC State expects to enroll about 1,245 transfer students this fall, along with 2,659 graduate students.

- NC State awarded a total of 5,598 degrees at Commencement on May 7, 2016. The degrees conferred included 64 associate’s degrees, 3,779 bachelor’s degrees, 1,467 master’s degrees, 190 doctoral degrees, and 98 Doctor of Veterinary medicine degrees. When combined with the degrees awarded in December 2015, the total degrees given by NC State in the 2015-2016 academic year reached 9,074. NC State’s retention rate is currently 92 percent, while the six-year graduation rate holds steady at 76 percent.

- NC State students have continued to impress this year, winning a number of prestigious scholarships and fellowships:
  - NC State has its first ever Churchill Scholar in Mia de los Reyes, a senior studying physics and mathematics. The scholarship covers all university and college fees, cost-of-living expenses, travel to and from the United Kingdom and other reimbursement of application fees. She plans to use the scholarship to earn a one-year master’s degree in astronomy from the University of Cambridge.
  - Five NC State students became Fulbright Scholars in April, earning grants from the prestigious program for English Teaching Assistantships and Research/Study opportunities. The 2016 winners were QuiAnne’ Holmes, Alex Starnes, Rachel Gonsalves, Danny Smyl, and Kyle Virgil.
NC State set a record this year with the number of Graduate Research Fellowships from the national Science Foundation. There were 32 NC State students who earned the prestigious fellowship for subjects ranging from genomics to engineering education to animal behavior.

Second-year College of Veterinary Medicine student Kimberly Schreiber was one of five students across the country to receive the 2nd Opportunity Summer Research Scholarship. This Scholarship supports veterinary students who have completed a summer research project and wish to conduct a second summer research project. This award offers students a $5,000 scholarship along with a $1,000 stipend to attend the 2016 National Institutes of Health Symposium.

- The Park Scholars have pledged to raise $1 million for Raleigh’s Rex Hospital by 2020, in addition to the more than $1 million already raised by the Krispy Kreme Challenge. The 15-room clinic at Rex will be renamed the Krispy Kreme Challenge Children’s Specialty Clinic.

- A group of NC State students from the College of Design won third place in Walt Disney’s Imaginations Design Competition. The challenge was to design a traveling experience that could make its way around small U.S. towns as a way to provide the magic of Disney to families unable to attend the actual parks. Kevin Lee, Emily Wise, Chandler Williams, and Simon Park created “Ostium: An Adventure Behind Every Door” which featured characters from Disney and Pixar favorites The Lion King, Frozen, Toy Story, Finding Nemo, and Monsters Inc.

- Students enrolled in Dr. Gary Blank’s Natural Resources 100 Class received the Fred Fletcher Award for Outstanding Community Service. Since 1996, this award has been given to honor citizens, non-profits, community programs and businesses for their hard work and dedication to improving their community through gardens and public parks. The 367 NC State students enrolled in the class have been involved with 16 different projects, racking up a total of 734 hours volunteered.


- Moaad Benkaraache and Tayyab Hussain, two seniors in the College of Engineering, co-founded Trakex, a startup company that was selected for a Y Combinator Fellowship. Trakex has developed an in-motion cargo dimensioning solution that could impact the trucking industry’s current pricing model. This technology has a current market opportunity of $1.8 billion.

- Recent History Alum Micah Khater received the NC Literary and Historical Association’s Hugh T. Lefler Award for her senior thesis, which was named the best undergraduate history paper in the state.
• Cara Pace, an NC State rising senior, was named one of 50 New Century Farmers by the Future Farmers of America.

• Ph.D. student Sumeet Mishra won a Gold Graduate Student award from the Materials Research Society for his work on integrating magnetite particles into elastic polymers to form magnetic polymer nanocomposites. The magnetic polymer nanocomposite can then be controlled and manipulated using a magnetic field, a safer and more efficient method for biomedical applications.

• The Pat Tillman Foundation accepts applications from Post-9/11 military veterans and spouses nationwide before choosing up to 60 as Tillman Scholars. Amie Pflaum, a 10-year Army Aviation Corps Blackhawk helicopter pilot, was named a Tillman Scholar for 2016. During her time in the military, Pflaum was tasked with providing humanitarian assistance and medical care to communities in Central America and the Caribbean. She noticed the impact veterinary and public health services had on the health of the local population’s food sources. Amie is currently pursuing her Doctor of Veterinary Medicine degree at NC State’s College of Veterinary Medicine in the hopes of improving animal and human health in the U.S. and abroad.

• Two NC State alumni are among winners of the 2016 World Food Prize, one of the most impressive and sought after international awards in agriculture. Maria Andrade and Robert Mwanga, who received Ph.D.’s in horticultural science from NC State, were two of the four recipients. Andrade and Mwanga work on breeding orange-fleshed sweet potato varieties resistant to pests, drought and heat—all qualities designed to improve crop growth in sub-Saharan Africa. The World Food Prize seeks to reward work in countering world hunger and malnutrition through biofortification. Andrade and Mwanga’s work has been recognized as the single most successful example of biofortification.

• NC State announced the Backpacks to Briefcases program, funded by a grant from Duke Energy, which helps connect recent graduates with local companies that match their interests through paid internships. This helps graduates make the connections they need to succeed and increases retention of skilled graduates in our local community.

• Former Wolfpack football players Jamelle Eugene and DaJuan Morgan have been working together for a few years on Gryppers, a product intended to replace full-handed gloves and athletics tape used by many football players. Unfortunately, they were not satisfied with the results, so they partnered with the College of Textile’s senior design program to get new input on their product. College of Textiles seniors Jamie McLain, Desirae Scruggs and Shannon Tart began their year-long project to improve upon Eugene and Morgan’s hard work. Scruggs and Tart have continued to work with Gryppers since graduating in May, and the company received a $50,000 grant from the NC Idea Foundation to take the product to market this summer.
Goal 2: Scholarship and Research

NC State’s research culture permeates every aspect of our essence as a university. It structures our thought, informs our teaching, and directs our engagement beyond the campus. It is the foundation on which we build an innovative learning environment that engages our faculty, undergraduates, and graduate students alike. NC State’s research quality determines our impact on the work force, on the economy, on the advance of knowledge, and on the human condition.

- Dr. Roland Kays, research associate professor in the department of Forestry and Environmental Resources, received an EAGER award from the National Science Foundation which will provide up to $300,000 for a collaborative ecology project on the effects of global warming. Dr. Kays will work alongside a professor from Duke University.

- Dr. Lee-Ann Jaykus, professor of food, bioprocessing and nutrition sciences at NC State, created a device that simulates vomiting and provided the first evidence that vomiting can aerosolize virus particles similar to human norovirus.

- Dr. Afsaneh Rabiei, a professor of mechanical and aerospace engineering, has conducted research that has found metal foams capable of shielding x-rays, gamma rays and neutron radiation. The work has promise for advancements in nuclear safety, space exploration and medical technology.

- Dr. Jason Miller found the earliest recording of Dr. Martin Luther King’s “Dream Speech” given at Booker T. Washington High School in Rocky Mount in 1962. Additionally, he has launched the website kingsfirststream.com as a tool for researchers and students to learn more about Dr. King.

- Associate professor of entomology, Hanna Burrack, received a $6.7 million grant from the US Department of Agriculture to lead research and grower education efforts aimed at reducing spotted wing drosophila damage across North America.

- Six NC State professors were named Fulbright U.S. Scholars, including Michelle Schroeder-Moreno, Patricia Marshall, Darrell Britt, Robert Kochersberger, Lucian Lucia and Michael Bustle. Another professor, Heidi Hobbs was named a Fulbright Specialist. She will travel to the University of Economics in Bratislava, Slovakia to work with the Center for North American Studies and will teach a course. NC State is one of the nation’s leading Fulbright producers.

- Six of NC State’s bright young researchers were awarded NSF CAREER Awards. Dr. Alper Bozkurt, Dr. Chih-Hao Chang, Dr. Hsiao-Ying Huang, Dr. Brina Montoya, Dr. Brendan O’Conor, and Dr. Srikanth Patala were all recipients. The NSF CAREER Award is widely recognized as one of the most prestigious awards given to junior faculty members.
Five NC State faculty members received NSF Early Career Awards, a prestigious honor that recognizes upcoming talent and innovation. Dr. Xipeng Shen, Dr. Daryoosh Vashaee, Dr. Kristy Boyer, Dr. Rosangela Sozzani, and Dr. Ana-Maria Staicu were all recipients.

Dr. Philip Bradford is the first researcher in the College of Textiles to receive funding through the Young Investigator Research Program sponsored by the Air Force Office of Scientific Research. Dr. Bradford plans to use his YIP award of $360,000 to pursue a new method for making extremely low density foam-like materials out of carbon nanotubes.

Dr. Paul Franzon and his research team of grad students Wenxu Zhao and Kirti Bhanushali have developed a new technique that allows them to create passive radio-frequency identification tags that are 25 percent smaller than current standard size. The smaller size will cut down on production costs, making the RFID tag process less expensive and more accessible.

Dr. Chase Beisel and his research team have developed a new method for identifying PAMs specific to different CRISPR-Cas systems. CRISPR-Cas systems are widely acknowledged as the next generation of genetic tools. They function by identifying invader DNA using PAMs. PAMs are short genetic sequences adjacent to target DNA in invaders like viruses. When protein in the CRISPR-Cas system identifies a PAM, the identification prompts the protein to bind to the DNA and begin cleaving the target DNA. Dr. Beisel’s tool is called the PAM-SCANR. This technology allows for the quicker scanning and identifying of PAMs which will lead to the more efficient use of CRISPR-protein combinations.

Dr. Frances Ligler, a professor in NC State’s Biomedical Engineering Department, and Dr. Michael Daniele, an NC State professor in the Department of Electrical and Computer Engineering, will receive one of four 2015 Edison Patent Awards from the Naval Research Laboratory for their work in developing a new technique for creating blood vessels. Dr. Ligler will receive an additional Edison Award for her patent “Sheath Flow Device and Method,” a project that involves the creation and shaping of continuous fibers on the micron scale. The Edison Award is typically given to patents that have the potential to significantly benefit the people of the United States.

Dr. Jay Narayan has developed a new method for depositing diamond on the surface of cubic boron nitride, combining the two materials to form a single crystalline structure. This material has incredible potential and could be used to create high-power devices like solid state transformers as well as cutting tools and deep sea drilling equipment. Narayan’s method is more energy- and time-efficient than the other methods currently used today.
• Dr. Zhen Gu received funding from the Juvenile Diabetes Research Foundation and Sanofi to support his development of glucose responsive insulin therapies for treating insulin-dependent diabetics. Gu has worked on developing a smart insulin patch capable of identifying when an individual’s blood sugar was too high and subsequently delivering a dose of insulin. Gu’s method proved successful on mice and this funding will likely allow him to move into human trials.

• The United States Department of Energy (DOE) is providing funding for projects at nine different institutions as part of the 11th round of DOE investments in solid-state lighting core technology research and product development. The “Solid-state Lighting Advanced Technology – 2016” program has awarded participants $10.5 million in research and development funds. Each participant is also contributing funds, bringing the total public-private investment to $13.5 million. NC State will receive $583,953 from the DOE to support the research and development effort to create organic light-emitting diodes (OLEDs) on low-cost, high index corrugated substrates with a semi-random periodicity. Researchers believe this technology could increase extraction efficiency across the entire visible spectrum due to the extraction of the thin-film-guided and surface-plasmon modes. With the DOE funding, this project will only cost the university $157,000.

• Dr. Ke Cheng, associate professor of molecular biomedical sciences at NC State with a joint appointment in the NC State/UNC-Chapel Hill Department of Biomedical Engineering, led a group of researchers who investigated how therapeutic stem cells exit the bloodstream. Their investigations provides better insight into the nature of stem cells and leads to more directed questions about the spread of metastatic cancer cells through the blood stream.

• The Center for Integrated Pest Management will receive the Excellence in Regulatory Affairs and Crop Security Award from the American Phytopathological Society. This award recognizes members whose many contributions to the grand challenge areas of invasive species and crop security and acknowledges that through their collaboration and research, they have established the National Science Foundation Center for Integrated Pest Management as the most respected source of information on predicting and mitigating the risks of exotic plant pests.

• Dr. Jeni Corn, the director of evaluation programs at NC State’s Friday Institute for Education Innovation, presented the “North Carolina Digital Learning Progress Rubric: Version 2.0” at the North Carolina Technology in Education Society conference. This rubric compiled feedback from schools across the state, educational organizations, policy makers and the North Carolina Department of Public Instruction to provide districts with information and steps for implementing digital learning practices.
Goal 3: Interdisciplinary Scholarship Addressing Grand Challenges

The history and mission of NC State call for us to address the major challenges that confront the world. Addressing complex problems with many disciplinary aspects requires assembling teams of scholars with varied skills and diverse perspectives. We will maximize the impact of NC State’s research by concentrating our research resources in areas where we have strategic strengths and by creating a culture of collaboration and interdisciplinarity that will enrich not only our research activities, but also our teaching and engagement.

- A team from NC State and Texas A&M launched Big Diva, a digital humanities tool that offers a visual interface for navigating scholarly humanities articles, sorting them by category and color coding articles to make navigation simpler.

- A study from NC State researchers found that novel light-weight composite metal foams (CMFs) are significantly more effective at insulating against high heat than the conventional base metals and alloys that they’re made of, such as steel. The finding means the CMF is especially promising for use in storing and transporting nuclear material, hazardous materials, explosives and other heat-sensitive materials, as well as for space exploration. The paper was published in the International Journal of Thermal Sciences. The lead author was Shuo Chen, a former Ph.D. student at NC State and co-author was Jacob Marx, a current Ph.D. student at NC State. The work was supported by the Department of Energy’s Office of Nuclear Energy through their Nuclear Energy University Programs.

- Researchers from NC State and Massey University in New Zealand have discovered that genetically engineered maggots can clean non-healing wounds and promote cell growth. This type of treatment focuses on non-healing wounds, in particular diabetic foot ulcers. Max Scott, NC State professor of entomology, led the study.

- New research from NC State found that “multimodal” communication – using a mix of words, images and other resources – is important for students and faculty in higher education, a finding that argues for increased instruction in multimodal communication for undergraduates. The paper was authored by Gwendolynne Reid, a Ph.D. student at NC State and co-authored by Robin Snead, a lecturer at UNC Pembroke. Snead worked on the project while a Ph.D. student at NC State. The researchers found that, across all disciplines, more than half of study participants assigned multimodal communication work to students – and more than 70 percent did multimodal work themselves. Multimodal work was most common for science faculty, with 90 percent reporting that they engaged in multimodal communication.
A study by Communication researchers found that the savvier young people are about using social media, the less likely they are to report having alcohol-related problems. The researchers found that the more likely an individual was to seek or post information about alcohol, the more likely that individual was to have alcohol-related problems, which was consistent with existing research. But the researchers uncovered that this effect varied depending on how skillful students rated their social networking site usage. Lynsey Romo, assistant professor of communication co-authored the paper with Charee Thompson, as assistant professor of communication at Ohio University.

Biomedical engineering researchers at NC State and UNC-Chapel Hill have developed a technique that uses a patch embedded with microneedles to deliver cancer immunotherapy treatment directly to the site of melanoma skin cancer. In animal studies, the technique more effectively targeted melanoma than other immunotherapy treatments. Zhen Gu, an assistant professor in the biomedical engineering program, was senior author of the paper. Chao Wang, a postdoctoral researcher in the joint biomedical engineering program at NC State and UNC-Chapel Hill, was the co-lead author.

English professor James Mulholland was awarded a Burkhardt fellowship to continue his research into the emergence of Anglo-Indian literature during eighteenth century at the National Humanities Center. Mulholland is one of 21 recently tenured professors who have been named Burkhardt Fellows for the 2016-17 academic year. The fellowships, awarded by the American Council of Learned Societies with funding from the Andrew W. Mellon Foundation, provide a $75,000 stipend in addition to a $5,000 research budget.

Dr. Alyson Wilson, professor of statistics at North Carolina State University was elected a fellow of the American Association for the Advancement of Science (AAAS), the world’s largest scientific society and publisher of the Journal Science. Wilson is the principal investigator at NC State’s Laboratory for Analytic Sciences. She is a fellow of the American Statistical Association with research interests in statistical reliability, Bayesian methods, and the application of statistics to problems in defense and national security. She also coordinates NC State’s “data-driven science” cluster.

Under the White House-led initiative titled the Collaborative to Advance Equity through Research, NC State has launched the Growing Research on Women of Color (GROW) Project. This commitment to conduct research that focuses on women and girls of color will be led by Dr. Blair Kelley, assistant dean for interdisciplinary studies and international programs in the College of Humanities and Social Sciences. Under Dr. Kelley’s guidance, NC State will recruit researchers from all disciplines to offer a wide range of perspectives on this under-researched topic in efforts to provide a thorough understanding of the problems facing women and girls of color.
Dr. Ann Ross of NC State’s Sociology and Anthropology department conducted a research experiment with Dr. Alicja Lanfear of Middle Tennessee State University and Dr. Ashley Maxwell from the University of South Florida. Their goal was to develop a methodology for identifying human remains based on X-rays that could establish a consistent approach to identification and allows experts to provide a probability for said identification. After studying ante and post mortem X-rays of the spine, upper leg, or side of the skull for multiple individuals, the researchers developed location-specific standards for each skeletal region. They found that the skull and cervical vertebrae provided the most accuracy when making an identification. This work could lead to the establishment of an efficient, universal system for radiographic ID.

A group of researchers led by the University of Oregon has announced the sequencing of the spotted gar genome. Dr. Jeff Yoder, an associate professor of immunology in NC State’s College of Veterinary Medicine, is a contributor to the gar genome project. Scientists believe that the genome of the spotted gar will provide insight into human evolution and human health since the gar chromosomes have remained relatively unchanged throughout history.

A study conducted by researchers at NC State, UNC-Chapel Hill, Emory University, Children’s Healthcare of Atlanta and the Georgia Institute of Technology shed new light on the formation of blood clots in newborns. The study showed that current practices used to increase clotting in neonates might be more detrimental than helpful. By furthering their understanding of how clotting in adults differs from newborns, scientists hope to be better suited to develop more effective treatment strategies for infants.

Researchers from NC State and the University of Delaware have developed an algorithm that can quickly and accurately reconstruct hyperspectral images using less data. Using instruments that capture hyperspectral information succinctly to create the images combined with the algorithm and accompanying hardware makes it possible to acquire hyperspectral images in less time and to store these images using less memory. While this technology needs further development, it holds promise for use in fields ranging from security and defense to environmental monitoring and agriculture.

The National Academies of Sciences, Engineering, and Medicine released a report explaining the current state of gene drive science and discussing next steps for scientists, stakeholders, regulatory agencies and the public. The report was prepared by a 15-person committee featuring experts from universities across the nation. NC State’s very own Dr. Jason Delborne, an associate professor in the College of Natural Resources and the Genetic Engineering and Society cluster, was a contributing member of the committee.
• Tran Chi Thanh, president of the Vietnam Atomic Energy Institute, toured NC State’s PULSTAR nuclear reactor with NC State Nuclear Engineering Professors Ayman Hawari and Nam Dinh and discussed further partnership between the two institutions. An administrative arrangement signed by the United States and Vietnam in 2016 looks to expound upon the agreement previously signed by the two countries in 2014, which opened the door to nuclear trade and cooperation between the two countries, under Section 123 of the Atomic Act. The 2016 agreement established the intention to cooperate further in training and education, building of institutional connections, strengthening of export controls, and securing and tracking nuclear and radiological materials. Plans for further cooperation include online and in-person training, lectures and visits by Dr. Hawari.

• Researchers from UNC-Chapel Hill and NC State have developed a new technology that will allow neuroscientists to capture images of the brain almost 10 times larger than previously possible. A UNC-Chapel Hill research team composed of Jeff Stirman, Ikuko Smith and Spencer Smith sought to investigate “ensemble” neuronal activity related to how mice process visual input using a two-photon microscope. The size of the visual field provided by the microscope was too small for the researchers’ needs, so they contacted Michael Kudenov, an assistant professor of electrical and computer engineering at NC State. Kudenov designed a series of lenses for the microscope that significantly increased the area the microscope could scan – the visual field jumped from 1 square millimeter to 9.5 square millimeters with Kudenov’s improvements. This improvement addresses “a major barrier to progress in two-photon imaging of neuronal activity” and suggests further adaptations and applications of the two-photon microscope system.

• NC State’s College of Textiles and College of Natural Resources collaborated to research ways to improve protection for firefighters battling wildfires in the worst situations. A team in the Textile Protection and Comfort Center (T-PACC) has been researching methods to improve the portable shelters firefighters are required to carry since receiving a three-year FEMA Assistance to Firefighters Grant back in 2014. The T-PACC team has been testing the existing fire shelters and new materials in a large-scale wildfire simulator at the College of Textiles, but recently had the opportunity to see how their equipment would withstand conditions that are more realistic. They joined the College of Natural Resources’ Forest Management majors as they conducted a prescribed burn in north Durham County as part of a nine-week intensive summer camp. The exercise allowed the research team to practice and refine the experimental protocol they plan to follow across the country and out west as they test new materials in larger fires.
Goal 4: Organizational Excellence

An excellent university is pervasively excellent. The standard of excellence applies to all NC State faculty and staff and to all departments, institutes, centers, and units. But excellence is not a static target. Achieving excellence requires constant attention, self-assessment, inclusion, and the courage to change and adapt.

- Donor Giving boosts university endowment to an all-time high of $984 million.
  - 11 percent increase over previous year
  - $208.5 million in gifts and pledges breaks record
  - 96 percent increase in endowment since 2015

- As an inaugural partner in the Healthier Campus Initiative, NC State was the first institution nationally to complete it. The initiative works as a three-year commitment to adopting guidelines for nutrition, physical activity and programming. NC State’s accomplishments include:
  - Offering a wellness meal, called the Dietitian’s Dish, at all meals
  - Using the Wolf-Approved healthy icon program to designate healthier food and beverage options in vending machines and C-stores
  - Ensuring free water is always available at dining, recreation and educational facilities
  - Providing more than 150 group fitness classes per week and more than 25 intramural sports yearly
  - Opening a Functional Training area on campus that includes a cargo net, dip bars and box jumps
  - Combatting food insecurity on campus with the Feed the Pack Pantry

- Across the country in the last year discussions of diversity, inclusion and tolerance have been very prevalent. At NC State, a number of actions and provisions were undertaken in an effort to increase respectful dialogue. It is an ongoing process, but we have made excellent progress.
  - A bias incident response team was launched in order to coordinate appropriate responses to incidents of bias and to offer support to affected populations.
  - Provost Arden, Vice Chancellor Mullen, staff from the Division of Academic and Student Affairs and I have held meetings with groups of students, faculty and staff members to discuss their experiences at NC State and hear recommendations for continually to improve the university’s cultural competence.
  - The Vice Provost for Institutional Equity and Diversity is now included in meetings of the Chancellor’s Cabinet to ensure that matters of diversity and equity are significant considerations in university decision making.
  - The Office of the Provost will implement two programs – the Emerging Scholar Program and the Senior Visiting Scholar Program – in an attempt to attract African-American and other underrepresented faculty to NC State.
  - OIED and Human Resources are evaluating programming opportunities for diversity education for faculty and staff.
  - The Council on Undergraduate Education is evaluating the diversity component of our General Education offerings to help ensure that diversity and inclusion are meaningful parts of our curricula.
I announced a new scholarship program for the dependents of NC State faculty and staff, helping to improve retention and putting NC State in line with best practices in higher education. The scholarship is offered to full-time, first degree undergraduate students enrolled at NC State who are dependent children of full-time employees of NC State. The scholarship provides up to $2,000 annually for a maximum of eight semesters.

NC State picked up a total of 10 awards for its efforts in marketing and communications this year. The Council for Advancement and Support Education granted NC State with four Awards of Excellence and four Special Merit Awards for writing, illustration, branding, publishing and web design. NC State’s institutional message received a silver award from the Academy of Interactive and Visual Arts at the Davey Awards. The Higher Education Marketing Report granted the Chancellor’s Annual Report a gold award at the 31st annual Educational Advertising Awards.

Justine Hollingshead, chief of staff for Academic and Student Affairs, won the 2015 Governor’s Award for Excellence in human relations for her work responding to the shooting death of Deah Barakat, Yusor Abu-Salha and Razan Abu-Salha.

NC State’s “Pizza Box Composting Project” was recognized by The Wall Street Journal and Food World News for its successful conversion of over 16,000 pizza boxes to fertilizer. This program is another way NC State is making efforts to become more sustainable.

NC State’s University Dining was recognized by Udi’s Gluten Free on its annual list “Top 10 Gluten-Free Accommodating Colleges.” The university placed fourth for its technological accessibility offerings, including iPads displaying ingredient lists in all dining facilities, email reminders, Allergy Ambassadors and training for dining staff by AllerTrain.

NC State’s Environmental Health and Safety department won the Campus, Safety, Health and Environmental Management Association institutional marketing campaign Award of Excellence for its WolfAlert Emergency Communication Campaign.

The Association of College Unions International awarded the 2016 Facility Design Award to NC State Student Centers, MHTN Architects, Duda │ Paine Architects, and Cooper Carry, Inc. for their roles in the expansion and renovation of Talley Student Union. This award recognizes excellence in the design of student-centered facilities that support the campus community as well as student success.

The U.S. Green Building Council recognized Talley Student Union as a Leadership in Energy and Environmental Design certified building. Talley earned its designation as a Silver level building for its innovative practices and commitment to sustainability.
• NCSU Libraries won the 2016 National Medal for Museum and Library Service from the federal Institute of Museum and Library Services. This award is the nation’s highest honor for extraordinary public service, recognizing institutions that are valuable community anchors. In addition to the medal, NCSU Libraries will receive $5000 and a visit from Story Crops, a nonprofit organization that will compile stories from the NC State community and preserve them at the American Folklife Center at the Library of Congress. Vice Provost and Director of Libraries Susan Nutter accepted the award from the First Lady in Washington, D.C. this June.

• The College of Design’s study-abroad program the Ghana International Design Studio won a Student Award of Honor from the American Society of Landscape Architects in the Community Service category.

• The College of Education was granted initial accreditation by the Accreditation Council of the Council for the Accreditation of Educator Preparation. The accreditation is good for seven years.

• University Police achieved the Gold Standard in Public Safety Accreditation from the Commission on Accreditation for Law Enforcement Agencies. University Police was commended for its dedication to public safety through its protocols and practices. This marks the fourth time University Police has received this honor since 2003.

• University Housekeeping was recognized nationally as a Silver winner in the annual Green Cleaning Award for Schools and Universities competition sponsored by American School & University Magazine, the Green Cleaning Network and the Healthy Schools Campaign. This award recognizes schools and universities for healthy and sustainable cleaning approaches – such as chemical and equipment choices, procedures and training – that protect human and environmental health, while still cleaning at a high level.

• NC State is among the nation’s best employers at providing sustainable transportation options for its more than 6,000 faculty and staff members. In the Best Workplaces for Commuters’ annual Race for Excellence Awards, NC State ranked among the country’s top 29 employers for exemplary efforts to offer sustainable transportation options such as vanpool, transit and telework. NC State is one of just 10 universities to receive this honor.

• The new University College replaces the First Year College, housing exploratory studies, previously unaffiliated academic departments, and interdisciplinary major and minor degree programs.
Goal 5: Engagement and Partnerships

As the world has changed, NC State’s reach has expanded beyond our borders and across the globe, challenging us to be locally responsive to the needs of our community and our state while globally engaged in solving the grand challenges facing our global community.

- An NSF grant of $5.5 million will see NC State lead a partnership with Duke and UNC Chapel-Hill. The goal is to give businesses and educators access to expertise and facilities that will speed the development of nanotechnology based products and educational opportunities.

- The More in My Basket at the Market program received a $248,000 grant from the USDA Food and Nutrition Service’s Supplemental Nutrition Assistance Program. This program aims to educate the public of five North Carolina counties suffering from severe poverty rates on the benefits of preparing healthy, cost-effective meals and buying locally.

- *First Language: The Race to Save Cherokee*, a film by NC State’s North Carolina Language and Life Project, documents the Eastern Band of Cherokee Indians’ efforts to preserve and pass on the Cherokee language. The film won several awards including, the American Indian Film Festival Best Public Service Film, the Red Rock Film Festival Audience Award and the Longleaf Film Festival Tar Heel Tie-In. The film is the work of Walt Wolfram, William C. Friday Distinguished Professor of English, and filmmakers Danica Cullinan and Neal Hutcheson.

- NC State assistant professor Dr. Andrew Grieshop traveled to Malawi, Africa to complete his studies on the effects of using wood-burning stoves on the health of local peoples. Grieshop found that the soot produced by these stoves significantly harmed the user’s lungs and replaced the wood-burning stoves in the village with gas-powered stoves.

- NC State was chosen to receive one of 17 new National Science Foundation Partnerships in International Research and Education grants, valued at $5 million. This grant is designed to promote studies on cassava mosaic disease, a plant DNA virus that is crippling the production of one of Africa’s most important food crops. Dr. Linda Hanley-Bowdoin will lead the project and collaborate with Dr. George Kennedy, a professor of Entomology at NC State, and Dr. Siobain Duffy, an assistant professor at Rutgers University, as co-principal investigators for the five-year project.

- Mark Nance, an assistant professor in the School of Public and International Affairs at NC State, was invited to assist the UN in organizing an academic conference on Resolution 1540 after interviewing the members of the committee responsible for drafting this global security measure. Nance’s research focuses on international mechanisms for detecting and preventing funding that supports illegal activities including piracy, terrorism, and illegal weapons proliferation.
• Art and Design Professor J. Mark Scearce composed an original score for The Carolina Ballet’s production of *Macbeth*. This marks the third and most challenging piece that Scearce has created for The Carolina Ballet.

• The Precision Engineering Consortium (PEC) in NC State’s College of Engineering is assisting NASA’s Goddard Space Flight Center with its Balloon Experimental Twin Telescope for Infrared Interferometer (BETTII). NASA scientists will use telescopes designed and created in the PEC to further study the process by which dense regions within molecular clouds in interstellar space collapse to form stars. PEC Director Dr. Thomas Dow, PEC senior research scholar Kenneth Garrad, and adjunct assistant professor in MAE Dr. Stephen Furest are all involved in this project. It is likely that this collaboration will lead to further partnership between NASA Goddard and NC State.

• The Obama Administration announced plans for a new Smart Manufacturing Innovation Institute (SMII) that aims to encourage technological innovation in the hopes of improving the efficiency of advanced manufacturing in the United States. SMII will be supported by $800 million in federal and non-federal resources and will include nearly 200 partners from industry, federal research labs, academia and state and local governments across 30 states. The SMII will oversee the formation of five regional hubs across the country. These hubs will collectively center on research and development of new technologies, workforce development initiatives and the development and creation of test beds. The specific focus of each individual hub depends upon which facility is best suited to complete which task given its location and resources.

  o NC State will be home to the Southeast Region hub, which will focus on solving issues of rising energy and technology adoption costs as well as the lack of skilled workers in a geographic region of booming manufacturing growth. NC State’s Southeast Region Partners include Virginia Tech, the University of Virginia, Clemson University, University of Louisville, Purdue University and Georgia Tech. Other partners include the Oak Ridge and Savannah River national laboratories and as many as 15 industry partners.

  o The four other SMII regional hubs will be located at the University of California, Los Angeles; Texas A&M University; Rensselaer Polytechnic Institute; and the Pacific Northwest National Laboratory.

  o The SMII is the ninth announced hub in the National Network for Manufacturing Innovation (NNMI). NC State is the lead institution for one of those hubs as well. PowerAmerica serves to advance research, design and manufacturing in the area of wide bandgap semiconductor-based power electronics.

• NC State’s Office of Professional Development is teaming up with Campbell Law School in downtown Raleigh to offer continuing education legal courses. NC State will facilitate the courses taught at the law school by overseeing event planning, integrated marketing, registration, financial management, and reporting needs for each class.
The American Academy of Arts and Sciences invited NC State to support their efforts to advance higher education by serving as an affiliate institution. NC State will do so by participating in its studies on higher education as well as offering support for its fellowships and outreach programs. This invitation reflects NC State’s place among the nation’s most prestigious scholarly organizations which are international leaders in the physical, life and mathematical sciences as well as in the humanities and social sciences.

Facilities

- Plans were announced to build the 62-bed facility, Case Commons Residence Hall, to house the players of the men’s and women’s basketball team as well as other NC State students. The project is fully funded through private donations solicited through the Wolfpack Club, and will provide the student-athletes with community housing located next to Case Academic Center.

- The deconstruction of Harrelson Hall was completed, with plans to add a Science Commons Classroom and a green space. Most of the usable materials from the old building will be reused, recycled, or donated. The building was named for Col. John Harrelson, NC State’s fifth executive officer, first chancellor and first alumnus to lead the school.

- Talley Student Union is completely finished and offers four floors with 283,000 square feet. It is also home to the new Wolfpack Outfitters that offers 40,000 more square feet than the previous bookstore. The project cost a total of $120 million and took four years to complete.

- A 16-foot solar tree was installed near James B. Hunt Library as a gift from the Park Scholars Class of 2015. The tree was also funded by the NC State Sustainability Fund and offers outlets to power and charge laptops, phones and other devices.

- Two new charging stations are available for powering electric vehicles: one in the Dan Allen Deck and one in the Coliseum Deck. The North Carolina Clean Energy Technology Center, the North Carolina Department of Transportation and NC State Transportation provided funding for the installation of these charging stations.

- The College of Textiles and the Graduate School are getting new street addresses due to the opening of the Center for Technology and Innovation on Centennial Campus this fall. The College of Textiles and the Graduate School are transitioning to their new address – 1020 Main Campus Drive – but both will retain their current campus box numbers.

- Initiated development, funding and approval of Engineering Oval ($154 million), Plant Sciences Complex ($160.2 million), Carmichael Renovation ($54 million).

- Broke ground on StateView Conference Center and Hotel ($28 million).
• Talley and Carmichael have implemented the use of solar powered trash compactors in an effort to promote sustainability across campus.

• The $35 million renovation on Reynolds Coliseum is due for completion in August 2016.

• A number of achievements were realized in the area of Sustainability. They include:
  
  o Achieved LEED certifications for all 6 Wolf Ridge buildings, Carol Johnson Poole Clubhouse, and Talley Student Union.
  o Reduced energy use per SF by 28% compared to 2003 baseline, despite an addition of more than 2 million GSF during this period.
  o Implemented program to consolidate Summer semester classes in selected buildings for energy savings
  o Saved more than $500,000 with gas procurement strategies.
  o Completed Waste Characterization Study / Compost Feasibility Study, which identified 38% of campus waste as compostable.
  o Began implementing composting at Carter Finley stadium, Lonnie Poole Golf Course, Engineering Oval and Honors Village.
  o Collaborated with Horticulture classes to create pollinator garden program on campus.
  o Achieved 50% waste diversion:
    ▪ 3,758 tons recycled
    ▪ 1,475 tons composted
    ▪ 1,674 tons reused
    ▪ 5.042 tons landfilled

Legislative and Budget Efforts

2015 Legislative Long Session

• Budget
  
  o Total state budget: $21.7 billion
  o $49 million to fully fund the projected enrollment growth for FY 2015-16
  o $750 one-time salary bonus for state employees
  o $1 million nonrecurring funding in both years for advance planning for the NC State Engineering building
  o $150 million for repairs and renovations (UNC System receives 1/3)
  o Funds in-state tuition for veterans
  o Funds for building reserves
  o Carryforward increased to 5 percent for the biennium— the new 2.5 percent authority is restricted to repairs and renovations (R&R) and planning funds
• **Legislation**
  o Passage of the Connect NC Bond Act (H943)
    ▪ Engineering Oval ($75 million)
    ▪ Plant Sciences Initiative ($85 million)
  o Passage of the UNC Self-Liquidating bill (H679)
    ▪ Engineering Oval ($77 million)

**2016 Legislative Short Session**

• **Budget**
  o University employees receive a 1.5 percent salary increase and a 0.5 percent bonus
  o $20 million for targeted merit raises
  o $31 million for enrollment growth
  o $81 million for R&R (UNC System receives 1/2)
  o Repealed the $1 million cap on private fundraising
  o Delay of the NC Guaranteed Admissions Program
  o Permanent fix for the Qualified Excess Benefit Arrangement (QEBA)

• **Legislation**
  o Passage of the UNC Self-Liquidating bill (S872)
    -- Plants Sciences- $75.2M
    -- Carmichael Addition and Renovation- $45M
    -- Case Commons Residence Hall- $15M

**Rankings and Recognition**

• **U.S. News & World Report**
  o NC State was listed #89 Among National Universities, up 6 places from last year.
  o NC State also advanced among Public Institutions, moving up 6 places to #37.
  o The part-time MBA program jumped an impressive 69 places and is now ranked #34 nationally.
  o Our online MBA program rose 19 places and is ranked #15 nationally.
  o The College of Veterinary Medicine is #3 in the nation.
• NC State ranked in the Top 10 Best Values in public higher education.

• The College of Engineering is ranked #27 in the country.

• NC State’s Computer Engineering program rose 10 places and is currently #36, while our Materials Science and Engineering program jumped 3 places to #15.

• The joint Biomedical Engineering Department with UNC-Chapel Hill is now recognized as one program and tied for #37.

• *Kiplinger’s Personal Finance Magazine*
  - NC State was rated #11 in Best Value for In-state Students Among Public Universities.

• *Association of University Technology Managers*
  - 6th nationally in commercialization agreements
  - 1st among universities without a medical school in licenses and options executed
  - 6th among universities without a medical school in invention disclosures received
  - 9th among universities without a medical school in total patents filed
  - 7th among universities without a medical school in U.S. patents issued
  - 5th among universities without a medical school in startup businesses launched
  - 6th among universities without a medical school in license income

• *Bloomberg Businessweek*
  - Jenkins MBA Program ranked number 29, up from 54 last year.
  - Poole College of Management Undergraduate Programs ranked number 47, rising 39 places from 2014.

• *Diverse Issues in Higher Education*
  - No. 2 for graduating African American students with master’s degrees in mathematics and statistics
  - No. 5 for graduating African American students with bachelor’s in engineering.
  - No. 8 for graduating Hispanic students with doctoral degrees in the physical sciences.

• The White House Initiative on Educational Excellence for Hispanics named NC State’s Junto’s program, a “Bright Spot in Hispanic Education.”
• NC State was awarded a Gold Rating by the Association for the Advancement of Sustainability in Higher Education, which works with 750 universities and colleges to make advancements in sustainability.

• Value Colleges ranked the College of Education in the Top 50 best value of national online graduate education programs of 2016. It was praised for its wide range of degree concentrations, high success rate in graduation and employment for graduates.

• College Scorecard showed NC State degrees provide high return of investment, especially those based in Science and Technology.

• College Rank placed NC State Dining at number 31 on its Top 50 College Dining Experiences for its sustainability efforts, special events, and nutrition program initiatives.

• NC State was first on BestColleges.com’s list of Top Online Colleges in North Carolina for 2016 and fourth on its list for Best Four-Year Colleges in North Carolina.

• NC State Poole College of Management’s Jenkins Master of Accounting Program ranked No. 12 in College Choice’s Top 50 Best Masters in Accounting Degrees 2016 survey. College Choice ranks programs based on factors including cost of attendance, program reputation, and return on investment. The Jenkins MAC program is the only North Carolina program to break the Top 15 in this survey.

• A study completed by the nonprofit Education Trust examined disparity between white and minority students in 1,309 national college and universities and placed NC State in the Top 10 among public institutions for improving its completion gap. The researchers compared two three-year increments, 2003-2005 and 2011-2013. They found at NC State the six-year graduation rate for white students increased by 4.8 percent to 74.2 percent in the years studied, and the six-year graduation rate for minority students rose 12 percent to 64 percent. From 2003-2013, the university narrowed the gap between white and minority graduation rates by 7.2 percent.

• Hunt Library made the cut as one of the Top 100 American architecture projects in a list posted by leading architecture website ArchDaily. The list highlights the 100 most visited works of architecture in the United States, publishing case studies on each to serve as references and resources for architects, students and journalists interested in architecture. ArchDaily champions Hunt Library for its seamless blending of technology and modernism with the classic academic library.

• **Individual Recognitions**
  o Associate professor of food, bioprocessing, and nutrition sciences, Dr. Rodolphe Barrangou was awarded the Canada Gairdner International Award for the discovery of revolutionary gene editing technique CRISPR. He was also awarded the Warren Alpert Prize, which recognizes seminal scientific research that holds great promise for ultimately changing the way a disease is understood or treated.
Dr. Trudy Mackay was awarded the Wolf Prize for agriculture for her work on the genome of Drosophila melanogaster, the common fruit fly. The Wolf prize is widely known as one of the world’s most prestigious awards for academic achievement, and many recipients have gone on to receive Nobel Prizes for their efforts.

Dr. Ken Swartzel was appointed to the National Academy of Engineering for his work in thermal processes of food preservation. His research has led to 24 U.S. and 32 foreign patents, which have exceed $20 million in royalties. His lab has also founded eight start-up companies in North Carolina and he has published more than 120 scientific papers.

Dr. Jayant Baliga, Distinguished University Professor of Electrical Engineering at NC State University, was inducted into the National Inventors Hall of Fame. He was honored for his invention of the Insulated-Gate Bipolar Transistor, a semiconductor device used as an electronic switch.

Dr. Penelope Perkins-Veazie was named Outstanding Researcher for her focus on postharvest storage and physiology of fruits and vegetables at the American Society for Horticultural Science annual conference.

Zhen Gu, assistant professor in NCSU and UNC joint biomedical engineering program, was named one of MIT Technology Review’s Innovators Under 35 for his work developing novel drug-delivery systems for treating cancer and diabetes. He was also named a 2016 Alfred P. Sloan Research Fellow in Chemistry.

Electrical Engineering assistant professor Alper Bozkurt was named to Popular Science’s Brilliant 10.

Dr. Jose Picart, Professor of Counselor Education at NC State, was named professor emeritus and distinguished faculty alumnus by the United State Military Academy at West Point in recognition of his 28 years of service as an educator, senior administrator and scientist.

Susan Nutter was named the ACRL Academic Research Librarian of the Year. This award acknowledges a member of the library profession who has made significant national or international contributions to academic/research librarianship and library development. She is also known for her efforts in the planning, development and construction of Hunt Library.

Jason Evans Groth, NCSU Libraries, was named a 2016 “Mover and Shaker” by the trade publication Library Journal. He was selected from 300 international nominees.

Executive Pastry Chef, Kelly Bellmore, won the 2016 American Culinary Federation Southeast Region Pastry Chef of the year award in a two-chef competition with her banana chiffon cake.

Dr. Rudy Rodriguez, an adjunct professor in the College of Veterinary Medicine, was elected to the Bioengineering Section of the National Academy of Engineering.
Dr. Kate Meurs receives the first Mark L. Morris Jr. Investigator Award. This award is given to an individual who embodies Morris’ spirit and dedication to treating and curing animal diseases through science. She received the award for her work studying genes related to cardiac disease in companion animals. She will use the ward to study canine mitral valve disease.

Dr. Lorena Boicu, an assistant professor in mathematics, has received an NSF CAREER Award for her project on the interactions of elastic bodies and fluids. This project will ultimately better the understanding of the cause and progression of glaucoma.

Dr. Jeff Joines, Textiles Engineering, Chemistry and Science, is a recipient of a Board of Governor’s Award for Excellence in Teaching and was honored by the Board of Governors in April 2016, and then recognized during the May 2016 Commencement Exercises.

Dr. Matthew Green, an Assistant Professor in NC State’s Physics Department, and Dr. Veronica Augustyn, an Assistant Professor in Materials Science and Engineering, were recipients of the 2016 Ralph E. Powe Junior Faculty Enhancement Award.

Dr. Joseph DeSimone, William R. Kenan Jr. Distinguished Professor of Chemical and Biomolecular Engineering at NC State and Chancellor’s Eminent Professor of Chemistry at the University of North Carolina at Chapel Hill, received the National Medal of Technology and Innovation during a White House ceremony in December 2015. The award is our nation’s highest honor for achievement and leadership in advancing the fields of science and technology.

Loek Helminck, professor and former head of the Department of Mathematics at NC State, received the 2016 Distinguished Public Service Award from the American Mathematical Society. He was honored for “his dynamic and public-spirited leadership of the Department of Mathematics and for his work, both in his department and at the national level, to increase the diversity of the mathematical research community.”

Dr. Jennifer Kuzma, professor of Public and International Affairs and Co-Director of the Genetic Engineering Society Center, was elected to the National Academy of Sciences’ Committee on Future Biotechnology Products and Opportunities to Enhance Capabilities of the Biotechnology Regulatory System.

Dr. Jean Ristaino, a William Neal Reynolds Professor in the department of Plant Pathology, will receive the Excellence in International Agriculture award for her contributions in teaching, research and public policy as well as for her efforts to encourage women in agriculture research.
Plant Pathology Department Head Dr. Eric Davis was selected to be a society fellow by the American Phytopathological Society for his contributions to his specific field of study on host-nematode interactions, his work as a teacher and mentor, and his years of service to the society and discipline.

Dr. Peter Balint-Kurti, a U.S. Department of Agriculture Professor will receive the Ruth Allen Award, an honor that recognizes individuals who have made exceptional, innovative research contributions. Dr. Balint-Kurti was chosen for his work with the maize genome and research on genetically controlling natural variation in quantitative disease resistance.

Christine Grant was selected to receive the American Institute of Chemical Engineers' Pioneers of Diversity Award.

**Athletic Excellence**

- NC State has more than 550 student athletes across 23 different teams. 243 of these student athletes maintain a 3.0 or higher GPA and 13 of the 23 teams have a combined GPA of 3.0 or higher. We have an 83 percent student athlete graduation succes rate, our highest ever.

- NC State finished No. 32 in the Learfield Director’s Cup standings, out of 351 schools, tied for the second-highest finish in program history. A time of remarkable consistency, five of the 10 highest finishes in school history have come in the last five years.

- Nine programs finished ranked in the Top 25 in their respective sports, including five in the Top 11, and three in the Top 10.

- NC State men’s swimming won the program’s first national title in the 400-freestyle relay.

- Men’s swimming and wrestling both won ACC Championships. For men’s swimming and diving, it was the program’s second consecutive league crown.

- Men’s swimming and diving finished fourth in the nation, matching the highest finish ever by an ACC program. The women’s program finished ninth in the nation, its highest finish since 1982.

- Four NC State swimmers represented their respective countries at the Summer Olympics in Rio, highlighted by a Gold Medal for Ryan Held in the 400-freestyle relay.

- Wrestling capped a remarkable year finishing the regular season ranked No. 2 in the nation and with a 23-1 record, before finishing 11th at nationals.

- It was a banner year for the cross country and track and field programs, as NC State finished fifth in the nation in women’s cross country, and Top 25 finishes in both indoor and outdoor track and field, while the women’s squad finished in the Top 25 outdoors.
NC State's Rifle team won its fifth consecutive South Eastern Air Rifle Conference Championship and finished 11th nationally. Lucas Kozeiesky, a rising senior on NC State's air rifle team, won the 2016 USA Shooting National Championship, becoming the first Wolfpack shooter to win a national USA Shooting title. He earned another first for the Wolfpack Rifle program when he qualified to represent the United States in the 2016 Rio Summer Olympics.

Four Wolfpack student-athletes were named ACC Scholor Athlete of the Year in their respective sports: Jonathan Addison, men's track and field; Kaitlyn Kramer, women's cross country and track and field; Nick Gwiazdowski, wrestling; and Joe Thuney, football.

Three Wolfpack student-athletes were named ACC Athlete of the Year in their respective sport: Jonathan Addison, Men's Indoor Track and Field Performer of the Year; Simonas Bilas, Men's Swimmer of the Year; and Nick Gwiazdowski, Wrestler of the Year.

Athletics Director Debbie Yow was named one of the most powerful women in sports by Forbes magazine in December 2015. She was ranked 16th on the list and was one of only five women in collegiate athletics to make the list.

Head Basketball Coach Mark Gottfried was selected to serve on the National Association of Basketball Coaches' ad hoc committee for NCAA men's basketball tournament selection, seeding and bracketing. This committee will provide the perspective of men's basketball coaches and teams to the NCAA Division I Men's Basketball Committee to aid in the tournament organization process.

While not a varsity sport, The NC State Dance Team received the title of "Best College Dance Team in America," winning a competition to perform during the Dallas Cowboys halftime show on December 19, 2015. They performed before 80,000 people at AT&T Stadium.

Also not a varsity sport, Cheerleading won the 2016 Small Coed Cheer Division IA national championship at the NCAA College Nationals. We also won second place in all-girl stunt, fourth in coed partner stunt, and second and sixth for the mascots Ms. Wuf and Mr. Wuf, respectively. NC State is the only program with a top five team, mascot, group stunt and partner stunt finish.

**Leadership Changes**

- Vice Chancellor Charlie Leffler retired from his position as Vice Chancellor for Finance and Administration. Scott Douglass was hired to permanently fill that position.

- Dr. Marvin Malecha stepped down as Dean of the College of Design in December 2015. It was announced in May 2016 that Dr. Mark Hoversten will fill this position permanently in the Fall.
• Ira Weiss stepped down as the Stephen P. Zelnak Jr. Dean of North Carolina State University's Poole College of Management. Dr. Annette Ranft was appointed to succeed him.

• Dr. William Ditto, dean of the College of Natural Sciences at the University of Hawaii at Manoa, began as Dean of the College of Sciences.

• Dr. David Hinks was appointed Dean of the College of Textiles after serving as Interim Dean.

• Dr. Mary Ann Danowitz was appointed Dean of the College of Education after serving as Interim Dean.

• Dr. Alan Rebar, senior associate vice president for research at Purdue University, was named Vice Chancellor of Research, Innovation, and Economic Development.

• Dr. Mladen Vouk was appointed to be the associate vice chancellor for research development.

• Dr. Linda McCabe Smith, the associate chancellor for institutional diversity at Southern Illinois University Carbondale, was named the new Vice Provost for the Office of Institutional Equity and Diversity.

• Marie Williams was named the new associate vice chancellor for human resources.

Selected Presentations

As Chancellor of the largest university in North Carolina, there are typically dozens of speaking engagements every month with a wide variety of constituencies. Below are selected presentations to external audiences.

Council of Graduate Schools Conference welcome. Quebec City, Canada (2015)

Innovate NC Announcement welcome (2015)

Raleigh Rotary Club entrepreneur’s presentation (2015)

NC Campus Compact Presidents Forum panel discussion – Elon, NC (2015)

NC Manufacturing Day welcome (2015)

Food Systems Leadership Institute dinner remarks (2015)

Campus Safety Health and Environmental Management Association (CSHEMA) Conference welcome remarks (2015)

ACC Housing Directors Conference welcome remarks (2015)

APLU Food Security Meeting Powerpoint presentation – Indianapolis, IN (2015)
APLU North American Zone of Knowledge panel discussion – Indianapolis, IN (2015)

NC Cooperative Extension Annual Conference welcome remarks (2015)

NC Farm Bureau Annual meeting remarks – Greensboro, NC (2015)


Association of International Education Administrators Forum, welcome remarks (2016)

East Carolina University Legacy of Leadership Panel discussion – Greenville, NC (2016)

CARET/AHS Joint Meeting keynote – Alexandria, VA (2016)


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