James B. Hunt Jr. Library Opens on Centennial Campus
The new Hunt library, one of the most advanced in the world, opened Jan. 2. Hunt Library turns the traditional library on its head, giving NC State students, faculty and staff a state-of-the-art space for learning, research and collaboration. The Library, which doubles the study seating available to students on campus, features an automated book delivery system housing nearly two million items and boasting a five-minute retrieval speed. Technology-rich spaces that feature video display walls and 3-D printers will facilitate large-scale visualization and simulation. Videoconferencing and multimedia production facilities encourage collaboration across disciplines and locations.

Fall 2012 Commencement Celebrates more than 3,500 Graduates
On December 15, NC State awarded degrees to more than 3,500 new graduates. With the 5,029 degrees conferred in May, a total of 8,647 degrees were awarded in 2012. To celebrate the achievements of NC State’s faculty and students, NC State alumnus Doc Hendley, President of the non-profit Wine to Water and a CNN Top Ten Hero, delivered the commencement address. Former Chancellor James H. Woodward was conferred an honorary degree at the ceremony.

Online Graduate Programs Top U.S. News & World Report Rankings
Three of NC State’s online graduate programs were recognized in the U.S. News & World Report’s rankings of “2013’s Best Online Education Programs.” The College of Engineering’s online programs ranked 7th among graduate Engineering online programs, a huge leap from the previous year’s 36th ranking. Also cracking the top 10 is NC State’s online graduate Computer Information Technology program, ranking 9th in the nation. The College of Education was also recognized, as their online graduate programs reached the top 20.

Eastman Selects 11 Proposals for $10 Million Joint Research
Since announcing its six-year, $10 million joint research and design partnership with NC State, Eastman Chemical Company has selected 11 projects for its first round of funding. The projects were selected by a joint Eastman-NC State steering team that reviewed 50 proposals submitted by NC State faculty. The principal and co-principal investigators on the 11 projects for funding are based in several departments, including five in forest biomaterials; nine in chemical and biomolecular engineering; two in chemistry; one in the Nonwovens Institute; five in textile engineering, chemistry and science; and one in materials science. A second round of proposals are expected to be awarded in the spring.

Researchers Create Flexible Membrane to Improve Drug Delivery
To test the concept that “balloons” imbedded with medicine could be used to deliver precise doses of drugs to specific targets, such as regions of the brain, an elastic material embedded with nanoscale needles first needed to be developed. Now, NC State researchers have developed a new, relatively easy and inexpensive way of embedding carbon nanofibers in an elastic silicone membrane, enabling safe and specific drug administration. NC State’s groundbreaking research will facilitate further advances on more effective drug delivery methods.
NC State Engineers Named to *Physics World*’s Top 10 Breakthroughs for 2012
Research that produced the world’s first message sent using tiny neutrino particles — a project led in part by North Carolina State University engineers — has been named among *Physics World* magazine’s Top 10 Breakthroughs for 2012. Earlier this year, the team of researchers successfully sent a beam of neutrinos through 240 meters of earth with a message in binary code that read “neutrino.” The communication marked the first time information has been transmitted with the particles. The research team was led in part by Dr. Daniel Stancil, head of the Department of Electrical and Computer Engineering at NC State, and Dr. Brian Hughes, professor and associate head.

Coaches Corner Celebrates Basketball Legacy
The new Coaches’ Corner celebrating the life and achievements of former NC State basketball coaches Everett Case, Norm Sloan, Jim Valvano and Kay Yow will be unveiled outside of Reynolds Coliseum this fall. A tribute to each of the coaches’ impacts on both NC State and the ACC, the project has been spearheaded by Student Body President Andy Walsh and a team of artists, campus officials and former Wolfpack basketball stars. The project, ongoing since 2010, will cost $200,000, and the committee continues to fundraise.

Office of Finance and Business Wins Three Sir Walter Raleigh Awards
Vice Chancellor for Finance and Business and his office were recognized with three Sir Walter Raleigh Awards. The Awards recognize outstanding new contributions to the character, environment and appearance of the City of Raleigh. NC State’s recognized projects included: the Centennial Campus stream restoration, installation of the new Watauga Club Gateway and sustained outstanding appearance of the J.C. Raulston Arboretum.

NC State Researchers Awarded $9 Million to Design Solar Energy Systems
A new grant to NC State and several partners could make installing rooftop solar energy systems much less expensive and time consuming. Researchers will use the $9 million grant from the U.S. Department of Energy to design solar energy systems with procedures that require little or no customization by homeowners and installers. The Department of Energy estimates that current costs to homeowners who use solar energy systems is $2.50 per watt. NC State researchers believe they can drive costs down to less than $1.00 per watt — savings of thousands of dollars and combatting the cost barrier that prevents widespread adoption of the energy-saving systems. The project is led by the FREEDM Systems Center and the NC Solar Center, both headquartered at NC State.

Student-founded Headbands of Hope Benefits Cancer Patients
Jessica Ekstrom, a senior in Communications, has started a company to benefit cancer research and children battling cancer. The company, Headbands of Hope, specializes in headwear for pediatric cancer patients. For every headband Ekstrom sells, one headband is given to a child with cancer and $1.00 is donated to the St. Baldrick’s Foundation, a nonprofit that raises money for childhood cancer research. Ekstrom’s project is a collaboration across NC State, bringing together students from the College of Design and faculty from the College of Textiles. Since going live in April, Headbands of Hope has sold more than 2,000 headbands and added representatives on 20 college campuses.