NC STATE RESEARCHERS HONORED

Dr. Carl C. Koch was recently elected to the National Academy of Engineering. (Read more on page 21.) He joins 11 other faculty members previously elected to this prestigious group: Drs. B. Jayant Baliga, Donald L. Bitzer, Jerome J. Cuomo, Joseph M. DeSimone, Keith E. Gubbins, Carol K. Hall, Thorn Joel Hodgson, Frances S. Ligler, R. Wayne Skaggs, James A. Trainham, III, and Paul Zia. Dr. Baliga is also a recipient of the President’s National Medal of Technology and Innovation, and Cuomo is also a recipient of the previously named President’s National Medal of Technology.


Dr. Yuntian Zhu was elected as a new Fellow of the American Association for the Advancement of Science. There are now 52 NC State faculty members who hold this honor.

Dr. Andrey V. Kuznetsov was selected for the prestigious Humboldt Research Award from the Alexander von Humboldt Foundation, which recognizes the achievements of outstanding academics worldwide. (Read more on page 23.)

Drs. Daniel Dougherty and Carla Frohlich received Early Career Research Awards from the U.S. Department of Energy. Dr. Kenan Gundogdu received a Young Investigator Award from the Office of Naval Research. Drs. William Enck, Mark Hoefer, Fanxing Li, Emerson Murphy-Hill, Gregory Reeves, David Ricketts, and Wenqiao Yuan are recent recipients of the National Science Foundation’s Faculty Early Career Development program. Dozens of NC State faculty have received this recognition.

Drs. Michael Escuti, Jason Haugh, Carla Mattos, and Veena Misra have received the Presidential Early Career Award for Scientists and Engineers (PECASE). NC State has three individual winners of the Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM): Drs. Laura Bottomley, Christine Grant, and Winser E. Alexander.

NC State is represented in the American Academy of Arts and Sciences by Drs. William R. Atchley, Joseph M. DeSimone, and Trudy Mackay. Dr. Mackay is also a member of The Royal Society of the United Kingdom.

SUCCESS ABOUNDS AT NC STATE

NC State launched eight new startups in FY2013. This brings the total to more than 100 startups from technology and concepts developed through research by NC State faculty, staff and students.

More than 400 products have been commercialized based on NC State inventions. The Office of Technology Transfer’s survey indicates that our startups have created more than 3,250 jobs in North Carolina and more than 6,800 worldwide, and raised more than $1.5 billion in investments. The majority of NC State’s active startups are headquartered in North Carolina, contributing to the economic development of our state.

In the first two years of the Chancellor’s Innovation Fund, 11 projects received funding. From these projects, two startups have launched, five commercial licenses have been executed, and $2.8 million has been awarded in additional development funds. Six additional projects have been selected for funding in FY2014, the third year of the Chancellor’s Innovation Fund: allergy relief for man’s best friend; predicting outcomes in canine lymphoma; range-enhanced RFID; on-site production of fertilizer from water and air; folio filer portfolio system; and a comfortable sleep-quality monitor.

More than 60 officials from Eastman Chemical and NC State attended the grand opening of the Eastman Innovation Center on Centennial Campus. Eastman joins eight other new partners on Centennial Campus: TopQuadrant, Bandwidth, US DOE Nuclear Engineering University Program, GridBridge, Inc., Hanesbrands, Inc., Freese and Nichols, Mann + Hummel, and Arcametrics.

NC State’s 125th anniversary celebration came to a close with an innovation symposium, Transforming Economies, in late February. Academic industry and government leaders from North Carolina and beyond gathered to discuss the important role that public universities such as NC State play in improving states’ economies.

Also as part of the anniversary, NC State also hosted a Military Appreciation Event to celebrate those who serve and to showcase our support through research, education, and outreach activities.

The university’s Economic Development Partnership played an integral role in recruiting the following companies to North Carolina: MetLife (Wake and Mecklenburg Counties); IPREO Holdings (Wake County); PlyGem (Columbus County); Nutrovonics (Durham County); Crossview (Durham County); SunStone Water Group (Franklin County); Southern Lithoplate (Franklin County); Woodgrain Millwork (Caldwell County); Varonis (Wake County); Mann+Hummel (Wake County); NL Diagnostics (Cabarrus County); and 3 Phoenix/Zeiss Optronics (Wake County).
One of NC State’s strengths is supporting the state’s economic vitality. One of the most obvious aspects of that work is the university’s ability to get research into ‘the real world’ where it creates new jobs.”

— NC State Chancellor Randy Woodson

AWARDS BY FEDERAL AGENCIES, FY13

- DOD/DHS: $22.8M
- DOT: $4.7M
- SBA: $3.6M
- DOE: $19.0M
- NIH/DHHS: $23.1M
- NASA: $3.4M
- DOC: $8.0M

AWARDS BY NC STATE UNIT, FY13

Research, Innovation & Economic Development: $17.8M
Agriculture & Life Sciences: $57.9M
Education: $4.8M
Engineering: $75.8M
Veterinary Medicine: $8.0M
Textiles: $7.5M
Physical & Mathematical Sciences: $26.3M
Natural Resources: $10.4M
Management: $1.4M
Humanities & Social Sciences: $7.4M

AWARDS BY SOURCE, FY13

- Federal: 77%
- Industry: 11%
- State: 7%
- Other: 5%

Total Awards: $229.3M

AWARDS BY FEDERAL AGENCIES, FY13

- NIH/DHHS: $23.1M
- NASA: $3.4M
- DOE: $19.0M
- SBA: $3.6M
- DOT: $4.7M
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- NIH/DHHS: $23.1M
- NASA: $3.4M
- DOC: $8.0M

NC STATE STARTUPS, FY13

- BioCentric Media
- CellSentry
- LingCast
- mAssured Technology
- Nirvana Sciences
- Novocor Medical Systems
- Polymer Braille
- Tethis

TECHNOLOGY TRANSFER & INNOVATION IMPACTS

- Intellectual Property Disclosures: 238
- Patents Filed: 145
- U.S. Patents Issued: 37
- Foreign Patents Issued: 70
- Commercialization Agreements: 111
- Startups Launched: 8
- License Revenue Received: $6.8M

CENTENNIAL CAMPUS PURSUES INNOVATION

Centennial Campus continues to create an atmosphere for innovation:

- The James B. Hunt, Jr. Library opens, earning “library of the future” designation by Time magazine and international acclaim for its design that encourages collaboration and information accessibility.
- The new Springboard Innovation Hub helps corporate, government and nonprofit partners “connect the dots” in working with NC State.
- The building known as Corporate Research I is re-named the Poulton Innovation Center in honor of former NC State Chancellor Bruce Poulton, who helped launch Centennial Campus.
- The new Eastman Innovation Center opens and awards the first two rounds of innovation grants to NC State faculty and students.
- The Nanosystems Engineering Research Center for Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST), funded by the National Science Foundation, begins development of wearable nanotechnologies that monitor individual health conditions.