



ECU students learn techniques in their laboratory classes, including pH testing and how to properly collect and analyze data, that are valuable to regional businesses.

Cultivating rural prosperity

ECU initiative aims to reshape eastern North Carolina

East Carolina University is leveraging its intellectual capabilities, research facilities, community partnerships and network of alumni to solve the region's disparities in health care, education and economic development. The university's Rural Prosperity Initiative calls for a unique approach to tackling the state's toughest problems. Students, faculty and staff are combining resources and working across multiple disciplines to advance economic development. Additionally, the university continues to work with industry partners to enhance economic growth and prepare community members for a changing technological landscape. The university's motto – *servire* – calls for all Pirates to serve. ECU is answering that call, using innovative strategies to maximize success in eastern North Carolina.

➤ From the lab to the worksite

Student internships with regional businesses are a core element of ECU's goal of preparing its students for the state's increasingly competitive workforce. Rising senior Daysha Ervin, a biology major and member of the TriBeta Biological Honor Society, has put what she's learned in the classroom to good use with Greenville's U.N.X. Incorporated. U.N.X.,

founded in 1958, develops chemical detergents and specialties for consumer industries. Ervin works as an intern at U.N.X., testing the company's products for quality control before they reach consumers.

"My general and organic chemistry labs at ECU have really translated to the work I'm doing at U.N.X.," Ervin said. "A lot of the experiments I've conducted in my lab courses have transferred over to the real world, including pH testing, titrations and collecting and analyzing data."

U.N.X. Laboratory Director Ryan Cotroneo said the company's partnership with ECU has opened U.N.X. up to new ideas and possibilities.

"We're bringing in a variety of students from ECU (who) have learned the latest and greatest teaching tools," Cotroneo said. "Our company is being exposed to new ideas because we're working with students (who) think and work differently than we do. We're becoming healthier as an organization through the exposure we've received from working with ECU and its students."

➤ Faculty and staff reach out

Along with its students, ECU faculty and staff members are

serving the Rural Prosperity Initiative through their work with industry partners.

In 2017, ECU launched seven pan-university research clusters – with an eighth planned this fall – that provide a multi-level framework for fostering interdisciplinary research, outreach and engagement. The clusters bridge the gap between industries and ECU's research projects through advisory boards, which make it easy for strategic partners to capitalize on the benefits of university collaboration as each cluster pursues innovative research that forges new intellectual directions and discoveries.

Additionally, ECU faculty interact with business partners through the university's workforce and extension programs, including the North Carolina Agromedicine Institute, the Small Business and Technology Development Center at ECU, Greenville SEED@ECU and the Center for Innovation in Technology and Engineering. David Harrowood, ECU's director for the Center for Innovation in Technology and Engineering, said his center's mission is to provide regional businesses and industries with university resources.

"One of the biggest benefits I've seen is that it keeps the work local," Harrowood said. "When we do a good job, companies tend to look toward ECU for hires. They don't have to go to Raleigh or Atlanta for a quality worker or trainer. Our faculty members who go out and work with these companies become the face of the university and make valuable connections that benefit ECU and its business partners."

➤ Partnering with industry

In addition to the efforts put forth by ECU students, faculty and staff, the university has committed to serve its local businesses and entrepreneurs.

RFPI, an ECU start-up, has developed technology that generates images from real-time data capture and instant analysis. This data allows surgeons to observe blood flow during surgical procedures. This non-invasive, minimal-risk imaging device provides patient benefits by improving clinical outcomes, physician benefits by enhancing the delivery of patient care, and hospital and third-party benefits by reducing the overall cost of care.

A second ECU invention, Xcomp, is an innovative, competency-based assessment technology that generates cumulative, evaluation data for students, faculty, curricula and programs. This assessment tool goes beyond evaluating academic programs based on grades and course performance. Instead, Xcomp uses factors including demonstrated knowledge, skill growth and values gained to determine a program's worth.

ECU is serving health care, educational and economic development needs in eastern North Carolina, connecting the Rural Prosperity Initiative to its industry partners while cultivating strong industrial roots from the ground up.

➤ ECU Metrics

Among the 17-member University of North Carolina system, ECU is:

- Top 2 in health sciences and clinical trials research expenditures
- Top 3 in funding from businesses, biological and biomedical sciences expenditures, geological and earth sciences expenditures, funding from Health and Human Services and life sciences expenditures

2016 HERD Research Expenditures Survey*

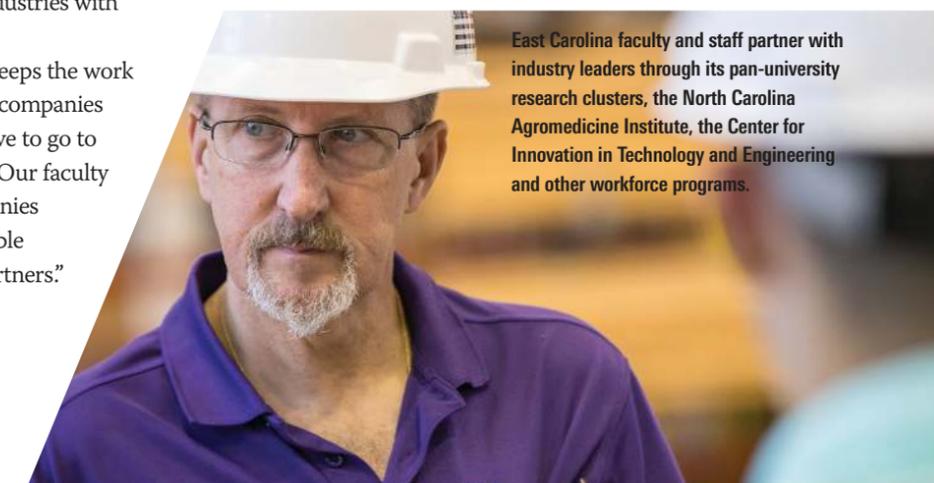
Among 15 sister and peer institutions, ECU is:

- Top 3 in licenses issues
- Top 5 in disclosures received, patents issues and license revenue
- Top 6 in patents field

Association of University Technology Managers, per \$1M research expenditures

ECU's economic impact totals \$2.8 billion in added state income, the equivalent of 42,798 jobs.

Fiscal year 2012-13



East Carolina faculty and staff partner with industry leaders through its pan-university research clusters, the North Carolina Agromedicine Institute, the Center for Innovation in Technology and Engineering and other workforce programs.



East Carolina University
Division of Research, Economic
Development and Engagement
2200 S. Charles Blvd., Suite 1500
Greenville, N.C. 27858
252-328-9471 • ecu.edu/research



➤ Interested in working with ECU?

Brandon C. Morrison
Director of Strategic Initiatives
252-737-5424
morrisonb17@ecu.edu