

NORTH CAROLINA

LEADING INNOVATION FOR THE FUTURE OF THE LIFE SCIENCES















[FUJIFILM] IS BUILDING FOR THE FUTURE, BOTH IN INFRASTRUCTURE AND IN TALENT, AS PART OF THE VIBRANT NORTH CAROLINA BIOTECH HUB.





















NORTH CAROLINA:

LIFE SCIENCES HISTORY IS MADE HERE

INDUSTRY LEADERS CHOOSE NORTH CAROLINA



























Thermo Fisher SCIENTIFIC

MAKING HISTORY IN THE LIFE SCIENCES INDUSTRY

1959

Research Triangle Park (RTP), the largest research park in North America, was founded in 1959. Bordered by three Tier-1 research universities, RTP has since grown to more than 600 life science companies.

1966

Taxol™, an anti-cancer drug, was developed by two scientists, Monroe E. Wall and Mansukh C. Wani, at RTI International. This drug has saved hundreds of thousands of cancer patients' lives and remains one of the most widely prescribed cancer drugs of all time.

ROBUST LIFE SCIENCES SECTORS

Human Therapeutics

North Carolina's top export is pharmaceuticals and medicines. Our state has 325+ company sites developing, testing, or manufacturing human therapeutics and vaccines. In addition, biological breakthroughs are developed at academic-based research institutes such as Wake Forest Institute for Regenerative Medicine (WFIRM). Physicians and scientists at WFIRM engineered the world's first successful laboratory grown organs for human transplantation.

Contract Research & Testing

North Carolina is home to 150+ contract research organizations that support life sciences companies with a wide range of services, including biopharmaceutical development, biologic assay development, preclinical and clinical research, and clinical trials management.

Agriculture

North Carolina is a place where a rich agricultural tradition meets high-tech science to create an unparalleled environment for innovation. R&D at universities and 190+ agriculture technology companies boost North Carolina's \$92 billion agriculture sector with innovations related to plants, animals and food.

Medical Devices & Diagnostics

From medical engineering labs to global manufacturers of medical devices, the state is rich with innovation. Of the 800+ bioscience companies in North Carolina, nearly 100 of them are developing, testing or manufacturing medical devices or diagnostics.

INDUSTRY LABOR COSTS

Industry	NC 2022 Jobs	NC 2022 Avg. Annual Earnings	US 2022 Avg. Annual Earnings
Total Life Sciences	90.073	\$137,463	\$153,774
Drugs & Pharma	24,391	\$141,479	\$167,318
Research, Testing, and Medical Labs	51.527	\$139,758	\$158,933
Agricultural Feedstock & Chemicals	5,287	\$159,765	\$126,516
Medical Devices & Equipment	8,868	\$99,790	\$132,527

1988

Gertrude B. Elion was the fourth woman in history to receive a Nobel Prize in Physiology and Medicine in 1988 as a result of her contributions to HIV/AIDS, leukemia, malaria, and organ transplantation research at Wellcome Research Laboratory in RTP.

2021

UNC Chapel Hill alum and Hillsborough, North Carolina, native Dr. Kizzmekia Corbett, Ph.D. was recognized among the 2021 "TIME 100 Next Innovators" for her pivotal role in developing Moderna's vaccine for COVID-19. Additionally, she was one of only four scientists recognized in 2021 as Time Magazine's "Heroes of the Year".

INDUSTRY RESOURCES

From the mountains to the coast, North Carolina is committed to being a global life sciences leader.



CO-LABS AND INCUBATORS

- BioNetwork Natural Product Lab, Craft Beverage Services, & Test Kitchen at Asheville-Buncombe Tech
- The North Carolina Research Campus (NCRC) in Kannapolis, offers companies and researchers turnkey laboratory space and ample opportunities for collaborations.
- BioLabs NC, a biotech coworking facility in Durham, is one of a number of life science incubators across the state.

GENERAL LIFE SCIENCES SUPPORT

- 4. The North Carolina Biotechnology Center (NCBiotech) is a nonprofit organization that leads life science economic development in North Carolina with a specialized staff supporting the progression of ideas from the lab to the marketplace. NCBiotech invests in technology development through grants, in company development through loans, and in economic development through grants and support activities.
- 5. The North Carolina Biosciences Organization (NCBIO) a membership organization that advocates for policies, encourages the growth of life sciences companies, supports the development of a strong life sciences workforce, and promotes research and technology transfer at universities and other institutions.

TRAINING FACILITIES

- 6. The Biomanufacturing Research Institute and Technology Enterprise (BRITE) at North Carolina Central University trains the next generation of scientists, particularly in drug discovery and manufacturing technology.
- 7. The Biomanufacturing Training and Education Center (BTEC) at NC State University provides hands-on educational opportunities to develop the next generation of biomanufacturing workers. It also offers customized short courses to meet the needs of specific companies.
- 8. The Pharmaceutical Services Network (PSN) at Pitt Community College provides pharmaceutical training in a pilot plant environment with lab scale equipment to teach oral solid dosage theory and manufacturing techniques.
- 9. National Center for the Biotechnology Workforce provides leadership and a collaborative platform that directly connects industry, educators, and workforce developers to meet the nation's everevolving bioscience workforce needs.
- **10.** Wake Forest Institute for Regenerative Medicine is recognized as an international leader in translating scientific discovery into clinical therapies.
- 11. IRCAD Surgical Training Institute is a French-based research and training institute that specializes in educating physicians from around the world in minimally invasive surgery techniques.



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