

**18,000**

**2025 Employment**

**1,700**

**Announced Jobs**

Employment in life sciences and supplier operations in the Piedmont Triad Region



**2** Major Research Parks

**5** Research Universities



North Carolina outpacing U.S. in Life Science Growth

## Life Sciences Powerhouse North Carolina

### *Piedmont Triad: Proximity Matters*

- The Piedmont Triad Region's central location within the state's thriving innovation ecosystem has been a boon to developing the life sciences sector here.
- The Piedmont Triad is an hour's drive to the Research Triangle Park (RTP), the largest research park in North America. JLL named the area the #1 hottest spot in the nation for biomanufacturing.
- An hour in the opposite direction is the North Carolina Research Campus (NCRC), a 350-acre scientific community in Kannapolis.



### **Gateway** *Research Park*

- Two 75-acre locations.
- Home to the Joint School for Nanoscience & Nanoengineering.
- Partnerships with corporate and educational institutions, allowing access to state-of-the-art equipment and R&D assets.

**GREENSBORO, NC**



### **Innovation Quarter** *Research Park*

- Downtown location with Phase II under development.
- Home to Wake Forest Institute for Regenerative Medicine.
- Mixed-use with corporate, educational, residential, and retail spaces.
- Greenway through the park.

**WINSTON-SALEM, NC**

### Piedmont Triad Life Science Cluster

**52%** Employment Growth  
2024-2024

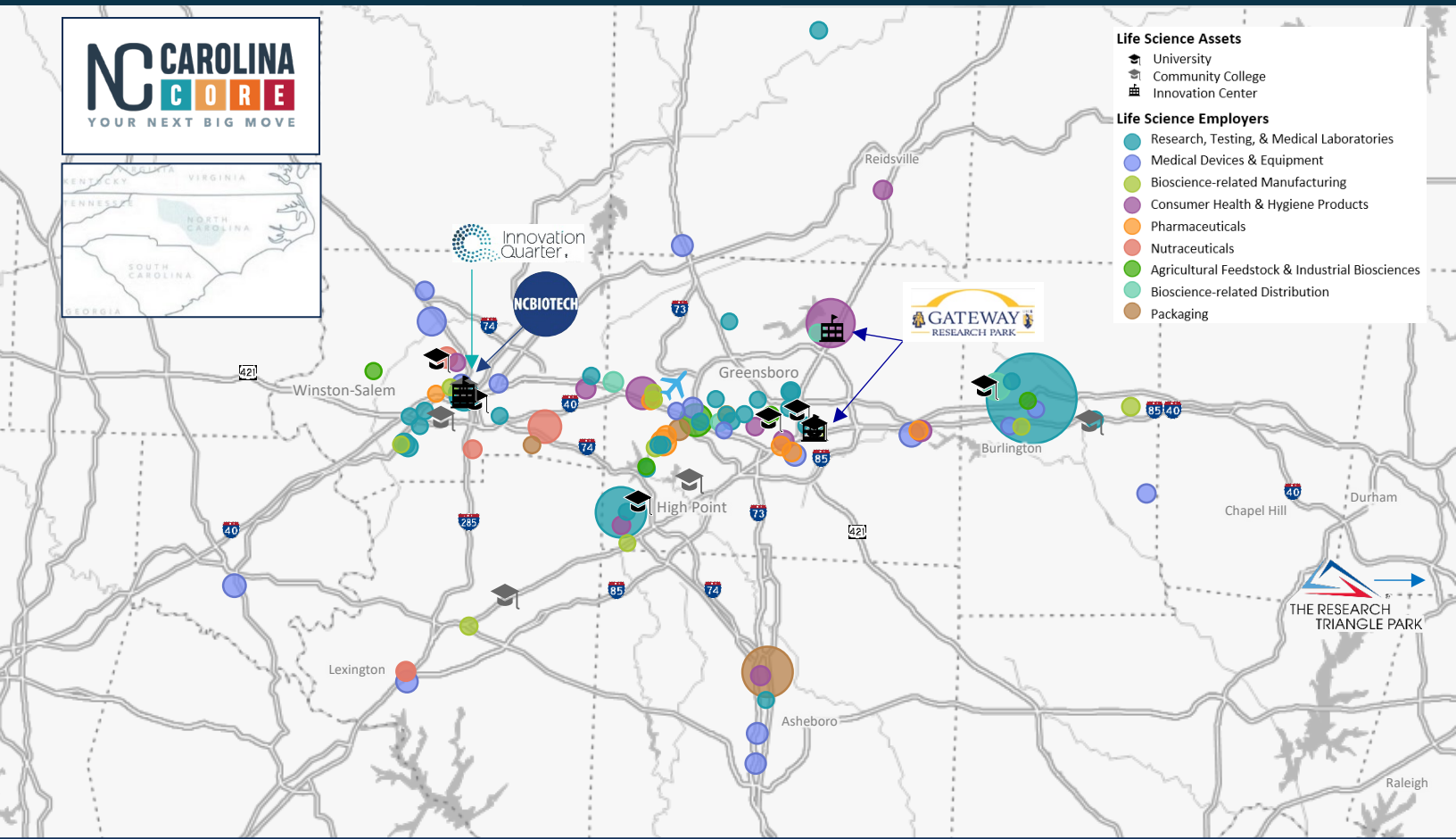
**34%** Employment in Research,  
Testing & Medical Labs

**26** Life Science Projects 2019-2025  
1,700 jobs + \$820 M

### Major Life Science Employers

LabCorp	Burlington
Quest Diagnostics	High Point
Procter & Gamble	Greensboro
Herbalife	Winston-Salem
Syngenta	Greensboro
Ecolab	Greensboro-High Point
Wake Forest Institute for Regenerative Medicine	Winston-Salem
Cook Medical	Winston-Salem
Carolina Biological Supply	Burlington/Greensboro
Thermo Fisher Scientific	High Point
ProKidney	Winston-Salem
Nature's Value Inc.	Winston-Salem
FFF Enterprises	Kernersville
Charter Medical	Winston-Salem
Cambrex Corp.	High Point

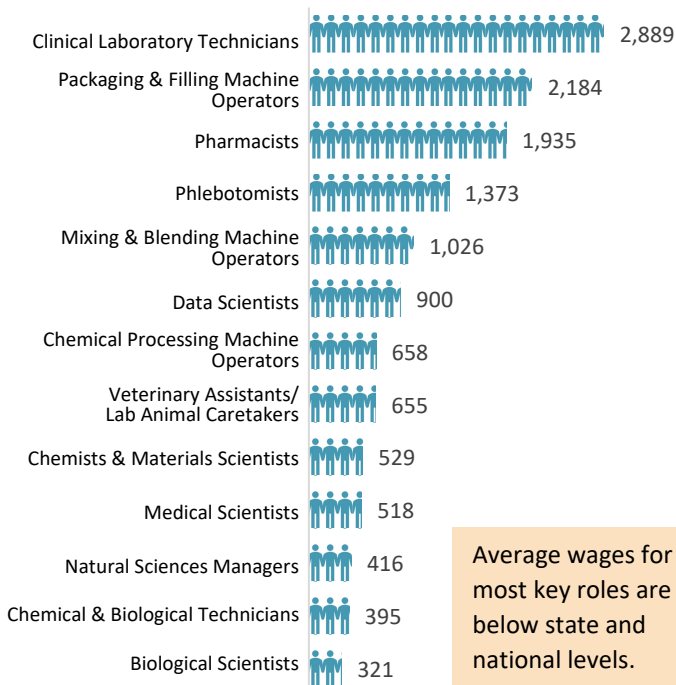
# Life Science & Related Cluster



## Skilled Workforce

### Piedmont Triad Life Science Occupations

#### Sample Occupations



Average wages for most key roles are below state and national levels.



## Piedmont Triad Talent Base

1.8M

Piedmont Triad  
Population 2024

825,000

Piedmont Triad  
Labor Force 2025

8%

Piedmont Triad  
Population Growth  
(10-Year)

95,800

Manufacturing  
Employment in  
Piedmont Triad 2025



## Piedmont Triad Occupational Employment

5,400

Life, Physical & Social  
Science Workers 2025

2,900

Clinical Laboratory  
Technicians 2025



## Piedmont Triad Gross Regional Product (GRP)

\$2.8B

Life Science GRP  
2023

13%

Life Science GRP  
Growth (5-Year)

# Life Science Innovation Ecosystem



## Strong Regional Life Science R&D

2

High Spending and  
Doctorate Production  
R2 Universities

5

Total Research Universities  
Spending >\$2.5 M on  
Research

**\$165 M**

Research Dollars from  
Federal Funding

**\$607 M**

3-Year Total for Research  
Federal Funding



## Growing in the Piedmont Triad

### Regenerative Medicine

*Wake Forest Institute for Regenerative Medicine (WFIRM)*

- International leader in translating scientific discovery into clinical therapies, the first to engineer laboratory-grown organs that were successfully implanted into humans.
- Today a team of 500+ is working to engineer more than 40 different replacement tissues and organs, and to develop healing cell therapies
- Attracts significant research funding and fosters startups to advance the science and grow the industry.



## Big Impact, Tiny Particles

### Nanoscience

*Joint School of Nanoscience and Nanoengineering*

- Collaborative institution between NC A&T and UNC Greensboro, fostering innovative research offering M.S. and Ph.D. degrees.
- World-class research infrastructure with labs, cleanrooms, and equipment, including rare assets like the X-ray Photoelectron Spectroscopy (XPS) and nanoimprint lithography.
- National research network integration.

## North Carolina Biotechnology Center<sup>®</sup> NC

### PIEDMONT TRIAD OFFICE

The North Carolina Biotechnology Center's Piedmont Triad office plays a pivotal role in advancing the region's life sciences ecosystem. The office serves as a strategic hub to link industry, academia, and the public sector to grow biotechnology in the region. The Life Science Intelligence team also offers market research resources at NCBiotech's Piedmont Triad office.

The organization, with the help of a regional advisory committee, shapes strategy and fills regional ecosystem gaps.



## Gateway Materials Test Center (GMTC)

The **Gateway Materials Test Center (GMTC)** was established in response to local industry requests for a testing facility that could perform composite and textile testing. With capabilities spanning a wide range of materials, including the latest fiber-reinforced composites, metals, ceramics, and fibers. The center is one of the most diverse testing facilities in the Southeast U.S., with custom consulting and an ISO 17025 lab.

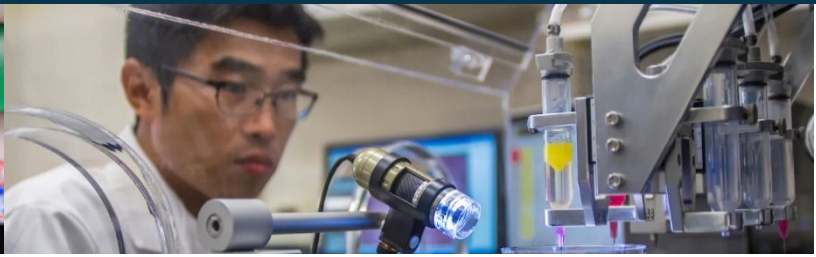


## Regenerative Medicine Engine

The National Science Foundation selected the region as one of 10 inaugural grant recipients to foster R&D in the Piedmont Triad. The \$160 million grant enabled the **Regenerative Medicine Engine**, a dynamic innovation ecosystem that is accelerating the translation of use-inspired research into commercial applications. With multiple institutional partners in the region, the work helps bridge the gap between industry, workforce development, and science.



# Life Science Talent Pipeline



## Piedmont Triad Regional Educational Assets

18

Colleges & Universities  
Piedmont Triad

114,166

Total Enrollment  
2023

24,600

Degrees & Certificates  
Awarded in Region, 2023

9,099

Life Science Related Degrees  
Awarded in Region 2023

800+

Degrees & Certificates  
Awarded in Biology, 2023

3,500

Degrees & Certificates  
Awarded in Health Sciences  
including Pharmacy, 2023



## Innovative Life Sciences Training

### Collaborative Training

The **Merck Biotechnology Learning Center** is a dynamic collaboration between Merck and North Carolina A&T State University, designed to bridge academic excellence with industry innovation. The 4,025-square-foot facility, located at Gateway Research Park, features advanced biopharmaceutical manufacturing equipment and a fully equipped process laboratory, offering hands-on training that prepares students with cutting-edge best practices.

### 20 Years of Biotech Training

The **National Center for the Biotechnology Workforce** serves as a national hub for developing a highly skilled biotechnology workforce. Its mission is to connect and align education with the ever-evolving needs of industries such as pharmaceutical production, biomanufacturing, and medical device manufacturing.

Located within Forsyth Tech's campus at the Innovation Quarter, the highly collaborative center features a state-of-the-art Analytical and Molecular Skills Development Laboratory (AMSD) that offers advanced training and internships to students, as well as equipment and bench space rental to small companies and researchers.



## Leaders in Research

**NC A&T**

*R2 Institution*



**N.C. A&T**  
STATE UNIVERSITY

- Partner with JSNN and nanotechnology research
- On the cusp of becoming an R1 research school
- Secured more than \$100 million in research and sponsored program contracts in 2024
- The HBCU is the top producer of African American engineers at all levels
- Awarded Engineering Research Center (ERC) funding from NSF, considered the "crown jewel" of NSF awards

## Wake Forest University



*R2 Institution*

**WAKE FOREST**  
UNIVERSITY

- Wake Forest School of Health Sciences and School of Medicine known for research particularly in areas like regenerative medicine and cancer biology.
- Top institution receiving federal funding regionally.
- Wake Forest Clinical and Translational Science Institute provides innovative, efficient, and sustainable research infrastructure.
- Multiple institutes with cutting-edge research including molecular medicine, cancer genetics and cancer research.



## Emerging Resource in Life Sciences

### High Point University

*Pharmacy and health science programs*

- School of Pharmacy offers a 6-year Pharm.D. program that integrates biomedical and clinical sciences.
- School of Natural Sciences housing "wow" labs and open-concept collaborative research spaces.
- School of Health Sciences trains students in physical therapy, physician assistant, and other health fields. The Human Biomechanics and Physiology Lab joins athletics and research to further performance and rehabilitation.