

Picture Your Career in the Life Sciences!



- Do you want to help solve the world's health problems?
- No matter your career path, there is a place for you in the Life Sciences industry in MA.

132,000 work in life sciences finding solutions for devastating diseases.

90% work in industry, 7% in hospitals and 3% in Higher Ed.

By 2032, we will need to fill 42,000 new jobs. Will you be working in one of them?

Employment in Research & Development increased 17% in one year

Middlesex County
Research & Development jobs grew by 17% & Manufacturing grew by 15%

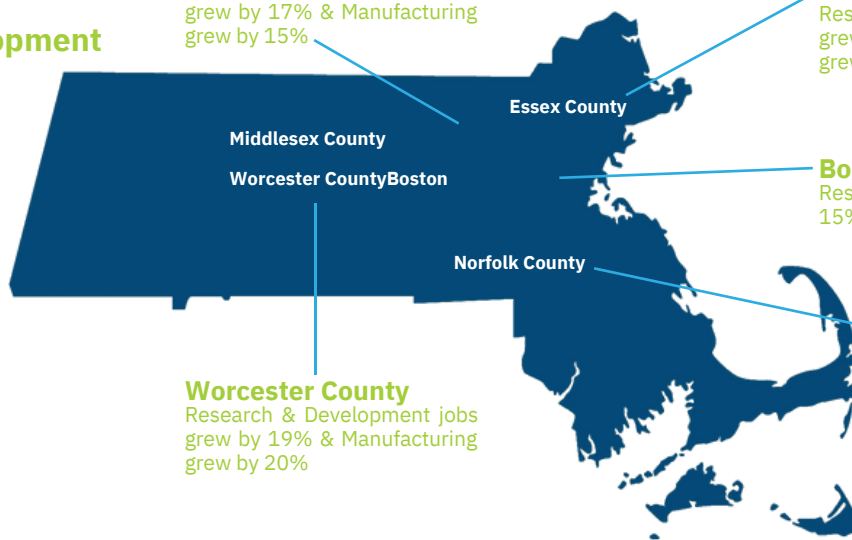
Essex County
Research & Development jobs grew by 11% & Manufacturing grew by 5%

Employment in Bio-Manufacturing increased 15% in one year

Worcester County
Research & Development jobs grew by 19% & Manufacturing grew by 20%

Boston
Research & Development jobs grew by 15% & Manufacturing grew by 57%

Norfolk County
Research & Development jobs grew by 13% & Manufacturing grew by 11%



Source: MassBio Snapshot, 2022

How can you start planning for a career in this field?



High School Students

- Take extra science, math, and computer science courses in high school, community college, or online.
- Immerse yourself in hands-on learning opportunities including school clubs and real or virtual labs.
- Apply for High School Apprenticeship roles through the Massachusetts Life Sciences Center at

masslifesciences.com/programs/hsapprenticeship

College and University Students

- Take extra science, math, and computer science courses in college, university, or online.
- Immerse yourself in experiential learning opportunities; contact professors at colleges and universities to ask about jobs and Summer internships.
- Apply for Internship roles through the Massachusetts Life Sciences Center at

masslifesciences.com/programs/internship-challenge/



Explore a variety of Careers in the Life Sciences.

See career descriptions and resources on our [Student and Career Seekers page](#)

[Click on each career path title to access additional information.](#)

Career Path	Preparation Needed	After 1 Year of Experience	After 5 Years of Experience
Animal Care Technician	High School or A.S.	\$49,000 - \$54,000	\$87,000 - \$96,000
Feeds and cares for animals in a hospital or research laboratory. They need to pay close attention to animals' well-being and carefully report on what they see.			
Biomufacturing Technician	High School with training certification or A.S.	\$56,000 - \$63,000	\$90,000 - \$100,000
Helps bring crucial and complex products from the lab to patients. Can work upstream (monitoring live cells that produce medicines or useful compounds) or downstream (purifies products made by living cells).			
Scientific Technician	High School with training certification or A.S.	\$44,000 - \$49,000	\$78,000 - \$87,000
Helps scientists by ordering supplies, maintaining equipment, growing cells, and preparing solutions that are used routinely. With experience, technicians can take on more responsibility and gain independence.			
Software Developer	Bachelor's Degree	\$92,000 - \$102,000	\$174,000 - \$192,000
Produces clean and efficient code based on specifications, integrate software with third party programs; can work with scientists to customize programs specifically designed for chemical or biomedical applications.			
Cinical Trial Professional	Bachelor's Degree	\$91,000 - \$101,000	\$156,000 - \$173,000
Works with the physicians and patients who volunteer to test new drugs and medical devices. They are responsible for documenting trial results and reporting them to the Food & Drug Administration (FDA).			
Chemical Engineer	Master's Degree	\$120,000 - \$132,000	\$171,000 - \$189,000
Designs chemical processes by which drugs or other sophisticated chemicals are made. They can help design the machinery that these chemical processes take place in.			
Mathematician or Statistician	Master's Degree	\$105,000 - \$117,000	\$171,000 - \$189,000
Translates data generated through basic and clinical research into useful, understandable information. They have advanced training in statistical analysis.			
Biological Research Scientist	PhD or Master's with 2-3 years of experience	\$113,000 - \$125,000	\$172,000 - \$190,000
Solves important problems by learning about the body and what changes occur when a person becomes sick. They use this knowledge to design new treatments for disease.			
Chemist or Materials Scientist	PhD or Master's with 2-3 years of experience	\$113,000 - \$125,000	\$172,000 - \$190,000
Analyzes components of biological substances to better understand how biomolecules interact with cells. They design novel molecules that might eventually become new drugs.			

- A.S. Associate's Degree – Typically earned at a community college over two – four years, full or part time.
- B.S. Bachelor's Degree – Earned at a college or university over four years, if full time or longer if part time. Often employers will pay for courses related to your work.
- M.S. Master's Degree – Once a Bachelor's Degree is obtained, Master's degrees take two to three years to complete if full time, or longer if part time. Often employers will pay for you to take courses related to your work.
- Ph.D. Doctor of Philosophy – Once a Bachelor's Degree is obtained, a Ph.D. takes another five to seven years to achieve, which includes some formal classes but mostly encompasses doing independent research. In science, getting a Ph.D. is free, and you will be paid for working on your project.

