

Biotechnology Industry Overview

What is Biotechnology?

Biotechnology is the use or manipulation of living organisms or their parts to make a useful product. In our region, this includes biomanufacturing as well as the production of medical devices.

What kind of training is available?

In 2004, Ivy Tech Community College - Bloomington established a two-year degree program in biotechnology through a grant from the Lilly Endowment. Since then, we have developed training and degree programs that meet the demand of the local biotechnology industry. We have received additional grants from the National Science Foundation, the State of Indiana Strategic Skills Initiative, and Lilly Endowment. Our local industry partners continually enable us to expand our training and obtain state-of-the-art equipment.

Ivy Tech - Bloomington offers certificate programs, two-year degree programs, and a two-year degree that transfers to four-year institutions, and counts toward a bachelor's degree.

The entire Ivy Tech AS degree in Biotechnology transfers seamlessly to IU-Bloomington.

The tuition and fees for two years of biotechnology college education at Ivy Tech costs about one third of the average cost of two years at public four year universities in Indiana.

Are there jobs in Biotechnology?

According to a study by the Indiana Health Industry Forum, in 2008 there were 798 biosciences companies in Indiana employing 52,832 people. This employment sector is growing faster in Indiana than the nation and growing faster than employment in other private sector industries. From 2001 to 2008, employment in Indiana biosciences grew 17.2%, compared to -0.9% in overall private employment.

The biotechnology industry is particularly important for the Bloomington region. According to a 2010 Batelle study, Bloomington ranked #3 in the nation in concentration of drug and pharmaceutical employment among small metropolitan areas. That same study ranked **Bloomington #1 for medical device employment** concentration for small metropolitan areas. Biotechnology jobs are certainly available.

The Biotechnology program partners with:

Pharmaceutical Companies:

Baxter Biopharma Solutions
Bloomington, IN

BioConvergence
Bloomington, IN

Cook Pharmica
Bloomington, IN

KP Pharmaceutical Technology, Inc.
Bloomington, IN

Medical Device Companies:

Boston Scientific, Spencer, IN

Cook Medical Group, Bloomington, IN

Cook Urological, Spencer, IN

Research Labs:

Indiana University, Bloomington, IN



Jobs in Biotechnology:

Discovery Research

Lab Assistant
Research Associate
Senior RA
Scientist
Senior Scientist
Research Director

Clinical Development

Document Assistant
Data Associate
Biostatistician
Research Associate
Medical Writer
Medical Expert
Medical Director

Regulatory Affairs

Document Specialist
Regulatory Associate
Labeling Associate
Dossier Management Associate
Director Regulatory Affairs

Quality Assurance

Document Specialist
QA Associate
QA Specialist
QA Auditor
QA Engineer
Validation Associate
Validation Specialist
QA Director

Process Development

PD Assistant
PD Associate
PD Scientist
PD Engineer
PD Director

Facilities

Mechanic
Electrician
Instrument Technician
Facilities Engineer
Project Engineer
Health and Safety Engineer
Maintenance Manager
Facilities Director

Manufacturing

Materials Handler
Manufacturing Assistant
Manufacturing Associate
Senior Manufacturing Associate
Lead Manufacturing Associate
Manufacturing Supervisor
Manufacturing Manager
or Director

Quality Control

QC Lab Assistant
QC Microbiologist
QC Cell Biologist
QC Biochemist
QC Chemist
QC Director



More information on job descriptions and salary information can be found at: www.lscalliance.org/pdfs/Biotech_Pharma_careers.pdf