

# The Biotechnology Program at GBCC

The biotechnology program at Great Bay is the only one of its kind in the CCSNH system, offering:

## 2 Associate Degree Pathways

The two pathways differ (61-66 credits) depending on whether the student plans to transfer to a four-year college or go directly into the workforce.

Learn More  
[greatbay.edu/program/biotechnology](http://greatbay.edu/program/biotechnology)



Ian Hitchcock performs Tangential Flow Filtration during the Covid-19 pandemic in the GBCC biomanufacturing lab.

## Alumni Success Story: Abbey Olsen and Brianna Sullivan

Abbey Olsen, an Exeter High School graduate (completing the biotechnology program at Seacoast School of Technology) and Brianna Sullivan, a Portsmouth High School graduate, both earned their AS in biotechnology at GBCC and their B.S. in biotechnology at UNH-Manchester. Brianna continued on to get her Master’s degree in biotechnology at UNH-Manchester and currently works on tissue engineering at ARMI. Abbey is working on her Master’s degree at Northeastern University and is a scientist at Maine Molecular Quality Controls.

## Are You Ready To Take The Next Step?

Apply today: [greatbay.edu/admissions/apply/](http://greatbay.edu/admissions/apply/)  
[gbadmissions@ccsnh.edu](mailto:gbadmissions@ccsnh.edu) | (603) 427-7600



## Certificate & Advanced Certificate

The advanced certificate (12 credits) is for students with a degree in another scientific discipline, and the certificate (27-29 credits) provides more classes in math and science for people with degrees in the humanities.

Learn More  
[greatbay.edu/program/biotechnology-advanced](http://greatbay.edu/program/biotechnology-advanced)  
[greatbay.edu/program/biotechnology-4](http://greatbay.edu/program/biotechnology-4)



Brianna Sullivan (L) and Abbey Olsen (R) assemble one of the bioreactors for growing yeast cells in the GBCC biomanufacturing lab.

# Your Opportunity to Change the World Starts Here.

Biotechnology Program | Great Bay Community College



Great Bay Community College’s nationally recognized Biotechnology program prepares students with the skills and knowledge needed to enter the biotech industry or continue onto a four-year university. Certificate programs allow students to enter the Biotechnology industry without committing to an associate degree.

## Why Pursue a Career in Biotechnology?

- Learn in a hands-on laboratory setting
- Join a HOT industry both right now, and for the foreseeable future
- Be involved in making of life-saving vaccines and other medical research and production
- Enjoy a career with less of a math focus than some of the other life sciences degrees, like bioengineering

## Revolutionize the Future

Biotechnology has enormous implications for the future and has impacted our lives by revolutionizing how we:

- Diagnose and treat disease
- Lengthen life spans
- Feed the planet
- Remediate the environment

**87,500**

jobs in biotechnology  
in 2019<sup>1</sup>

**4,300**

new jobs expected  
by 2029<sup>2</sup>

**\$80,455**

average yearly salary for  
biotechnologists<sup>3</sup>

**+5%**

new biological technician  
careers by 2029<sup>4</sup>



Great Bay  
Community College

1, 2 & 4 - Bureau of Labor Statistics | 3 - ZipRecruiter



## What Can You Do with Your Degree?

As a biotechnology graduate, you can be involved in projects that will **change the world as we know it**. As a GBCC Biotechnology student or graduate, you'll have access to internships and jobs at some of **the best biotech firms in New England**, and beyond. Current graduates may be found in a variety of biotechnology companies, working as:

- Lab Technicians
- Manufacturing Associates
- Quality Control and Quality Assurance Technicians
- Validation Consultants

## Additional Career Options

Job Title	Average Yearly Salary
<b>Biomanufacturing Operator</b>	<b>\$40,000</b>
<b>Biological Technician</b>	<b>\$47,000</b>
<b>Medical &amp; Clinical Laboratory Technologist</b>	<b>\$80,000</b>
<b>Food Science Technician</b>	<b>\$60,000</b>

## Some Biotechnology Companies Hiring GBCC Graduates

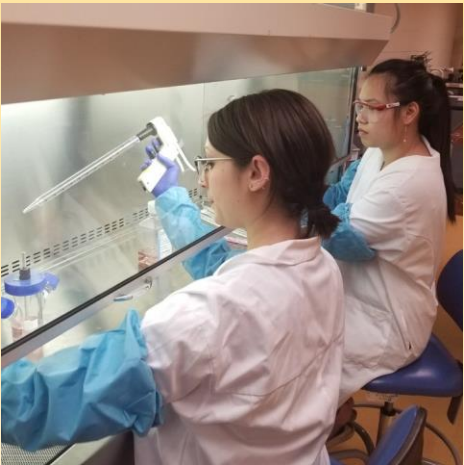
- Abbott
  - Amgen
  - Biogen
  - Brammer Bio
  - Cell Signaling Technology
  - Cytovance Biologics
  - EMD Performance Materials
  - ICQ
  - Itaconix
  - Juno Therapeutics
  - Lindt and Sprungli
- Lonza
  - Lyophilization Services of New England
  - Mangan
  - Masy BioServices
  - New England Biolabs
  - NxStage Medical
  - Pfizer
  - Sanofi Genzyme
  - Seres Therapeutics
  - Takeda
  - Vertex Pharmaceuticals



Jenny Currier performs one of the first labs in the introduction to biotechnology class.

### Alumni Success Story: Jennifer Currier

Jennifer Currier, a graduate of Portsmouth High School, has nearly completed her degree. For her final course, the biotechnology externship, she is a paid operator at Lonza, where she manufactures injectable pharmaceutical drugs.



Uyen Ly, on right

### Alumni Success Story: Uyen Ly

Uyen Ly, a graduate of Dover High School, has completed two AS degrees at GBCC (computer science and biotechnology). She is currently at UNH-Manchester completing her BS and MS in biotechnology. She has had a summer internship at Toxikon-Labcorp

## Why Biotechnology at GBCC?

### Location

Great Bay's Portsmouth campus is in the heart of the NH Seacoast, just minutes to downtown Portsmouth, a short drive to the outlets in Kittery, ME, and nearby a variety of beaches and mountains for year-long outdoor activities.

### State-of-the-art Equipment

Work in state-of-the-art biotechnology labs which house advanced equipment and technology, mirroring a real-world laboratory.

### Small Class Size

The low student-to-professor and student-to-equipment ratios allows students to truly master the skills for success.

### Running Start Program

The Running Start program enables high school students to take community college courses for dual high school AND college credit. Courses are taught at high schools by teachers who have college-level teaching credentials and use a college syllabus and course materials.

Learn More:  
[greatbay.edu/admissions/early-college](http://greatbay.edu/admissions/early-college)

### Transfer Pathways

Transfer pathways are available to 4-year degrees at UNH Manchester, UNH Durham, and other NH universities. UNH Manchester offers a BS in Biotechnology and an MS in Biotechnology, so you can choose your path. Get your associate degree at Great Bay (2 years) and transfer to UNH to complete your bachelor's and/or master's degree in biotechnology (2 or 3 years, respectively).

### Internship, Fellowship and Scholarship Opportunities

GBCC Biotechnology students are eligible to apply for a paid full-time summer internship

at Lonza Biologics. There are also paid summer research fellowships funded by NH-INBRE and the NH-EPSCoR BioMADE program.

**Learn More:** including paid research, internship, and scholarship opportunities  
[greatbay.edu/life-sciences](http://greatbay.edu/life-sciences)

### Contact

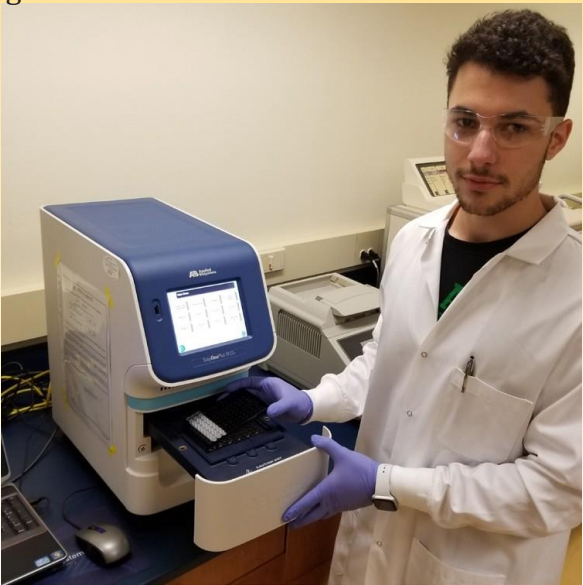
Biotechnology Program Coordinator:

Deb Audino

[daudino@ccsnh.edu](mailto:daudino@ccsnh.edu)

### Alumni Success Story: Ben McDonough

Ben McDonough, a Portsmouth High School graduate, attended GBCC to study biotechnology. While at GBCC he acted as a teaching assistant, developed a site-directed mutagenesis lab and created an electronic chemical inventory system. He was hired as a paid intern at Lonza for two summers and continues to work part-time during the school year. He is presently in the bioengineering program at UNH.



Ben McDonough uses the real-time PCR machine to amplify and detect DNA without needing to run an agarose gel.