

# BIOMANUFACTURING TRAINING PROGRAM

# The RSTA Biotechnology Program is Expanding!

#### What is Biomanufacturing?

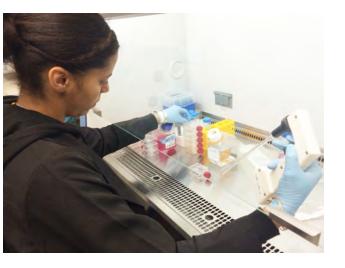
Large-scale production of therapeutic proteins (aka biologics)

Eleven of the 12 FDA-approved biologics came from companies located in Massachusetts! (2015)

#### Hit the ground running!

Enter the Biotech workforce after two years of training (Associates Degree).

Continue with an advanced degree and help shape the future of Biomanufacturing!



### **BIOTECH JOBS**

## Jobs in Massachusetts (March 2016 - February 2017)

Occupation	Total	Median
	Jobs	Salary
Researcher Associate	500	NR
Chemist	263	\$62,124
Laboratory Technician	184*	\$41,798
Chemical/Process Engineer	167	\$80,396
Biostatistician/Statistician	136	\$74,543
Quality Control Analyst	119*	\$53,970
Biological Technician	115	\$46,617
Clinical Research Coordinato	r	
/Manager	103	\$80,431
Laboratory Technologist	91	\$60,495
Sales Representative	83	\$77,662
Manufacturing/Production		
Technician	64*	\$52,750
Project Manager	50	\$95,244
Chemical Technician	47*	\$43,929
Quality Inspector/Technician	40*	\$40,322
Clinical Pharmacist	33	\$122,571
Database Administrator	31*	\$80,488
Regulatory Affairs Specialist	30	\$61,203
Validation Engineer	29	\$71,263
Data/Data Mining Analyst	27	\$76,332
Biochemist	27	\$69,166
Document Control/		
Management Specialist	26*	\$38,012

#### \*Minimum degree required: Associates Degree

Source: MassBioEd. (2017, May 5). 2017 Life Sciences Entry LevelJobs Report. Retrieved from

https://www.massbioed.org/writable/files/JobTrends/2017\_entry\_level\_report\_final.pd

## For More Information Contact:

Joan Abrams, Ph.D.
RSTA Biotechnology Program
459 Broadway
Cambridge MA 02138
jabrams@cpsd.us
(617) 349-6659



Cambridge Rindge and Latin School



"RSTA Biotechnology students are competitive applicants to the Broad Summer Scholars Program. Their impressive skill set allows them to contribute to a research project in a meaningful way with minimal training."

Rachel Gesserman, Education and Outreach Program Manager, Broad Institute

### DID YOU KNOW?

"Massachusetts is the number one hub for life sciences in the world." -Massachusetts Biotechnology Council

There are 154 Biotech companies in Cambridge!

#### **RSTA Biotechnology Program:**

- All courses are Science Electives with Honors Credit
- RSTA Exploratory is not required to enroll in Biotech 1
- Qualified juniors and seniors may enroll *directly* into Biotech 2
- Biotechnology fulfills multiple graduation requirements:

Biology\*, PE\*\*, Art!\*\*\*

 A personalized lab coat is awarded upon completion of the

<sup>\*\*\*</sup>Technical Arts









## RSTA BIOTECH BENEFITS

#### **Lab Skills & Latest Techniques**

- Work in a state-of-the-art laboratory
- Earn Certificate of Proficiency in Biotechnology
- Cell culture, cloning, DNA & proteins, etc.

#### **Authentic Research**

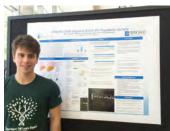
- Ask questions, design experiments, analyze data, present your work!
- Engage in semester research projects and summer internships

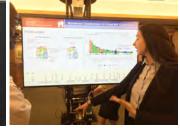
#### **College Preparation**

- Honors credit for all Biotech courses
- College credit upon completion of the three-year program (Articulation Agreements)

#### **Networking!**

- Meet scientists guest speakers/field trips
- Explore careers
- Biotech company projects
- Conduct informational interviews





Nico, Broad Institute

Nora, Dana Farber Cancer Institute

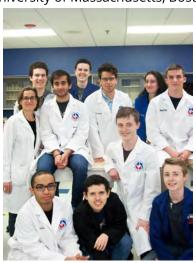




Anders, Mass. State Science Fair Kelly & Lukas, BioBuilder/Lab Central

## RSTA BIOTECH GRADUATES

Concordia University, Montreal
Wesleyan University
Washington University
University of Pennsylvania
University California, Santa Cruz
University of Miami
University of Massachusetts, Lowell
Northeastern University
University of Massachusetts, Boston



Biotech Level 3 (2017)

## Summer Internships and Training

Broad Institute

Dana Farber Cancer Institute

Massachusetts Institute of Technology

Harvard University

Tufts University

**BUILDING BONDS** 

AB Biosciences BioBuilder Biogen

Draper Laboratory

<sup>\*</sup>Level 2

<sup>\*\*3-</sup>week embedded Physical Education