# Bioprocess Data Analytics and Machine Learning

## Massachusetts Institute of Technology Virtual Course

October 12-14, 2020

**Course Description:** This course teaches best practices in the application of data analytics and machine learning to biopharmaceutical processes. The course describes pitfalls to avoid when applying these methods, and ways to increase efficiency and effectiveness known only to top experts in process data analytics.

Instructors: Dr. Richard D. Braatz (MIT), Dr. Brian Anthony (MIT), and Dr. Seongkyu Yoon (UMass Lowell).

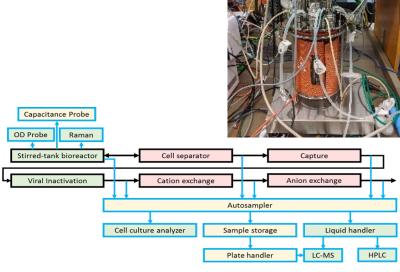
## **TARGET AUDIENCE:**

Data Scientist, Senior Research Scientist, Bioprocess Engineer, or equivalent with experience with analyzing experimental data

### **COURSE OBJECTIVES:**

At the completion of this course, the participant will be able to:

- A greater understanding of how bioprocess data analytics can be applied to develop and improve biotherapeutic manufacturing
- Insight into important advances in data analytics, machine learning methods, and software that provide new ways to build models, diagnose problems, and make informed decisions
- An introduction to new sensor technologies, including spectral imaging and real-time color video, and the major classes of data analytics and machine learning methods used in bioprocess operations
- Tools to systematically interrogate the data to ascertain specific characteristics needed to select among the best-inclass data analytics methods



### **REGISTRATION:**

Register <u>here</u>

Cost of attendance is \$3,500

BioTnet (**Bio**manufacturing **T**raining **net**work) is a collaborative training network building workforce training and development solutions for the U.S. biopharmaceutical manufacturing industry. The NIIMBL-supported training network includes UMass Lowell, UMass Dartmouth, MassBiologics, and MIT with industry input from Merck & Co., Pfizer, and Millipore Sigma.

