



Industry Training Series

Title:	Principles of Biomanufacturing For Pharmacists and Health Science Professionals
Date:	Lectures: August 3 - September 9, 2021, Tuesdays & Thursdays Lab Work: September 20 - 22, 2021
Location:	Lectures: Online Lab Work: The Stack Family Center for Biopharmaceutical Education and Training NanoFab East, 257 Fuller Road, Albany NY 12203

Why Attend This Course:

Join us for a new course specifically designed for pharmacists and health science professionals. Through online lectures by industry experts and hands-on application at our Stack Family Center for Biopharmaceutical Education and Training (CBET) site, this course will give you the fundamentals of biopharmaceutical product development and biomanufacturing, spanning upstream and downstream processing, QA/QC, and regulatory guidelines.

The lecture component of the course is planned for flexible online delivery that is accessible to working professionals, while the hands-on laboratory component will be offered during three days of condensed work at CBET.

Who Should Attend:

This course has been specifically created for individuals with pharmacy and health science backgrounds.

It is also a good introduction for individuals working in non-manufacturing roles at companies – those in sales and marketing, for instance, finance, human resources, and more.

For more information, contact: Diana Bartlett, Corporate Engagement Leader at (518) 694-7746 or at Diana.Bartlett@acphs.edu



What Will You Learn:

Lecture topics are comprehensive and provide a strong foundation for laboratory applications:

- Lecture topics are comprehensive and provide a strong foundation for laboratory applications:
- Introduction to Biomanufacturing
- Upstream Processing: Growth Kinetics
- Media Optimization for Cell Growth
- Cell Line Development and Expression Systems
- Bioreactor Design and Operation
- Fundamentals of Sterilization in Bioprocessing
- Principles of Vaccine Manufacturing
- Introduction to Downstream Processes
- Preparation & Separation of Biologics
- Purification of Protein Products
- Bioanalytical Validation of Proteins
- Quality Assurance & Quality Control
- Formulation, Fill and Finish
- Regulatory Oversight in Biopharma

Lab Topics have been selected to enable participants to apply their new knowledge and skills:

- Upstream Setup: Fermentation and Cell Culture Experiments in Parallel
- Bioreactor Start-up: Inoculation, Sampling, Nutrient/Metabolite Assays, Time-Course Sampling, Cell Visualization, Cell Counts & Viability
- Downstream Setup: Cell Disruption, Centrifugation, Filtration, Process Chromatography and UHPLC

Schedule:

Live Online Lectures:

August 3 - September 9, 2021, Tuesdays & Thursdays

Meeting Time: 6:00 p.m. - 8:00 p.m. EST

In-Person Laboratory Component:

3 days, September 20 - 22, 2021

Meeting Time: 8:30 a.m.-4:30 p.m. EST

Instructors

Ehsan Mahdinia, Ph.D., ACPHS-CBET
Kamal Rashid, Ph.D., ACPHS-CBET
Julian Rosenberg, Ph.D., ACPHS-CBET
Payel Datta, Ph.D. ACPHS-CBET
Oumou Diallo, MS, ACPHS-CBET
Meenakshi Malik, Ph.D., ACPHS-CBET-BCS
Richard Dearborn, Ph.D., ACPHS-CBET-Pharm Sci
Sam Nemeth, Cytiva
Ron Bates, Ph.D., Immunovant

Cost

Per Person \$5,000

Certificate of completion

Awarded to each participant who successfully finishes the course.

Register

cbet.acphs.edu/industry-training/register-for-industry-training/