

NIBRT Online Academy partnership with the Canadian Alliance for Skills and Training in Life Sciences CASTL

Case Study



NIBRT is a global centre of excellence for training and research in bioprocessing located in Dublin, Ireland. The NIBRT Online Academy (NOA) provides online training courses for all aspects of biopharmaceutical manufacturing.



The Canadian Alliance for Skills and Training in Life Sciences (CASTL) is a first-of-its-kind partnership between academia, industry, and government to address the future skills needs of the Canadian life sciences sector.

About the Training Partnership

The Canadian Alliance for Skills and Training in Life Sciences (CASTL) with their industry partner BioVectra, worked with the National Institute for Bioprocessing Research and Training to deploy the NIBRT Online Academy (NOA) in BioVectra's Canadian manufacturing sites. The purpose of the partnership was to provide high-quality online training in bioprocessing that would increase productivity and drive manufacturing efficiencies while minimizing trainees time away from production activities.

The key objectives of the partnership included:

- Provide industry leading training that meets the needs of CASTL's industry partner, BioVectra
- Explore the use of online learning for bioprocessing partners, especially in response to COVID-19
- Better understand the processes and procedures for effective delivery and reporting for streamlined delivery in future training initiatives
- Understand how online learning could enhance CASTL programming, especially the upskilling learning stream

Biovectra employees successfully completed NOA course modules on:

- Aseptic Processes
- Downstream Processing
- Biopharmaceutical Manufacturing
- Fermentation
- Bioreactor Operations

Courses completed by CASTL through NOA

GENERAL OVERVIEW

Overview of Biopharmaceutical Manufacturing
Biotechnology and Biopharmaceuticals
Cell Biology and recombinant DNA Technology

UPSTREAM

Cell Culture in Biopharmaceutical Manufacturing
Upstream Processing: Bioreactors in Bioprocessing
Fermentation in Biopharmaceutical Manufacturing

DOWNSTREAM

Downstream processing: Centrifugation
Downstream processing: Protein Purification - Chromatography
Downstream processing: Ultrafiltration and Diafiltration
Aseptic processing: Cleanrooms and Control Technologies

FORMULATION, FILL FINISH AND ASEPTIC PROCESSING

Aseptic processing: Concepts and Controls
Aseptic processing: Contamination Control
Aseptic processing: Decontamination and Sterilisation Technologies
Aseptic processing: Gowning
Clean in Place
Freeze Drying (Lyophilisation)
Formulation in the Biopharmaceutical Industry

FACILITY DESIGN

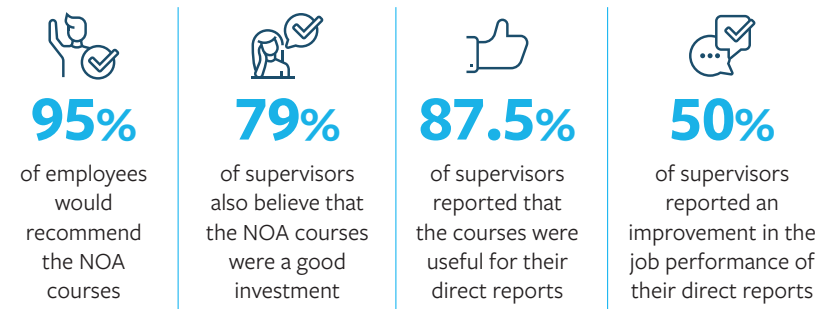
Process Validation: Part 1: Process design
Process Validation: Part 2: Process Qualification and Control

FREE COURSES

Bioreactor Operations
Introduction to Viruses
Vaccine and Immunity
Good Handwashing Technique
Developing Vaccines for Shigella
Vaccine Development for COVID-19
The essentials I4.0 technologies to assist with manufacturing in the new C19 reality
Glycan Characterisation

Results

This Partnership was a success in that both employees and supervisors reported a high level of satisfaction with the the NOA training.



In total there were **907 total enrollments** on NOA courses. Some of the feedback from BioVectra employees included:

The training courses were useful because...

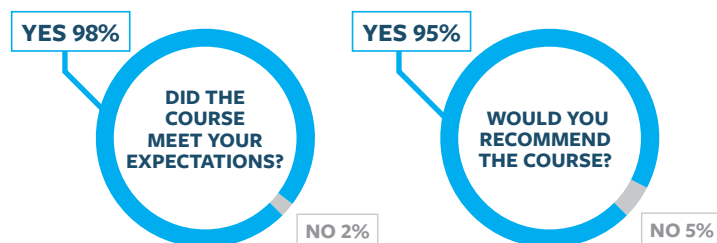
- They strengthened their knowledge base or toolbox.
- Courses provided a general overview of concepts.
- They provided more in-depth knowledge of the 'how to' of biopharmaceutical manufacturing and validation.
- They deepened subject matter expertise or provided a good review of current expertise
- Graphics and videos were beneficial in comparison to read and understand policy document.

→ **89% of supervisors** rate the courses as at least 4 out of 5 stars.

→ **80% respondents** rated the course design as at least 4 out of 5 stars.

→ **79% of supervisors** 'agree' or 'strongly agree' that the NIBRT training courses were a great investment for BioVectra.

User Feedback



BioVectra will continue to use NOA courses as a part of their employee training and development and build this into new hire onboarding programs.

If you would like to partner with the NIBRT Online Academy (NOA) or to find out more please contact us at:

admin.noa@nibr.ie, call us on **+353 1 215 8100**