



Analytical Data Analysis for the Bioprocessing Industry

Understand how to manage
analytical data and its relevance
on the process and product

23 – 26 APRIL 2018

Held at the Department of Biochemical
Engineering, UCL, London, UK

In collaboration with



Who should attend?

This course is intended for engineers and scientists who are involved in the generation and use of analytical data for bioprocesses. Each concept and topic covered will be explained in detail and an example case study is then used to develop delegates' understanding and help place the topics in context.

Typically, delegates are: R&D scientists, engineers or managers who wish to learn more about the analytics lifecycle and be more actively involved in creating understanding from analytical data. Analytical Data Analysis for the Bioprocessing Industry.



Course costs include materials, lunches and refreshments. Accommodation is not included, but we have negotiated special rates at nearby hotels. Details will be sent with registration pack.

University College London reserves the right to cancel any module which does not attract sufficient interest up to 48 hours before the start of the module. Delegates are responsible for the arrangement and payment of their own travel and accommodation. University College London claims no responsibility for delegates' commitments made with travel agencies and hotels in the event of a module being cancelled.

Analytical Data Analysis for the Bioprocessing Industry

Understand how to manage analytical data and its relevance on the process and product

Duration: 4 Days **Location:** CPI, Darlington

The module explores risk based decision making for bioprocess analytics by considering why a measurement is being made and what it conveys with regard to product critical quality attributes.

Expert lectures supported by a series of workshops and case studies will enable you to:

- Gain deeper understanding of how and why measurements are made.
- Use statistical methods to assess the validity of data and its impact on critical product quality attributes.
- Empower you to make a greater impact in the practical aspects and to be a more effective member of an interdisciplinary development or manufacturing team.
- Explore best practice in team working exercises and in numerical analysis of case studies.
- Network with sector leaders and subject matter experts.

Previous Expert Speakers Include

- Farlan Veraitch, *UCL* (Module Leader)
- Mike Davies, *F-star* (Module Leader)
- Shirley O'Hare (Module Leader)
- Liam O'Hare, *Consultant*
- Richard Alldread, *CPI*
- Viv Lindo, *MedImmune*
- Mike Molloy, *GSK*
- Assa Oumie, *Cell and Gene Therapy Catapult*
- Gerard Powell, *Allergan*
- Richard Turner, *Clinical Network Services*
- Clemens Stilling, *UCB*

Programme

Emphasis is on teaching through interactive problem solving case studies in small classes for effective learning.

DAY 1: Overview of analytics lifecycle – why are we doing the measurements

Analytical challenges in the manufacture of biologics

WORKSHOP: Experiences of analytics

Rationalising the analytical testing toolbox

Measurement of cell therapy potency – an analytical challenge

DAY 2: Is my measurement valid?

WORKSHOP: Statistical approaches to data analysis (computer based laboratory session)

CASE STUDY: Specification limit setting

Analytical comparability to support manufacturing changes during the product lifecycle

Expectations of regulatory agencies for analytical requirements in development of biological medicinal products

DAY 3: Practical application of analytical technologies to the product development lifecycle

How do I measure and why

The evolution of analytical methods during the process lifecycle

CASE STUDY: Selecting methods for a biopharmaceutical specification

Biosimilars: overviews and analytical challenges

Safety and Efficacy: the evolution of vaccine testing

DAY 4: Analytics to support manufacturing

CASE STUDY: Managing planned and unplanned process deviations

The future analytical needs of the burgeoning biologics sector

“ Better insight of techniques. Better understanding of regulation – pharma interactions. Learning statistical tools also very useful.”

Course Delegate



“ The statistics were very useful and the talk about regulations will also benefit my job.”

Course Delegate

Other Short Courses and CPD from the UCL Advanced Centre for Biochemical Engineering:

MBI® Courses

October 2017

NEW Antibody Targeted Therapies (on-line MBI module)

2 – 4 October 2017

Principles of Fermentation Processes

16 – 18 October 2017

Rapid Fermentation Process Design

13 – 16 November 2017

Downstream Processing – From Cell to Column

27 – 30 November 2017

Downstream Processing – Chromatography

22 – 24 January 2018

Current Challenges in Mammalian Cell Processing

26 February – 1 March 2018

Quality by Design for Effective Bioprocess Characterisation and Validation

12 – 14 March 2018

Design of Experiments for Bioprocess Optimisation

23 – 26 April 2018

Analytical Data Analysis for the Bioprocessing Industry

16 – 18 May 2018

Vaccine Bioprocess Development and Commercialisation

4 – 7 June 2018

Bioprocess Design & Economic Evaluation

25 – 28 June 2018

Bioprocess Facility Design

9 – 11 July 2018

NEW Advancing Cell & Gene Therapy Bioprocessing and Manufacture

COMING SOON

Industrial Biotechnology: Biocatalysis through to Synthetic Biology

(on-line MBI module)

Contact us for 2017/18 course dates

VISION Leadership Training

4 – 6 October 2017

UCL VISION Leadership Course
Held at KGI, USA

Autumn 2018

UCL VISION Leadership Course
Held at UCL, UK

Contact us for course dates



The award winning Modular Training Program for the Bioprocess Industries (MBI®) is acknowledged as the leading international provider of innovative UCL-accredited short courses in bioprocessing. These courses are designed to support continued professional and technical development within the bioindustry. Stakeholder impact is high with over 70 senior industrial experts contributing to the design and delivery of cutting-edge modules each year. MBI® plays a central role within the context of our larger knowledge transfer continuum which ensures cutting edge research is undertaken to capture the value of integrating engineering with complex and fast moving biology so that we can keep the global industry ahead in manufacturing. Modules are designed for flexible professional and technical development with options for achieving Certificate, Diploma or Masters level qualifications.

For further information and bookings please contact:

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www.ucl.ac.uk/mbi

Bespoke courses are also available

Please contact mbi-training@ucl.ac.uk to discuss your requirements.

