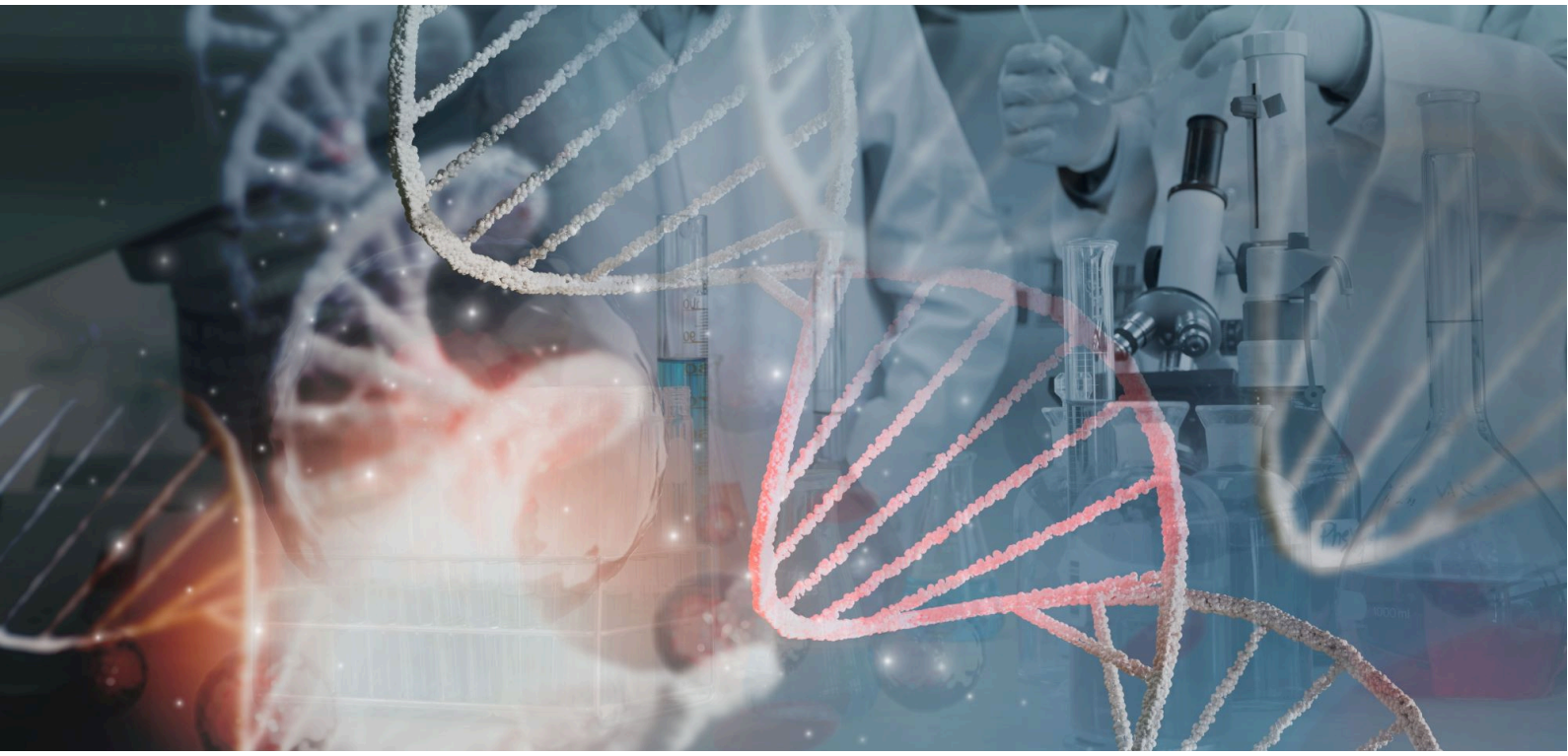
IPI Academy

MANAGEMENT forum



Presented by
Management Forum

Molecular Biology for the Non-Molecular Biologist

9-10 October 2025

Explore the applications and significance of molecular biology in the pharmaceutical industry, covering DNA, RNA, proteins, gene expression, biotechnology, drug discovery, personalised medicine, and the latest breakthroughs like CRISPR-Cas9 and mRNA vaccines.

Format:
Live online

CPD:
12 hours for your records

Certificate of completion

Course overview

Elevate your expertise in molecular biology to excel in pharmaceuticals research, development and manufacturing.

Molecular biology is not just a theoretical pursuit; it's a practical tool essential for understanding and manipulating the DNA, RNA and protein interactions that underpin drug discovery, development, and personalised medicine. This field's applications extend beyond the basic research, impacting biotechnology, microbiology and the pharmaceutical industry. As the demand for advanced molecular techniques grows, professionals must stay current with the latest breakthrough and regulatory requirements. This course will provider you with the knowledge and skills to excel in your role, whether you're involved in research, development, quality assurance, regulatory affairs, or manufacturing.

This course offers a comprehensive introduction to these concepts, equipping you with the necessary skills and insights to excel in your role and stay ahead in this dynamic field.

Key topics covered in this course:

- The central dogma of molecular biology
- DNA replication
- Gene expression
- Molecular genetics
- Practical skills
- Molecular biology in medicine and biotechnology
- Pharmaceutical Applications

Benefits of attending

- **Gain** a deep understanding of molecular biology concepts and techniques, essential for pharmaceutical applications
- **Learn** about the latest breakthroughs in molecular biology, including CRISPR-Cas9 gene editing, single-cell sequencing and mRNA vaccines and understand their implications for drug discovery and development
- **Understand** the regulatory landscape and compliance requirements for molecular biology applications in the pharmaceutical industry
- **Explore** practical skills in molecular biology
- **Engage** in discussions and critical analyses of recent research articles and case studies to apply their knowledge practically.

Who should attend?

This course is designed for professionals with a scientific background who are looking to deepen their understanding of molecular biology and its applications in the pharmaceutical and biotechnological industry, including:

- Regulatory affairs professionals
- Quality assurance specialists
- Chemistry, manufacturing and control specialists
- Clinical trial managers
- Pharmaceutical engineers
- Pharmaceutical manufacturers
- Process engineers and developers
- Production managers
- Research & development personnel
- Clinical research coordinators
- Bioinformatic analysts

Programme

Day 1

The central dogma of molecular biology and beyond

- DNA replication

Gene expression

Gene Regulation in Prokaryotic and Eukaryotic

- RNAi in gene regulation

Molecular genetics

Gene mutations and protein function

Horizontal gene transfer in prokaryotes

- Antibiotic resistance, superbug and phage therapeutics

Molecular biology techniques and toolbox

Clustered Interspaced Short Palindromic Repeats (CRISPR) technology

Regulatory molecular biology

Molecular biology in forensic science

Day 2

Biotechnology: the tools to build a better tomorrow

Molecular biology in medicine and biotechnology: pharmaceutical applications

- Molecular biology and vaccine technology
- Antibody Drug Conjugate (ADC) for Cancer Treatment
- Immune checkpoint and PD-1/PD-L1 inhibitors for Cancer therapy
- Chimeric Antigen Receptor T-cell therapy (CAR-T Therapy)

Antibody Directed Enzyme Prodrug Therapy (ADEPT), full detailed research

Combination cancer therapies and precision medicine

Presenter

Sayed Goda

Sayed K Goda, a biochemistry and drug discovery professor, has a robust academic background. He earned a BSc in Chemistry and an MSc in organic chemistry from Cairo University, Egypt. He then pursued a PhD in Biochemistry from the University of Southampton, UK. Recognising the pivotal role of technology management in his field, he obtained an MBA in technology management from the Open University, UK, in 2000. His diverse educational background equips him with a unique perspective and a broad range of skills, making him a valuable asset in the field of biochemistry and drug discovery.

After completing his PhD, Sayed embarked on a leadership journey at the Porton Down establishment in Salisbury, UK, where he served for fourteen years as a senior scientist and a team leader. During that time, he led commercial and medically sensitive research. He employed protein engineering to produce novel commercially and medically important proteins.

In 2002, Sayed's academic prowess and leadership skills led him to a professor position at Cairo University, Egypt. His tenure was marked by transformative contributions, notably the establishment of a new BSc Biotechnology program. He also supervised many successful MSc and PhD degrees.

In 2006, Dr. Goda accepted a professor position at Qatar University, Qatar, where he taught many major courses in biochemistry and biotechnology and successfully obtained many research grants.

In 2012, Sayed's expertise and reputation led him to a senior scientist and Professor position at the Antidoping laboratory in Qatar. He led research in various fields and established a protein engineering laboratory here. His exceptional ability to secure research funds, totalling over two million, for cancer-targeting drug discovery projects. His collaboration with Groningen University, Netherlands, resulted in the successful completion of four Ph. Ds and numerous publications, further solidifying his status as a prolific researcher.

Sayed has years of commercial and medical research experience in a conventional research institute in the UK.

He is also a regular reviewer for many high-impact journals, and he is currently a guest editor for Cancers.

Course date

9-10 October 2025

Live online
09:30-17:00 **UK (London)** (UTC+01)
Course code 15501

GBP **1,299** ~~1,499~~
EUR **1,819** ~~2,099~~
USD **2,087** ~~2,399~~
Until 04 Sep

How to book

Online:
ipi.academy/2790

Alternatively contact us to book, or if you have any queries:

Email:
info@ipiacademy.com

Phone:
+44 (0)20 7749 4749

Discounts

- Booking more than one delegate on any one date qualifies for a **30% discount** on the second and subsequent places.
- Most events qualify for an **early booking discount** prior to 6 weeks before the course date. Be sure to check on our website, where the latest discounts will be shown.

Further information

Fee
The fee includes all meals and refreshments for the duration of the course (for venue-based courses) and a complete set of course materials (provided electronically). If you have any particular requirements, please advise customer services when booking.

Please note
IPI Academy (and our training partners) reserve the right to change the content and timing of the programme, the speakers, the date and venue due to reasons beyond their control. In the unlikely event that the course is cancelled, we will refund the registration fee and disclaim any further liability.

Terms and conditions
The rest of the our terms, the event cancellation policy and the terms and conditions are on our website, please visit ipi.academy/content/terms-and-conditions

Reviews

★★★★★

This was a really great webinar. The content was very clear as it's started with a reminder [of the] basics of molecular biology which helps understand the rest of the course. It was very interesting to learn about the application of molecular biology in medicine, particularly in cancer and to understand that there is still so much to discover from molecular biology. These 2 days of formation [training] were a real pleasure.

Mathilde Livernois
Regulatory Affairs Associate Manager
Boehringer Ingelheim
Mar 25 2025

★★★★★

I wanted to learn the application of molecular biology in medicine.. 5*. I would like to thank [speaker] for his pedagogy and for the passion he transmits in his courses. He has a talent for making things accessible and understandable to everyone. Thank you.

Mathilde Livernois
Regulatory Affairs Associate Manager
Boehringer Ingelheim
Mar 25 2025

★★★★★

Excellent webinar, to be recommended. The course allowed to review key basic elements to gradually understand more complex topics - A wonderful speaker, able to make complex topics very accessible. In addition he helps a lot by asking some simple questions and practical cases after each chapter.

Soizic COUPAT
RA Bio Team Leader
Boehringer Ingelheim Animal Health France
Mar 25 2025

Run this programme in-house for your whole team

Coming to IPI Academy for your in-house training provides an all-inclusive service which gives you access to a wide variety of content, learning platforms and delivery mechanisms as well as your own personal training adviser who will work with you from the initial enquiry through to feedback and follow-up after the programme.

With over 600 trainers, all practitioners and experts across a huge range of fields, we can provide the training you need, where you need it, when you need it, and at a price which suits your budget. Our approach to tailored learning and development consists of designing and delivering the appropriate solution for each client.

For your FREE consultation and to find out more about how we can work with you to solve your training needs, please contact our training advisers:

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IPI Academy

IPI Academy is a training initiative of Falconbury and Management Forum; leading providers of industry training for over 30 years, based in the UK.

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