



Biotechnology for Non-Biotechnologists

(BT104)

Wednesday & Thursday, 3-4 November 2010

Biotechnology and life sciences are of growing concern to many professionals who do not necessarily have any formal training in biology or an adequate personal knowledge base.

The need for literacy in modern biology among non-scientists is recognized in many domains, in particular in the pharmaceutical industry where biologics have started playing an important role a long time ago and where increasingly sophisticated biomolecular constructs, gene, RNA and cell therapies, nanobiotechnologies, organ regeneration and synthetic biology will clearly occupy an important place in a not so distant future.

Biotechnologists are not necessarily biologists. Indeed, biotechnology is becoming more and more trans-disciplinary in nature with the rapid and massive emergence of new hybrid technologies that combine medicine, agriculture, environmental sciences, robotics, informatics, engineering, and modern biology. Yet, without a basic, yet sound understanding of the latter, it is impossible to fully comprehend these hybrid technologies, nor have any critical outlook on their practical consequences.

This 2 day course will make you a competent biotechnologist by helping you gain literacy in molecular biology and serving as a springboard for further self-directed learning at any point in time in the future.

Learning Objectives:

1. Key concepts in molecular biology underlying all biotechnology
2. Functional definitions of key terms required to understand the workings of major biomedical applications
3. Biological representations of healthy and diseased cells
4. Key aspects of genetics, molecular biology and biochemistry in supporting drug design and development
5. Current and future biotech applications in diagnostics, prognosis and therapeutics

Curriculum:

- The central paradigm of molecular biology
- Molecules as building blocks of life
- Pillars of modern biology: genetics, molecular biology, biochemistry
- DNA analysis and manipulation: diagnostics and recombinant DNA techniques
- RNA analysis and manipulation: gene expression and cDNA production
- Protein analysis and manipulation: rational drug design and the production of biologics
- Immunology and antibody- based diagnostics and therapeutics
- Molecular views of infectious, endocrine, autoimmune diseases and neoplasms
- Biology of cancer and personalized medicine
- RNAi therapies, gene therapies, cell therapies
- Epigenetics and the biology of aging

Asia Life Sciences Academy Pte Ltd

VBox 886484, Singapore

Tel: +65.9431.4236 Email: academy@createbusiness.ch RCN: 201011942C
www.createbusiness.ch/training.htm

An affiliate company of Creative Business Solutions sàrl



Who Should Attend?

- Mid-to senior level executives in all industries that are faced with biological information but lack any formal training in life sciences.
- Junior to mid-level managers in pharma, biotech and medtech companies, government agencies and law firms who need to better understand the science that underlies the life sciences industry. It will be particularly helpful to personnel in:
 - Quality Control and Quality Assurance
 - Information Technology
 - Registration and Regulatory Affairs
 - Engineering
 - Legal and Patents
 - Sales and Marketing
 - Finance and accounting
 - Health and Safety
 - Investments
 - Risk Management
- Chemists, physicists, IT specialists and other scientists who interface with biologists.
- Any other professional who needs to gain a broad understanding of modern biology.

This course is suitable for scientists and non-scientists alike.

Trainer:

Dr. Vanya Loroach is a US-trained molecular biologist with over fifteen years of experience in applying emerging technologies to scientific communications and education. After spending ten years developing web-based medical education programs in collaboration with a major ambulatory clinic in Geneva (Groupe Médical d'Onex), the Geneva University Hospital and the University of Montreal, he launched intensive training programmes in compact biology and biotech to help busy professionals bridge the gap between a state of partial or non-existent understanding of key concepts in modern biology and true literacy in life sciences. In the last three years, over 600 participants from more than 130 companies and organizations in Switzerland, including major pharmaceutical and biotech companies such as Lonza, Novartis, Syngenta, Roche and Merck Serono, have attended his training programs. Dr Loroach's courses are supported and endorsed by the Swiss Biotech Association.

Testimonials from Past Participants:

" ... clearly explains a very difficult subject ... an excellent way to better understand this interesting but complex domain. "

Markus G. Schriber, General Manager, DuPont de Nemours
President of the Board of Directors, Eclosion

"...takes you from the basics to high level contemporary technologies in only 2 days and helps you understand what probably is a big part of your company's business."

Michael Haag, Training Manager, Lonza

Asia Life Sciences Academy Pte Ltd
VBox 886484, Singapore

Tel: +65.9431.4236 Email: academy@createbusiness.ch RCN: 201011942C
www.createbusiness.ch/training.htm

An affiliate company of Creative Business Solutions sàrl



" Within a few hours, we went very efficiently through key elements of molecular biology. This has definitely been very useful to me in my day-to-day business."

Vincent Moser, CTI Start-up

Date, Time & Venue:

Date & Time Wednesday and Thursday, 3-4 November, 2010
9am – 5pm

Venue The courses will take place at Biopolis, Singapore's biomedical R&D hub which houses key public research institutes and private research organizations. It is centrally located within walking distance to the Buona Vista MRT station, and is close to the National University of Singapore.

Multi-Function Room @ Level 5
Matrix Building
30 Biopolis Street
Singapore 138671

Fees:

Early Bird	Register on or before 8 th October	S\$2,300.00
Regular	Register after 8 th October	S\$2,600.00

Course fees include:

- Pre-course online activities & Online educational extensions
- Interactive course CD
- Lunches and coffee breaks
- GST is waived.

To enrol, please use our online registration form at www.createbusiness.ch/training.htm

For further information, please email us at academy@createbusiness.ch

About ALSA:

Asia Life Sciences Academy (ALSA) is dedicated to serving the needs of biomedical sciences executives and organizations in Singapore and in the region. We offer structured education opportunities in global pharma business development and licensing. We provide business and scientific training using a case study approach delivered by industry experts and practitioners to ensure that the learning is practical, up-to-date and can be applied by our participants immediately in their workplace. Our aim is to advance the skills and deepen the understanding of the science and business realities of the entire value chain in drug discovery, development, registration, partnering, licensing and commercialisation.

Asia Life Sciences Academy Pte Ltd
VBox 886484, Singapore

Tel: +65.9431.4236 Email: academy@createbusiness.ch RCN: 201011942C
www.createbusiness.ch/training.htm

An affiliate company of Creative Business Solutions sàrl