

## ALUMNI

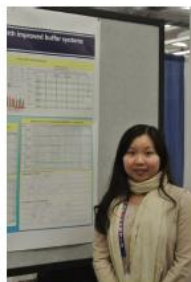


As the first enlightening degree in my University life, studying at MBT has built me solid foundation in molecular biology concepts and knowledge, which are important for my career as a Scientist working in lung cancer and Chinese herbal medicine research area. The pathogenesis of complex diseases is related to genomic mutations and many of the novel therapeutic agents, such as small molecule inhibitors are designed based on the mutant protein structures. Also, next generation sequencing has opened a new era for personalized medicine. If you love Science and innovation, try hard to acquire as much knowledge as you can, be optimistic, open-minded and confident to you work, the world is full of opportunities.

**Leung Lai Han, Elaine (2001 Graduate)**  
Associate Professor, Assistant Director,  
Macau Institute For Applied Research in Medicine and Health,  
State Key Laboratory of Quality Research in Chinese Medicine,  
Macau University of Science and Technology

I have to say the MBT Program has definitely equipped me a lot of in many different aspects of the molecular basis that I can later on apply in different research areas. MBT graduates are becoming more recognised as high quality candidates for post-graduate students in different research institutes. And I'm always proud of myself to be one of the MBT alumni.

**Lin Sze Wah (2003 Graduate)**  
Chemist, Government Laboratory, HKSAR



I am very glad to study MBT in my bachelor. The knowledge and experience I gained from MBT indeed lead to some of the most amazing and life-changing opportunities including doing a DPhil at Oxford and working as a scientist in Denmark. The trainings offered by MBT are at the world-class standard. Connection is another key characteristic of MBT. It is precious for MBT graduates to be so close to each other. And for those who are joining our family, there are unlimited possibilities in your future careers. Not only restricted to biotechnology, but there are also various chances such as medicine, publication industry, legal practice and business consultancy. Welcome to MBT!

**Chu Wai Kit (2004 Graduate)**  
Assistant Professor, Department of Ophthalmology & Visual Sciences, CUHK

I joined MBT due to its good learning environment, cultures of student life, and more importantly, the pioneering nature of subject in science. MBT students are not only trained to acquire scientific knowledge, but also broadened the vision in various aspects. I had ample chances to expose to both science areas and legal industry that benefitted my extensive understanding and my career in legal industry.

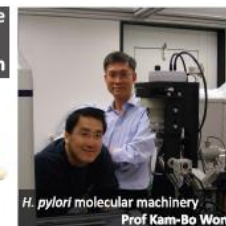
**Wang Jun, Phillip (2008 Graduate)**  
Paralegal, Guantao & Chow, Solicitors and Notaries



# MBT

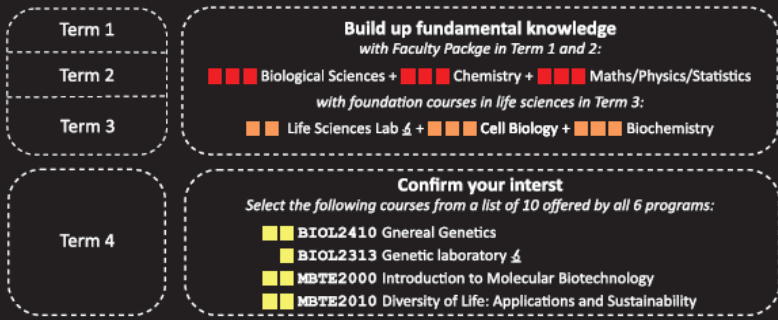
Molecular Biotechnology Programme  
School of Life Sciences, The Chinese University of Hong Kong

分子生物技術學



*Conduct research in basic science and transform the knowledge to technologies to benefit the society!*

# BSc Molecular Biotechnology



## Major Core Courses (All ■)

- BCHE3030 Methods in Biochemistry
- BCHE3050 Molecular Biology
- BIOL3410 General Microbiology
- MBTE4320 Genetic engineering
- MBTE4510 Plant Biotechnology
- MBTE4520 Animal Biotechnology
- MBTE4530 Microbial Biotechnology ‡
- MBTE3000 Business and Social Aspects of Biotechnology ‡
- MBTE4033 Methods in Molecular Biotechnology Laboratory I (Term 5) 4
- MBTE4034 Methods in Molecular Biotechnology Laboratory II (Term 6) 4

## Capstone Core Courses (Final Year Project)\* (3-6 ■)

- MBTE4901 Senior Experimental Project I (Summer)
- MBTE4906 Internship in Molecular Biotechnology (Summer) †
- MBTE4902 Senior Experimental Project II (Term 7)
- MBTE4903 Senior Experimental Project III (Term 8)
- LSCI4000 Literature Research (Term7/8)

## Credits Proportion



## Major Elective Courses (7-10 ■)

- MBTE3510 Medical Biotechnology
- BCHE3040 Protein and Enzymes
- BCHE3080 Bioenergetics and Metabolism
- BCHE3680 Bioenergetics and Metabolism Laboratory 4
- BCHE4030 Clinical Biochemistry
- BCHE4060 Basic and Applied Immunology
- BCHE4080 Biochemistry for Forensic Sciences
- BCHE4090 Biochemistry for Sport and Exercise
- BMEG2001 Introduction to Biomedical Engineering
- BMEG2011 Biomedical Engineering Laboratory 4
- BIOL2420 Population Genetics
- BIOL3310 Human Biology
- BIOL3530 Plant Biology
- BIOL3630 Animal Physiology
- BIOL4032 Physiological Investigations 4
- BIOL4120 Developmental Biology
- BIOL4310 Human Genetics
- BIOL4520 Plant Metabolism and Metabolic Engineering
- BSSC2600 Biosphere, Climate and the Environment
- CMBI4001 Protein Trafficking
- CMBI4002 Protein Folding
- CMBI4003 Signaling Transduction
- CMBI4101 Cancer Cell Biology
- CMBI4102 Stem Cell Biology
- CMBI4103 Neuronal Cell Biology
- CMBI4201 Genomics and Transcriptomics
- CMBI4202 Proteomics
- CMBI4203 Metabolomics
- CMBI4301 Current Topics in Cell Biology
- CMBI4302 Current Topics in Molecular Biology
- CMBI4303 Current Topics in Biotechniques
- CMBI3101 Biology of Model Organisms for CMB Research
- STAT3210 Statistical Techniques in Life Sciences
- LSCI2003 Scientific Conduct and Bioethics



† **71%** and **60%** of the second/third year MBT students were selected for local and overseas summer internships in **Australia, Germany, USA, Taiwan, Canada** and **Hong Kong** in 2015 and 2016 respectively.



‡ Visits to biotech companies in **Hong Kong** and **Mainland China**.

## Outstanding MBT student

Biotechnology is essential to biological research, and is also a critical means by which humans can improve their lives. MBT students are taught the basics of bioengineering techniques, encouraged to think critically, and provided ample chances to the latest improvements in biological research, all of which I found to be extremely helpful. Studying the MBT curriculum lead to my decision to study biology further, and I am sure that becoming a MBT student will fuel your love for science.



*Serena Yichen Dai - the Rhodes Scholar for Hong Kong 2016  
Current PhD student in the University of Oxford*

## MBT students pursuing postgraduate studies overseas

The Emory University School of Medicine (USA)

Karolinska Institutet (Sweden)

University of Zurich (Switzerland)

University of Copenhagen (Denmark)