



生物化學課程
Biochemistry Programme



Biochemistry Program

OUR MISSIONS

1. To provide *concepts and mechanisms on the molecular basis of life processes and the significance in human activities and health.*
2. To provide training on the latest *biochemical technology.*
3. To cultivate the ability of *critical thinking, a proactive and responsible attitude and efficient communication skills* for high competitiveness in further study and career development.



Biochemistry Program Requirements

- Fundamentals of Biochemistry
- Cell Biology
- Basic Laboratory Techniques in Life Sciences
- Scientific Conduct and Ethics
- Frontiers in Biochemistry
- Molecular Biology
- Recombinant DNA Techniques
- Molecular Biology & Recombinant DNA Lab
- General Genetics / Lab

Year 2 :
Fundamental Courses
(20 units)

- Proteins and Enzymes
- Bioenergetics and Metabolism
- Self-Study Modules in Biochemistry
- Methods in Biochemistry/Lab
- Senior Literature Research / Senior Experimental Project I, II, III

Year 3 - 4:
Fundamental &
Specialized Topics
(13 units)
+
Elective courses
(18 units)

Major Elective Courses for Different Career Paths

BCH program

- Clinical Biochemistry
- Aspects of Neuroscience
- Molecular Endocrinology
- Medical Biochemistry Lab.
- Basic and Applied Immunology / Lab.
- Biochemistry for Sport and Exercise
- Biochemistry Forensic Sciences
- Management & Accreditation of Biochemical lab

Clinical / Biomedical Sciences

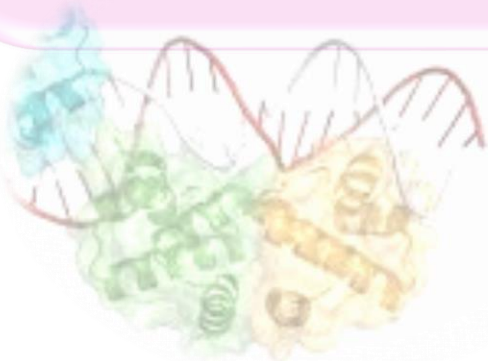
- Nutrition and Human Development
- Introduction to Medical Nutritional Therapy
- General Microbiology
- Animal Physiology
- Human Genetics
- Statistical Techniques in Life Sciences

Research / Biomedical technology

- Protein Folding, Proteomics
- Animal Biotechnology
- Biochemical Toxicology/Lab
- Statistical Techniques in Life Sciences
- DREAM, iGEM

Biochemistry for environment

- Animal Biotechnology
- Environmental & Biochemical Toxicology/Lab
- Methods in Toxicological Research/Lab
- Environmental Health
- Statistical Techniques in Life Sciences



Active Learning



Lectures and tutorials



**Laboratories /
Videos/ Presentation**



Collaborative learning

Academic Advising and Mentoring

- Academic counseling and mentoring for Biochemistry students
- College-based, same advisor assigned to the same student for the whole university life
- Take care of the academic matters and general affairs

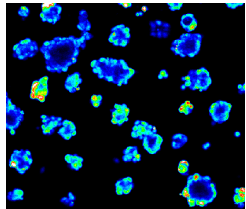
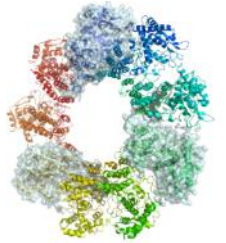
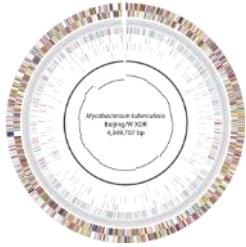
Level I advisors: provide academic advice and general support

Profs. Shannon Au, Edwin Chan, Michael Chan, TF Chan,
WP Fong, SK Kong, KF Lau, Jacky Ngo, PC Shaw
Drs. FH Lo, Patrick Ngai

Level II advisors: provide academic advice and further support

Profs. Shannon Au, TF Chan and KF Lau

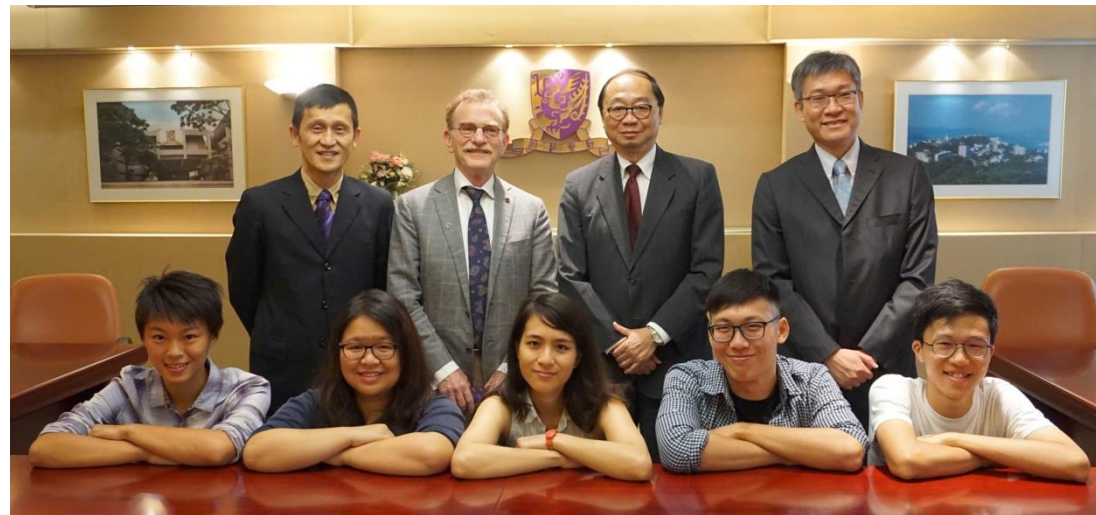
Major Research Areas at Biochemistry



- **Genomics and bioinformatics**
- **Protein Science**
- **Cell Biology/Cancer/Immunology**
- **Neuroscience**
- **Biochemical toxicology**
- **Nutritional Science and Natural Products**

Other Learning Experiences at Biochemistry

- **SMART Program (Young Scientist Mentorship and Research Training)**
- **DREAM Program (Dedicated Research Exchange and Mentorship)**
- **Berkeley Biosciences Study Abroad (BBSA) Programme**
- **Summer Internship**
- **Exchange activities through university and colleges**



Joining SLS for DREAM and iGEM

DREAM: A Research Training Program for Undergraduates

Participating Institutions from 2006-2017:

University of Sussex	University of Melbourne
Imperial College London, UK	University of Toronto, Canada
The Ohio State University, US	University of California, US
University of Western Ontario, Canada	Brigham and Women's Hospital, US
University of Cincinnati, US	Georgetown University, US
Harvard University, US	Mayo Clinic College of Medicine, US
The Ohio State University, US	National Institute of Health, US
Institute of Biological Chemistry, Biodiversity Research Center, Academia Sinica, Taiwan	

iGEM: First-ever CUHK team formed by students including those for Biochemistry

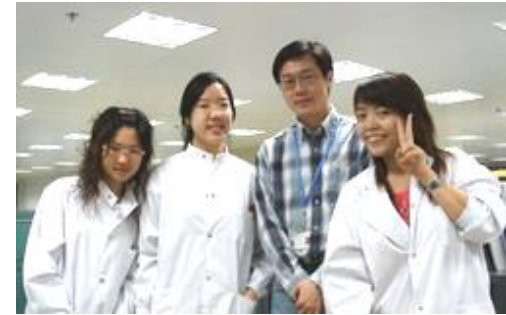
Our 4th Gold Medals since 2010



http://2015.igem.org/Team:Hong_Kong-CUHK



Summer Internship



Host Institutes

No. of students

2017

Nano and Advanced Materials	1
Kadoorie Farm and Botanic Garden	1
New β Innovation Ltd	2

2016

DiagCor Bioscience Incorporation Limited	3
GeneHarbor (HK) Biotechnologies Limited	3
Kadoorie Farm and Botanic Garden	1
New β Innovation Ltd	2

2015

Kadoorie Farm and Botanic Garden	1
New β Innovation Ltd	2



GENEHARBOR (HONG KONG) BIOTECHNOLOGIES LTD.



New β Innovation



Outgoing Exchange Opportunities

Country	Host University	Exchange Period
2016-17		
Denmark	Technical University of Denmark (Engineering & Science Programme)	2nd Term
Korea	Yonsei University	2nd Term
Korea	Korea University	2nd Term
Singapore	Nanyang Technological University	Summer
Sweden	Karlstad University (Science Programme)	2nd Term
Switzerland	University of Lausanne	2nd Term
The Netherlands	Utrecht University	2nd Term
United Kingdom	University of Glasgow	1st Term
USA	University of California, Davis	Year

Outgoing Exchange Opportunities

Country	Host University	Exchange Period
2015-16		
Canada	The University of British Columbia	1 Year
Czech Republic	University of Economics, Prague	2nd Term
Denmark	Copenhagen Business School	Summer
Finland	University of Helsinki	2nd Term
Japan	Doshisha University	1 Year
Sweden	Stockholm University	Summer
The Netherlands	Maastricht University	2nd Term
The Netherlands	Leiden University	2nd Term

Extracurricular activities organized by the Biochemistry Society (The Student Body of Biochemistry Majors)



Extracurricular activities organized by the Biochemistry Society (The Student Body of Biochemistry Majors)



Career Talks

Biochemistry Alumni and leaders in various areas are invited to share their work experience



高怡醫學化驗所有限公司
Bright Growth Medical Laboratory Limited

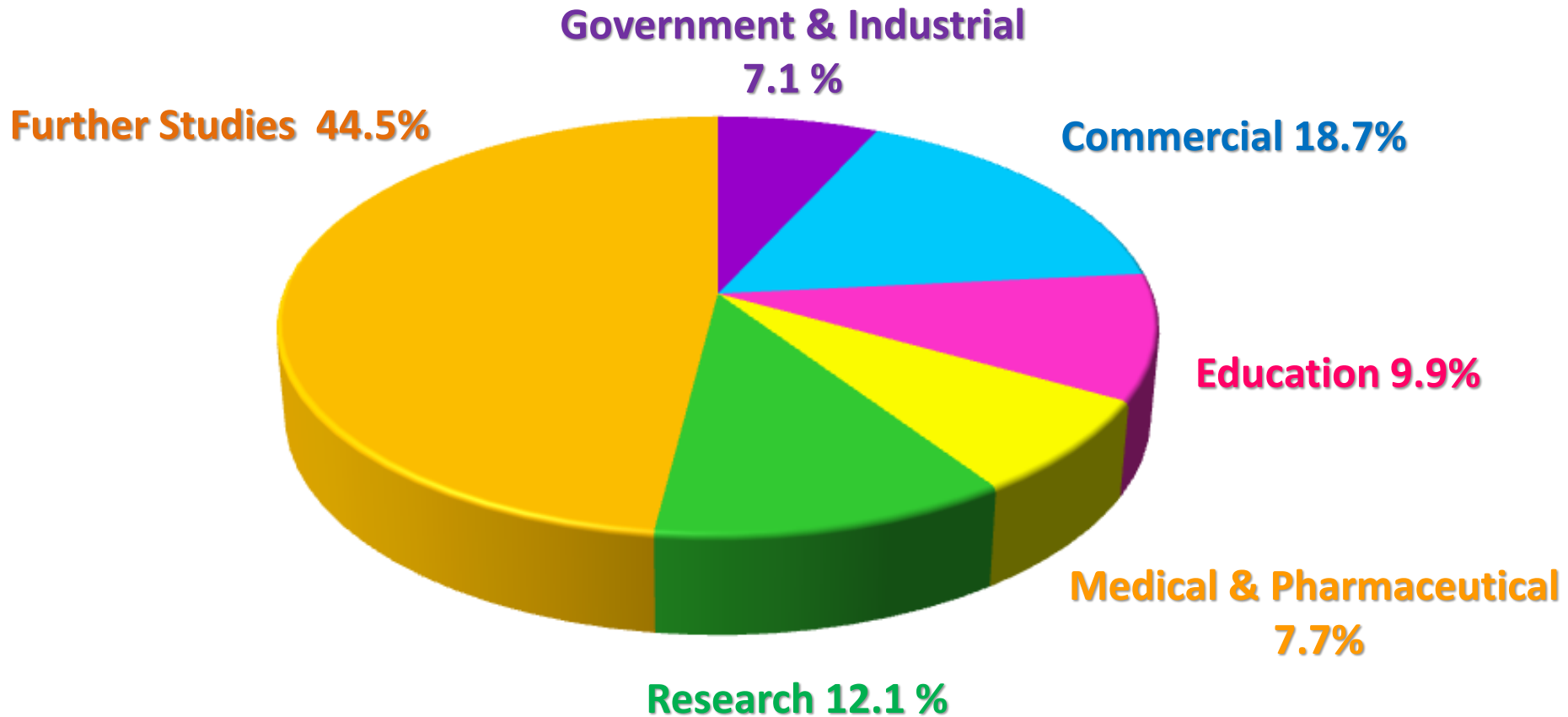


香港中文大學
The Chinese University of Hong Kong



中華人民共和國香港特別行政區政府
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China

Careers of Biochemistry Graduates (2012-2016)



For more information, please click into our website
<http://www.sls.cuhk.edu.hk/index.php/bche>



Biochemistry Programme
The Chinese University of Hong Kong



INTRANET

SEARCH



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BCHE Picnic 2015
Biochemistry Programme Picnic 2015



< October 2016 >						
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20-10-2016

No event messages to display for today

What's new



Biochemistry College Gatherings with Teachers and Students



Career Talk 2016



4-Year Curriculum



Useful Links



Admission requirements



Alumni Activities



Study



Student