

Joint Course Offered under HKU-CUHK-HKUST Centre for Advanced Study

<i>Department(s), institution</i>	Departments of Anatomical and Cellular Pathology, Chemical Pathology, Obstetrics and Gynaecology, School of Public Health, Faculty of Medicine, CUHK Division of Life Science, School of Science, HKUST Department of Pathology, Li Ka Shing Faculty of Medicine, HKU		
<i>Course title (general) & description</i>	<p>Molecular Medicine: This joint course will give an introduction to basic concepts as well as modern techniques and technologies in Molecular Medicine. Current usages of molecular diagnostic tests will be discussed and cancer will be used as a disease model in most of the examples covered in the course. Specific course objectives in relation to the topics covered are as follows:</p> <ul style="list-style-type: none"> • To obtain basic knowledge of chromosomal abnormalities in tumour cells, methods for detection and their clinical significance • To discuss the genetic basis of cancer and implications for clinical diagnosis, prognostication and disease monitoring • Special topics in neuroscience/cancer biology: to focus on neuronal signaling and neurodegenerative diseases, and cell cycle control • Cell signaling: to discuss the concept and techniques used in signal transduction study and its connection with cancer • To obtain basic knowledge in molecular diagnostics • To obtain basic concepts on the design of molecular medicine studies, including statistical considerations • To obtain basic knowledge on high throughput molecular technologies, including those used in proteomics and the mass spectrometric analysis of nucleic acids 		
<i>Course code</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	MEDP6001	LIFS6660	MMPH6020
<i>Course credits/units</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	3 units	3 credits	N/A
<i>Course title</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	Molecular Medicine		
<i>Grading scheme</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	A-F grades	Pass/Fail	Pass/Fail
<i>Term offered</i>	2 nd semester, 2019-20: January – March 2020		
<i>Teacher</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	Prof. K.C.Allen Chan Prof. Benny Zee Dr. Anthony Chan Dr. Maggie Wang Dr. Huating Wang	Prof Pingbo Huang Prof Robert Z Qi Prof Jun Xia Prof Tuan Anh Nguyen	Dr Carmen CL Wong Dr Jack CM Wong Dr Judy WP Yam Dr Helen HN Yan
<i>Class schedule</i>	Please see the below table		
<i>Venue</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	Lecture Theatre 2/F, LCW Clinical Sciences Building Prince of Wales Hospital, Shatin	Cheung On Tak Lecture Theatre (LT-E), Academic Building, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon	Lecture Theatre 2/F, Block T Queen Mary Hospital Hong Kong
<i>Assessment</i>	<ul style="list-style-type: none"> ▪ The assessment of the course is based on a take-home essay question on a selected topic. ▪ Attendance rate is included in the assessment for HKUST students (the minimum attendance rate is 75% and students need to sign <u>before and after</u> the class). ▪ The length of the essay is limited to 2500 words. 		

	<ul style="list-style-type: none"> ▪ All teachers of the course would set an essay question for their own topic for students to choose from. ▪ A quota is set for each topic (e.g. 20 students maximum). ▪ In case of over-quota in any topic, students would be chosen in random and the remaining students would be assigned to a topic of their second choice. ▪ Teachers would mark the essays on their own topic for grades A-F, which could be translated in to Pass/Fail grades according to the grading system of each institution. ▪ The dissertation assessment guidelines currently adopted by the Master of Medical Sciences programme at HKU and a similar marking scheme from the CUHK would be taken as a reference. ▪ The topics should be made available for students to select in March 2020; ▪ Students should be required to indicate their top three choices of topics in priority order within one week and be required to submit their essays within one month.
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Joint Course in Molecular Medicine

- 12 sessions each lasting for approximately 3 hours (total 36 hours)
- Each university contributes 4 sessions (total 12 hours)
- Classes will be held on Saturdays, starting from **Jan 4, 2020**.
- Scheduled teaching time: 10:00 am to 1:00 pm (CUHK & HKUST), 10:30 am to 1:30 pm (HKU)

Lectures schedule:

Date^a and Time	Venue^b	Topic	Teacher
4 Jan 2020 10:00 – 13:00	CUHK	Clinical Applications of Molecular Diagnostics Techniques I	Prof Anthony Chan
11 Jan 2020 10:00 – 13:00	CUHK	Non-coding RNAs: Nature's Trash or Treasure?	Dr Huating Wang
18 Jan 2020 10:00 – 13:00	CUHK	Clinical Trials Designs Bioinformatics Applications in Molecular Medicine	Prof Benny Zee Dr Maggie Wang
1 Feb 2020 10:00 – 13:00	CUHK	Clinical Applications of Molecular Diagnostics Techniques II	Prof Allen Chan
8 Feb 2020 10:00 – 13:00	HKUST	Ion channels in health and disease	Prof Pingbo Huang
15 Feb 2020 10:00 – 13:00	HKUST	Disease Proteomics	Prof Robert Z Qi
22 Feb 2020 10:00 – 13:00	HKUST	Molecular understanding of brain disorders	Prof Jun Xia
29 Feb 2020 10:00 – 13:00	HKUST	MicroRNA in cancer	Prof Tuan Anh Nguyen
7 March 2020 10:30 – 13:30	HKU	Molecular genetics of cancer: genomic analysis	Dr Helen HN Yan

14 March 2020 10:30 – 13:30	HKU	Hypoxia and cancer	Dr Carmen CL Wong
21 March 2020 10:30 – 13:30	HKU	Molecular basis and characterization of new genes	Dr Judy WP Yam
28 March 2020 10:30 – 13:30	HKU	Cancer epigenetics	Dr Jack CM Wong

Note:

^a 25 Jan 2020 is within the Chinese New Year holidays.

^bVenue:

CUHK: Lecture Theatre, 2/F, Lui Che Woo Clinical Sciences Building, Prince of Wales Hospital, Shatin

HKUST: Cheung On Tak Lecture Theatre (LT-E), Academic Building, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon

HKU: Lecture Theatre, 2/F, Block T, Queen Mary Hospital, Hong Kong

Revised on: 30 Oct 2019.