

## 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) &amp; description</i>	<p>Molecular Medicine:</p> <p>This joint course will introduce the basic concepts, modern techniques as well as the latest analytic technologies in Molecular Medicine. The current usages of molecular diagnostic tests will be discussed, where cancer will be used as one of the disease models. Here are the specific objectives will be covered in the course:</p> <ul style="list-style-type: none"> <li>• To deliver basic knowledges of chromosomal abnormality and immunoregulation in cancer development, and their clinical significance.</li> <li>• To discuss the genetic basis of cancer and implications for clinical diagnosis, prognostication, and disease monitoring.</li> <li>• Special topics in neuroscience/cancer biology: to focus on neuronal signalling and neurodegenerative diseases, and cell cycle control.</li> <li>• Cell signalling: to discuss the concept and techniques used in signal transduction study and its connection with cancer.</li> <li>• To obtain basic knowledge in molecular diagnostics.</li> <li>• To obtain basic concepts on the design of molecular medicine studies, including statistical considerations.</li> <li>• To obtain basic knowledge on high throughput molecular technologies, including those used in proteomics and the mass spectrometric analysis of nucleic acids.</li> </ul>		
<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 <sup>nd</sup> semester, 2021-22: January – March 2022		
<i>Teacher</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	Prof Patrick Tang Prof Huating Wang Prof Benny Zee Prof Maggie Wang Prof Peiyong Jiang	Prof Pingbo Huang Prof Robert Qi Prof Yukinori Hirano Prof Tuan Anh Nguyen	Dr Helen HN Yan Dr Carmen CL Wong Dr Judy WP Yam Dr Jack CM Wong

<i>Class schedule</i>	Please refer to page 3
<i>Teaching mode</i>	<p>CUHK: Face-to-face</p> <p>HKUST: Mixed Mode Lite (On the HKUST campus and online; HKUST students are required to attend lectures in-person on campus, excepted students who are not in Hong Kong)</p> <p>HKU: Face-to-face</p>
<i>Assessment</i>	<ul style="list-style-type: none"> <li>▪ An essay assignment is needed for assessment (max 2500 words).</li> <li>▪ Attendance rate at least 75% is required for HKUST students (need to sign <u>before and after</u> the class).</li> <li>▪ Every teacher will set an essay question related to their lecture topic, which will be available for student to select in the end of April 2022.</li> <li>▪ A quota is set for each topic (max: 6 students/topic).</li> <li>▪ Students need to indicate their top three choices in priority order within one week and be required to submit their essays within one month.</li> <li>▪ In case of over-quota in any topic, students will be chosen in random, and the remaining students will be assigned to their second-choice topic.</li> <li>▪ The essays will be graded A to F by the topic teachers for grades, which can be translated into Pass/Fail according to each institution's system.</li> <li>▪ 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.</li> </ul>

## Class schedule of 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 **8 Jan 2022**
- Scheduled teaching time: 10:00 am – 1:00 pm (CUHK and HKUST)  
10:30 am – 1:30 pm (HKU)

Date	University	Topic	Teacher
8 Jan 2022	CUHK	Molecular Mechanisms of Neoplasia	Prof. Patrick Tang
15 Jan 2022	CUHK	Clinical Applications of Molecular Diagnostics Techniques	Prof. Peiyong Jiang
22 Jan 2022	CUHK	Clinical Trials Designs Bioinformatics Applications in Molecular Medicine	Prof. Benny Zee Prof. Maggie Wang
29 Jan 2022	CUHK	Non-coding RNAs: Nature's Trash or Treasure?	Prof. Huating Wang
5 Feb 2022	HKUST	Ion channels in health and disease	Prof. Pingbo Huang
12 Feb 2022	HKUST	Disease Proteomics	Prof. Robert Qi
19 Feb 2022	HKUST	Molecular understanding of brain disorders	Prof. Yukinori Hirano
26 Feb 2022	HKUST	MicroRNA in cancer	Prof. Tuan Anh Nguyen
5 March 2022	HKU	Molecular genetics of cancer: genomic analysis	Dr. Helen HN Yan
12 March 2022	HKU	Hypoxia and cancer	Dr. Carmen CL Wong
19 March 2022	HKU	Molecular basis and characterization of new genes	Dr. Judy WP Yam
26 March 2022	HKU	Cancer epigenetics	Dr. Jack CM Wong

### Venue:

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

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

HKU: Cheung Kung Hai Lecture Theatre 4, G/F, William MW Mong Block, 21 Sassoon Road, Pokfulam, Hong Kong.

(Last updated: 4 Jan 2022)