

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 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"> • To obtain basic knowledges of chromosomal abnormality and immunoregulation in cancer development, their latest detection methods and 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, 2020-21: January – March 2021		
<i>Teacher</i>	<i>CUHK</i>	<i>HKUST</i>	<i>HKU</i>
	Prof Peiyong Jiang Prof Maggie Wang Prof Huating Wang Prof Benny Zee Prof Patrick Tang	Prof Jun Xia Prof Robert Z Qi Prof Pingbo Huang 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>Teaching mode</i>	<p><i>All lectures will be delivered in the format of video conference. The link for the lectures will be sent to the students via email.</i></p> <p><i>HKU: to be confirmed</i></p>		
<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 maximum 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 2021; ▪ 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 2, 2021**.
- Scheduled teaching time: 10:00 am to 1:00 pm

Lectures schedule:

Date^a and Time	Responsible by	Topic	Teacher
2 Jan 2021 10:00 – 13:00	CUHK	Clinical Applications of Molecular Diagnostics Techniques I	Prof Patrick Tang
9 Jan 2021 10:00 – 13:00	CUHK	Non-coding RNAs: Nature's Trash or Treasure?	Prof Huating Wang
16 Jan 2021 10:00 – 13:00	CUHK	Clinical Trials Designs Bioinformatics Applications in Molecular Medicine	Prof Benny Zee Prof Maggie Wang
23 Jan 2021 10:00 – 13:00	CUHK	Clinical Applications of Molecular Diagnostics Techniques II	Prof Peiyong Jiang
30 Jan 2021 10:00 – 13:00	HKUST	Molecular understanding of brain disorders	Prof Jun Xia
6 Feb 2021 10:00 – 13:00	HKUST	Disease Proteomics	Prof Robert Z Qi
20 Feb 2021 10:00 – 13:00	HKUST	Ion channels in health and disease	Prof Pingbo Huang
27 Feb 2021 10:00 – 13:00	HKUST	MicroRNA in cancer	Prof Tuan Anh Nguyen

6 March 2021 10:30 – 13:30	HKU	Molecular genetics of cancer: genomic analysis	Dr Helen HN Yan
13 March 2021 10:30 – 13:30	HKU	Hypoxia and cancer	Dr Carmen CL Wong
20 March 2021 10:30 – 13:30	HKU	Molecular basis and characterization of new genes	Dr Judy WP Yam
27 March 2021 10:30 – 13:30	HKU	Cancer epigenetics	Dr Jack CM Wong

Note:

^a Feb 13, 2021 is within the Chinese New Year holidays.