



# Bachelor of Medicine and Bachelor of Surgery (MBChB) &







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# Dean's Message

If you aspire to pursue a career in medicine, it is in your best interest to obtain as much information as possible to make a smart choice that will launch yourself onto a most fulfilling and meaningful career.

Unrestrained by the bounds of tradition, the 34-year-old Faculty of Medicine at The Chinese University of Hong Kong (CUHK) has prided itself as an innovative and forward-looking institution, having educated cohorts of new-generation doctors and clinician-scientists who have gained national and international recognition. Please read sections in this brochure on our research achievements and success stories from our distinguished alumni and students.

Doctors of today and tomorrow are practising in an increasingly complex and technologically demanding environment, constantly shaped by the unprecedented expansion of knowledge, innovations pushing the boundaries of medical sciences, and rising and shifting expectations of patients and of the society.

The faculty has been proactive and responsive in identifying trends in the medical profession and in ensuring the currency and quality of the medical education we are offering. Our on-going review of the medical curriculum and implementation of new initiatives have been supported by highly dedicated teams, appropriately resourced and structured.

Following the launch of our Global Physician-Leadership Stream (GPS) in 2013, our SMART curriculum is yet another response to an ever expanding role of a medical practitioner. Apart from the application of knowledge and skills, building students' capabilities in handling conflicting information, dealing with uncertainties, and managing and communicating risks to patients under their care is equally important. From 2015/16, the faculty has collaborated with the Columbia University, a top-ranked lvy League university, to offer an online, interactive bioethics course to engage medical students in making valued judgements on thorny issues arising from rapid developments in biotechnology like genetics and stem cell research.

Our teachers regard students close partners in shaping the learning experience. Our students' voices and concerns heard through formal and informal settings. Student representatives sit in Year Committees under a newly formed Office of Medical Education, which has consolidated disparate resources to better support an organic and



**Professor Francis K.L. CHAN**Dean, Faculty of Medicine
The Chinese University of Hong Kong

evolving medical curriculum. Our mentorship system and interactions between staff and students in a wide variety of activities offer opportunities for timely feedback and responses to issues of concern.

How is learning best achieved? We encourage students to connect and integrate knowledge from both the formal and informal learning settings. As you can see in the sections titled "To See the World: To Explore, to Experience and to Learn" and "Studying Medicine at CUHK", you will find that learning can also occur with lots of fun and fond memories.

Studying medicine is not a walk in the park. The faculty has at heart the health and well-being of our students. Our devoted teaching staff and student counsellors are there to help and counsel students so that they can move on with confidence to the next milestone.

In addition to reading this brochure, I strongly encourage you to participate in our activities for prospective students, and interact with our students, alumni and teachers. You will find out for yourself why and how studying medicine at CUHK can help unlock your potential and open the door for you to enter a world of possibilities in the field of medical and healthcare sciences.



# Faculty of Medicine The Chinese University of Hong Kong

The history of the Faculty of Medicine can be traced back to the government and Legislative Council's approval in 1974 for the establishment of a new medical school at The Chinese University of Hong Kong. The faculty was set up to meet the needs of society by providing graduates with solid and professional training in medical knowledge and competency.

The faculty believes that medicine is best studied through an approach that integrates knowledge, attitude and skills. In 1981, the medical curriculum was designed in accordance with both international standards and local conditions. In the same year, the Choh-Ming Li Basic Medical Sciences Building was completed and the first batch of students embarked on their study of medicine. About a decade later, undergraduate programmes in nursing and pharmacy and many other postgraduate programmes were introduced.

Currently, the Faculty of Medicine has 5 schools and 14 departments with 417 regular teaching staff and 3,900 adjunct/honorary teaching staff offering courses in 9 undergraduate programmes and a number of postgraduate programmes. We also provide continuing and professional training to public and healthcare professionals. To date, more than 16,700 graduates and undergraduate students have passed through the faculty.

#### 5 Schools



School of Biomedical Sciences



School of Chinese Medicine



School of Pharmacy



The Jockey Club School of Public Health and Primary Care



The Nethersole School of Nursing



# 14 Teaching Departments

- Department of Anaesthesia and Intensive Care
- Department of Anatomical and Cellular Pathology
- Department of Chemical Pathology
- Department of Clinical Oncology
- Department of Imaging and Interventional Radiology
- Department of Medicine and Therapeutics
- Department of Microbiology
- Department of Obstetrics and Gynaecology
- Department of Ophthalmology and Visual Sciences
- Department of Orthopaedics and Traumatology
- Department of Otorhinolaryngology, Head and **Neck Surgery**
- Department of Paediatrics
- Department of Psychiatry
- Department of Surgery

#### **Bachelor of Chinese Medicine (BCM)**

The six-year full-time programme provides solid theoretical knowledge in Traditional Chinese Medicine (TCM) and training in biomedical sciences to students who demonstrate strong clinical and research skills in Chinese Medicine. Graduates work towards the sustainable development of Chinese Medicine and people's well-being.

#### Bachelor of Medicine and Bachelor of Surgery (MBChB)

The six-year full-time programme offers a unique medical curriculum that allows doctors to meet the challenges of an ever-changing healthcare service sector. Together with a year of clinical internship in recognised hospitals, the programme enables graduates to qualify as registered doctors in Hong Kong. The university's teaching hospital is the Prince of Wales Hospital.



In addition to 9 undergraduate programmes, the faculty offers around 70 postgraduate study programmes.

#### **Global Physician-Leadership Stream (GPS)**

In this elite programme, the most capable students receive training in global perspectives and leadership competencies, in addition to the professional medical training of the MBChB curriculum. Graduates are groomed to play pivotal leadership roles in the medical community, both locally and internationally.

#### **Bachelor of Nursing (BNurs)**

The five-year full-time programme prepares students for registration as general registered nurses with the Nursing Council of Hong Kong. Besides theoretical courses, students can also gain experience in the care of clients in both community and hospital settings.

#### Bachelor of Science in Gerontology (BScG)

The two-year full-time articulated programme provides students who possess an Associate Degree or a Higher Diploma with a full scope of knowledge and skills in planning, delivering and coordinating elderly care services in a wide variety of elderly health and social care settings.

#### **Bachelor of Pharmacy (BPharm)**

The four-year full-time programme provides students with the core knowledge, skills and attitudes needed to flourish in pharmacy practice. Students must complete one-year internship after graduation to be qualified as registered pharmacists.

# Bachelor of Science in Biomedical Sciences (BSc in Biomedical Sciences)

The four-year full-time programme is designed to provide students with integrated and holistic training in biomedical sciences. It offers different concentration areas that prepare graduates for career paths in scientific research, health system policy and management, or clinical, pharmaceutical, diagnostics and healthcare related professions.

# Bachelor of Science in Community Health Practice (BSc in Community Health Practice)

The two-year full-time articulated programme has been designed in response to the increase in non-communicable diseases, emerging and re-emerging infectious diseases, and increased societal recognition of the importance of community-based care.

# Bachelor of Science in Public Health (BSc in Public Health)

The four-year full-time programme is the first and only undergraduate programme of its kind in Hong Kong. It provides students who have an interest in public health with valuable insights into health issues of concern to the population.

\* Programme details and admission information are available at www.med.cuhk.edu.hk



# **Bachelor of Medicine and Bachelor of Surgery (MBChB)**

## The SMART Curriculum

As one of the youngest institutions to be ranked among the world's top medical schools, the Faculty of Medicine of The Chinese University of Hong Kong (CUHK Medicine) is reputable for being innovative and forward-thinking. In addition to conducting high impact research, the nurturing of competent and compassionate medical graduates is an important mission of the faculty.

As the traditional system-based and problem-based learning models can no longer meet the expectations of tomorrow's doctors, CUHK Medicine is pleased to launch a unique MBChB programme - the **SMART** curriculum - to nurture our future doctors who will make a difference to the world.

### Prince of Wales Hospital



# Student-centred

We see things through the eyes of our students, understanding their needs and walking them through their difficulties. Our students are inspired to undertake self-directed learning and are equipped to be active learners. Students are motivated to make the most of their potential and will be given ample opportunities to pursue their academic interests.

# Mentorship-based

Our teachers do much more than simply transferring knowledge. They have the interests of their students at heart, see the potential in each student, and have the passion and ability to bring out the best in them.

### Assured Knowledge Acquisition

Students build solid foundations in medical science in the initial years. Well-structured bridging courses are provided to ease the transition from pre-clinical to clinical training. The flexible curriculum allows our students to acquire knowledge, skills, and competence through a variety of innovative platforms.

### Robust Clinical Teaching

Our clinical training begins in the early years. Students acquire clinical competence through a well-designed programme consisting of simulation training, bedside teaching, clinical attachment in centres of excellence, and a pre-internship course before they graduate and work as interns in various hospitals in Hong Kong.

# Teach Bioethics, Communication Skills, and Professionalism

We strongly believe that good doctors are defined not by how much they know about the diseases but by how well they care for people suffering from diseases. A significant proportion of the SMART curriculum is dedicated to the learning of important bioethical values and principles, as well as the cultivation of effective and empathic communication skills and professionalism, which are essential attributes of tomorrow's doctors. Professionalism is emphasised throughout the six years and students are given ample support and advice with respect to professionalism-related issues.





**Professor Simon S.M. NG**Assistant Dean (Learning Experience)
Faculty of Medicine, CUHK

"A positive and inspiring learning experience is essential for students to have their potential fully developed. CUHK Medicine is pleased to launch the SMART curriculum. This unique curriculum is designed using a student-centred and mentorship-based approach, which can help ensure a smooth transition from secondary school to university study for our students. With early clinical training and various teaching platforms, we believe that our students are able to acquire knowledge and skills in the most effective manner. Life as a medical student at CUHK is enriched by the support of very friendly and caring teachers and staff. This supportive learning environment has become a CUHK Medicine hallmark. Students are truly nurtured here."

### The Six-year Curriculum

We offer a six-year medicine programme. The first year is the foundation year; students will learn the basic scientific knowledge and concepts to be applied in subsequent pre-clinical and clinical studies.

Our medical education is more than vocational training. All medical students are benefited from the general education which is a unique strength of CUHK. Students have ample opportunities to learn humanities and other knowledge beyond medicine through the entire curriculum to expand their knowledge and develop their intellectual capacity.

Year 2 and Year 3 offer mainly pre-clinical science training. Students are provided with a solid, comprehensive, and continually updated grounding in biomedical sciences with some community exposure.

Clinical skills training is introduced in pre-clinical years. Bridging courses are offered before students are promoted to Year 4 to further equip our students with the essential pathology knowledge and clinical skills.

In Year 4, students will acquire the skills and knowledge of handling basic clinical problems through clinical attachment to the Prince of Wales Hospital, our primary teaching hospital and other partner hospitals. Anatomical pathology and clinical haematology, chemical pathology, clinical microbiology, medicine and surgery are covered.

In Year 5, students rotate in four clinical disciplines: community and family medicine, obstetrics and gynaecology, paediatrics, and psychiatry. At the end of Year 5, students will broaden their learning, research, and clinical horizons through

tudent entorship ssured based Knowledge centred Acquisition Year 1 **Years 2-3** Year 4 **Foundation Year Pre-clinical Years Clinical Year** - Health Sciences - Anatomical Pathology and Clinical Haematology - Human Structure Knowledge - Chemical Pathology - Systemic Anatomy - Human Function - Clinical Microbiology - Cells and Tissues - Molecular Medicine and Genetics - Medicine and Surgery - Public Health - Basic Pathology - Research Module - Clinical Rotations in Medicine and Surgery - Basic Life Support - Clinical Skills Practical **Clinical Training** - Clinical Skills Modules - Clinical Anatomy and Clinical Skills - Advanced Life Support - Basic Life Support - Doctor and Patient - Doctor and Patient - Bioethics and Humanities - Bioethics and Humanities - Law, Society and Medicine - Communication Skills - Ethics and Society - Clinical Communication Skills - Professionalism - Communication Skills - Professionalism - General Education - Professionalism - General Education

attachments to other healthcare institutes in Hong Kong or overseas during their 8-week elective studies.

In Year 6, students will go through rotations for further clinical teaching in medicine, surgery and other clinical disciplines including anaesthesia and intensive care, clinical oncology, diagnostic imaging and interventional radiology, emergency medicine. ophthalmology, otolaryngology, orthopaedics traumatology. and Students are scheduled to work with interns and clinical teams in their day-to-day clinical duties under the supervision of more senior doctors. Pre-internship training ensures that our students will have a smooth transit to become safe and competent interns.

Throughout the six-year curriculum, training in bioethics, communication skills, and professionalism will be offered to our students. These are all important attributes of our graduates before they are competent and ready to serve the community as junior doctors.



each Bioethics, Communication Skills and Professionalism

# **Clinical Year**

- Community and Family Medicine
- Obstetrics and Gynaecology
- Paediatrics
- Psychiatry

### Year 6 **Clinical Year**

- Medicine, Surgery and various clinical disciplines
- Clinical Rotations in Community and Family Medicine, Obstetrics and Gynaecology, Paediatrics and Psychiatry
- Elective Studies in HK or Overseas
- Clinical Rotations in Medicine and Surgery
- Pre-internship Training
- Bioethics in the practice of the four disciplines
- Clinical Communication Skills
- Professionalism

- Ethics and Society for final year students
- Clinical Communication Skills
- Professionalism



**Dr Vivian LOK** MBChB 2015

"I am proud to have graduated from CUHK Medicine. The art of medicine is to take good care of your patients with good knowledge, good skills and a good heart. We are granted many opportunities in practical skills as well as clinical exposure, including cadaver dissection, conducting normal vaginal delivery, assisting in caesarean sections, and assisting surgery in the operation theatre. Furthermore, we are all taught by and shadow great doctors with caring hearts. And professors acknowledge the talent of each student, giving us the best tailor-made education to excel ourselves. We have been trained to become excellent doctors in loving and nurturing environment.

CUHK graduates have been well known for their good attitude and dedication. I am proud to be one of them!"

### **Admission**

We set out to recruit the very best students. We not only look for academic ability, but also students with a keen interest in medical discipline, high ethical standards, good communication skills, leadership potential, the ability to work as a team, and a strong desire to serve people.

We take in 235 students a year and do not set specific quotas for JUPAS and non-JUPAS places as we prefer to select the students we consider most capable and best suited to become tomorrow's generation of new doctors.

We accept students who rank in the top 1% or higher in the Hong Kong Diploma of Secondary Education (HKDSE) or equivalent standards for other non-JUPAS categories.

The tables below list the minimum requirements of HKDSE in terms of subjects and the grade required for each respective subject to apply for the MBChB programme.

Core Subject(s)	Minimum Level
Chinese Language	3
English Language	4
Liberal Studies	3
Mathematics Compulsory Part	3

Elective Subject(s)	Minimum Level
Biology	3
Any 1 subject (1)	3
OR	
Chemistry	3
Any 1 subject (2)	3

#### Notes:

- (1) Chemistry is preferred.
- (2) Biology is preferred.

Taking a third elective and/or Mathematics Extended Part Module 1 or 2 is strongly recommended. We use the total score of all subjects (4 cores + 2 or 3 electives) to rank the students. As a result, students who take 7 subjects (4 cores + 3 electives) will have an advantage over students who only take 6 subjects (4 cores + 2 electives). The conversion of examination grades to scores works as follows:  $5^{**} = 7$ ,  $5^{*} = 6$ , 5 = 5, 4 = 4, 3 = 3. The extended Mathematics module contributes to the total HKDSE score if the grade in that module is better than the worst of the 3 best electives. Please refer to our faculty website for calculating the total score if the extended Mathematics module is included.





#### **Admission Interviews**

Students will usually be invited to an admission interview if they achieve the minimum scores. Interviews, which last for around 15 minutes, will be conducted in English by senior professors, outstanding medical alumni or distinguished leaders in the community.

#### **Application**

JUPAS applications are made through the JUPAS office and applicants' schools.

Non-JUPAS applications are made via the Office of Admissions and Financial Aid (OAFA). The latest information on the programmes and courses offered is available on the faculty website at www.med.cuhk.edu.hk.

### **Enquiries**

### **Faculty and Planning Office, Faculty of Medicine**

Room G07, G/F, Choh-Ming Li Basic Medical Sciences Building,

The Chinese University of Hong Kong

Shatin, New Territories, Hong Kong

Tel: (852) 3943 6891 / 3943 6806

Fax: (852) 2603 5821 / 2603 7997

Website: www.med.cuhk.edu.hk

Email: faculty@med.cuhk.edu.hk





# **Global Physician-Leadership Stream (GPS)**

### Introduction

Given the changes in the healthcare sector and the challenges ahead, there is a great need to identify and develop a new generation of physician leaders.

The Global Physician-Leadership Stream (GPS) launched in 2013 provides the most capable students with training in global perspectives and leadership competencies, in addition to the professional medical training of the MBChB curriculum.

GPS graduates are expected to play pivotal leadership roles in the medical community, both locally and internationally, while advancing healthcare and benefiting the community at large.

## **Director's Message**

As the first undergraduate medical leadership programme in Asia, GPS goes beyond professional training in medical knowledge, skills and attitudes. It is designed to develop students into future leaders in the medical and healthcare profession in Hong Kong and the international community, fulfilling their aspirations to pursue a clinical or academic career, or to serve in the public, private or humanitarian sectors.

We seek well-rounded applicants with high scholastic potential and an international perspective, who are technically competent, adept at solving problems, and capable of demonstrating a strong sense of responsibility, ethical behaviour, patience and compassion. Most importantly, they should be committed to preserving the health of the community and possess a passion for lifelong learning and inquiry.

We will look ahead and build on our reputation for innovation, discovery and excellence so we may continue to contribute to the health and well-being of individuals and communities.



Professor Justin C.Y. WU

Director, Global Physician-Leadership Stream
Associate Dean (Development)
Faculty of Medicine, CUHK

### **Programme Characteristics and Overview**

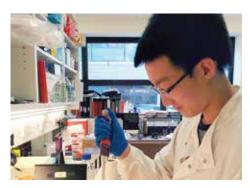
#### **Personal Mentorship Scheme**

We have a large pool of leaders and researchers to educate and nurture our GPS students. Under the Personal Mentorship Scheme, students will be assigned a dedicated academic advisor to assist them throughout their study period. Students will have the opportunity to lead and complete a project under the close supervision of their mentors. We cherish this strong teacher-student bond, which can last for decades.

#### **International Experience**

Outstanding GPS students gain international exposure through funded overseas exchanges, internships and graduate studies at top overseas institutions, including the University of Oxford and the University of Cambridge.









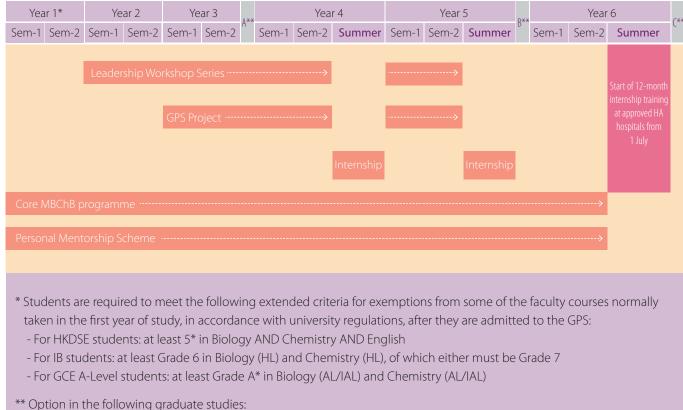
#### **Thomson LOONG**

"What I like most about the GPS programme is the multitude of opportunities available. With these opportunities, I can truly pursue my research interests even at an early stage, which makes my medical education much more worthwhile.

I also enjoy the variety of presentations given by outstanding medical leaders. They provide a global perspective on the medical profession, reminding us that doctors have a responsibility to benefit not only individual patients but also society as a whole."

## **Structured 6-year Course**

#### An Overview of the Global Physician-Leadership Stream



- **A** = 1 year of Master of Research Medicine at CUHK
- **B** = 1 year of Master of Public Health at CUHK or an overseas institution
- **C** = Within 2 years of conferment of MBChB, pursue a Master's or PhD degree at CUHK part-time or full-time at an overseas institution



## **Requirements for Application**

Students are generally required to be among the top 0.25% in their respective university entry examinations in order to be eligible for the Global Physician-Leadership Stream.

JUPAS	HKDSE <sup>(1) (2)</sup>	Total score ≥ 46 AND Any 5** in 4 subjects and with good interview performance and a past record of achievement
Non-JUPAS	International Baccalaureate <sup>(2)</sup>	44/45 or above with good interview performance and a past record of achievement
	GCE A-Level <sup>(2)</sup>	A* in all subjects with an average mark of 97% or above with good interview performance and a past record of achievement
	Others	Selection will be based on academic merit, interview performance and a past record of achievement

#### Notes:

- (1)The HKDSE score is calculated on the 4 core subjects and 3 best elective subjects (where level 5\*\* = 7 points, 5\* = 6 points, 5 = 5 points etc.). The attained level of Mathematics (extended part) will contribute to the score if its level is higher than the lowest level of an elective subject (please refer to the faculty website on admissions for further details). For the number of subjects with 5\*\*, both the compulsory part and optional extended part of Mathematics are treated as one subject. Hence, 5\*\* in both compulsory and extended Mathematics does NOT count as two subjects with 5\*\*.
- (2) Students who meet the following extended criteria are eligible for exemptions from some of the faculty courses that are normally taken in the first year of study in accordance with university regulations, after they are admitted to the GPS:
  - For HKDSE students: at least 5\* in Biology AND Chemistry AND English
  - For IB students: at least Grade 6 in Biology (HL) and Chemistry (HL), of which either must be Grade 7
  - For GCE A-Level students: at least Grade A\* in Biology (AL/IAL) and Chemistry (AL/IAL).

The above admission requirements are subject to change without prior notice. For the latest information on admission requirements, please refer to our faculty website at www.med.cuhk.edu.hk.





#### Coco CHAN

"I have enjoyed a meaningful and fruitful year full of good memories.

The GPS provided me with the opportunity to make new friends not only from CUHK Medicine but also from Oxford, and to share my experiences with high school students and professors.

One of the highlights of my year was the Stand TALL project when we visited Sichuan to follow up on the progress of the rehabilitation of earthquake victims. We not only met patients and learned about rehabilitation, but we also learned from the professors how to run an NGO, how to hold an event, and how to plan our future career path. These were invaluable experiences which I treasure very much."



Source: Li Ka Shing Institute of Health Sciences

# **Research: Unlocking the Secrets**

The Faculty of Medicine is involved in a wide range of medical research and the development of advanced clinical technology.

We have achieved regional and world firsts in many areas of clinical research and procedures and have helped Hong Kong gain a reputation as a pioneer in some of the world's most advanced surgical technologies and techniques.

To help fulfil our research mission, the faculty has developed numerous state-of-the-art research facilities, including the Li Ka Shing Institute of Health Sciences, the Lo Kwee-Seong Integrated Biomedical Sciences Building, the Lee Hysan Clinical Research Laboratories and the two State Key Laboratories of Oncology and Digestive Disease.



#### **Diabetes and Personalised Medicine**

Diabetes has become a major global public health problem and is associated with complications that can result in blindness, kidney failure and heart problems. These complications lead to poor health and account for a large proportion of the healthcare burden in most countries. Diabetes and diabetic complications can be prevented by addressing the risk factors at the early stages.

Our research focuses on the latest genomic technologies to discover novel genetic and other molecular markers associated with diabetes and diabetic complications, in order to identify at-risk individuals for early intervention and provide new biological targets for drug development. We are also developing biomarkers linked to treatment response in order to provide better, more tailored treatments for Recent achievements include identification and development of a panel of genetic markers that predict kidney complications in diabetes and the identification of a genetic variant near the PAX4 gene as a novel genetic marker for type 2 diabetes among Chinese and other Asian populations.

#### **Gastrointestinal Research**

Gastrointestinal (GI) cancers, including gastric, liver and colorectal cancers, are major causes of morbidity and mortality among Chinese. The State Key Laboratory of Digestive Disease at CUHK consists of a world-leading team of scientists and clinicians working at the forefront of GI research, such as cancer and its related diseases. Our work includes the whole genome profiling of GI cancers for the development of novel diagnostic biomarkers and drug targets, the delineation of the role of gut microflora in GI diseases, treatment of HBV and the management of peptic ulcer bleeding.

Highlights of our recent research include (1) the identification of mutations and epigenetic alterations of Epstein-Barr virus (EBV)-associated gastric cancer; (2) the development of microRNAs (miR-34a-5p, miR-221 and miR-18a) as non-invasive biomarkers for colorectal cancer; (3) identification of a novel oncogene in colorectal cancer (SLC12A5) and; (4) tumour suppressor genes (DACT2, BCL6B, CLDN3, CA4 and MDGA2) in Gl cancers.

Our research group has published over 1,600 peer-reviewed articles including 312 high-impact



Source: Li Ka Shing Institute of Health Sciences

papers and has been honoured with 42 prestigious national and international prizes, such as two State Scientific & Technological Progress Awards, the Laurel Awards for International Leadership and three first-class Ministry of Education Higher Education Outstanding Natural Science Output Awards.

#### Genomics

The faculty is at the forefront of the clinical application of genomics. In particular, researchers within the faculty have pioneered the field of non-invasive prenatal diagnosis following our discovery of fetal DNA in maternal plasma in 1997. We have developed a robust non-invasive prenatal test for Down syndrome that is now used by over a million pregnant women in over 60 countries around the world. We are also the first in the world to sequence the fetal genome from maternal plasma.

Our researchers are also prominent in cancer genomics, especially for liver and nasopharyngeal cancers. We have developed high throughput DNA sequencing approaches towards a promising blood test that can potentially detect all types of cancer.

These research groups have been supported by the highly competitive and prestigious State Key Laboratory Programme of China, the Areas of Excellence Programme of the University Grants Committee and the Theme-based Research Scheme of the Hong Kong Research Grants Council.

Our researchers in these areas have been recognised through their election to the Chinese Academy of Sciences, the Chinese Academy of Engineering, the Royal Society, the US National Academy of Sciences and the World Academy of Sciences. Other recognitions include the King Faisal Prize in Medicine (2014), the Chinese Young Women in Science Fellowship (2012), and awards from the Ministry of Science and Technology and the Ministry of Education of China.

We developed a robust non-invasive prenatal test for Down syndrome that is now used by over a million pregnant women in over 60 countries around the world.

Professor Dennis Y.M. LO

Associate Dean (Research)
Faculty of Medicine, CUHK



#### **Integrative Medicine**

The Hong Kong Institute of Integrative Medicine was established in the autumn of 2014 to develop an innovative model of healthcare service that synergises the strengths of both Western and Chinese medicine.

Distinguished from other local integrative medical units, the institute aims to explore the application of research findings on patients in order to bring about improvements in disease treatments and cutbacks in treatment costs, and alleviate the burden on patients and the health system caused by medical treatments.

The institute employs an evidence-based medicine process to study and evaluate the efficacy of integrative medicine in areas such as stroke rehabilitation, chronic pain treatment, metabolic diseases, digestive diseases, skin diseases, cancer rehabilitation, and women's health.

In response to the increasing demand for integrative medicine, the institute also investigates how Chinese and Western medicine can collaborate on risk management, clinical governance and teamwork on the existing clinical platform.

#### **Liver Research**

Liver disease is highly prevalent in Asia. In Hong Kong, 7% and 27% of the general population have chronic hepatitis B and non-alcoholic fatty liver disease respectively, which may result in cirrhosis and liver cancer.

Our objective is to improve diagnostic accuracy, develop effective treatments and prevent complications in patients with liver disease. The CUHK research team has led a number of international clinical trials for the treatment of chronic hepatitis B. We were among the first to show that antiviral therapy can prevent disease progression and liver cancer in chronic hepatitis B, pioneered the use of transient elastography to accurately diagnose liver fibrosis and cirrhosis, and developed a clinical score to predict liver cancer so that high risk patients can receive early diagnosis and curative treatment.

Our research findings have been cited in international guidelines and have received numerous research awards, including the first-class MoE Higher Education Outstanding Scientific Research Output Award from China in 2013.



Up to date, the CUHK Jockey Club
Minimally Invasive Surgical Skills Centre
has conducted 1,155 training courses
and trained 17,522 healthcare
professionals. The Robotic Surgery
Training Centre established in 2008 is
the first outside the US and Europe. A
total of 1,103 surgeons have received
basic robotic surgical training at the
Centre.

#### Professor Philip W.Y. CHIU

Director, CUHK Jockey Club Minimally Invasive Surgical Skills Centre

#### Oncology

Our researchers are internationally recognised leaders in cancers prevalent in Asia, including liver, nasopharnx, stomach and lung cancers.

The Department of Clinical Oncology is part of the Partner State Key Laboratory of Oncology in South China (CUHK) and is an active member of the Phase II Mayo Consortium hosting US NCI funded studies through our involvement in the Cancer Therapeutics Research Group. The department has two professorships held by Professor Anthony CHAN and Professor Tony MOK, supported by the Li Shu Fan Medical Foundation.

Since 2007, we have been conducting studies through Radiation Therapy Oncology Group (now NRG Oncology) and in 2009 became a Sister Institution of the MD Anderson Cancer Center in the United States.

Between 2011 and 2015, our investigators published 26 papers with an impact factor of over 10. We are also involved in research projects with Cancer Research UK, Stanford University and the University of Liverpool. The PROFILE 1014 study's results have been published in the *New England Journal of Medicine* with Professor Tony MOK as co-first author. This randomised study defined the role of first line Crizotinib for patients with ALK re-arrangement.

Professor Tony MOK was the recipient of the second-class

award in Natural Sciences from the Ministry of Education in 2014.

#### **Robotic and Minimally Invasive Surgery**

The first laparoscopic cholecystectomy performed by the Department of Surgery at The Chinese University of Hong Kong in 1990 introduced minimally invasive surgery (MIS) to Hong Kong. Minimally invasive surgery results in less pain for patients after surgery and improves perioperative outcomes. Since then, we have made major advances in minimally invasive surgery, including the application of laparoscopic colectomy for colorectal cancers, laparoscopic repair of perforated peptic ulcers, laparoscopic appendicectomy and thoracoscopic surgeries.

Our work has been extensively published and widely cited in the medical literature, and we have contributed to the medical community through publications in respected high-impact journals such as *The Lancet, Gastroenterology, Annals of Surgery*, and *Journal of Bariatric Surgery*.

In 2005, The Chinese University of Hong Kong established the CUHK Jockey Club Minimally Invasive Surgical Skills Centre. This unique multidisciplinary centre is equipped with advanced laparoscopic facilities for the most up-to-date training of MIS surgeons.

# The Journey to Become a Future Clinician-Scientist

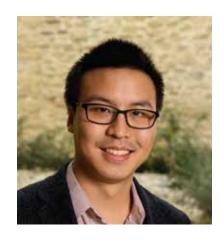
The Faculty of Medicine conducts a wide range of biomedical and other healthcare-related research. In addition to providing first-class facilities for researchers and significant postgraduate training, the faculty trains future clinician-scientists through its undergraduate programmes. Students have the opportunity to learn scientific research skills and participate in exciting research projects.

#### **Dr Timothy H.T. CHENG**

MBChB (CUHK), DPhil (Oxon)

Rhodes Scholar, Hong Kong and Green Templeton 2010

My time at CUHK gave me a solid platform to pursue doctoral studies in cancer genetics at the University of Oxford. I think it is a terrific opportunity to strike a balance between practising medicine and taking the time to think and ask questions about the many things that remain unknown. I have recently returned to the Department of Chemical Pathology, CUHK to train as a specialist and to conduct research about circulating nucleic acids with Professor Dennis LO and his team.



Dr CHENG was selected as the Hong Kong Rhodes Scholar for 2010. He was the first medical student in Hong Kong to have been awarded the scholarship to pursue a research degree in basic medical sciences at the University of Oxford.





#### **Landon CHAN**

Since a young age, I have wanted a career that allows me to care for people, to conduct research and to teach. I found this combination of work extremely rewarding, and I have set my goal to become a clinician-scientist. In particular, I have a strong interest in the application of genomics science in personalised medicine. Through the GPS programme, I am very thankful to have Professor Dennis LO as my mentor to coach me in both my personal and academic development. Because of him, my research interest and personal character have been allowed to flourish. Under his mentorship, I have published my first-authored academic review paper.

I am also grateful for the generous support of the Gerald Choa Memorial Fund Overseas Exchange Scholarship, which enabled my summer research experience at the Gerstein Lab, Yale University. At Yale, I got the opportunity to participate in international consortiums such as the



Encyclopedia of DNA Elements (ENCODE). In particular, I worked on a project related to targeted enhancer prediction. Through this opportunity, I gained invaluable insights into how scientific discoveries are translated into clinical practice.

In the future, I wish to dedicate myself as a clinician-scientist to providing both state-of-the-art care and evidence-based medicine to my patients. I would like to thank the faculty and, in particular, my mentors from the GPS programme for providing me with such a wonderful combination of strong support in helping me to realise my dream.



# To See the World: To Explore, to Experience and to Learn

With the guidance and approval of the Coordinator of Clinical Elective, each student arranges an attachment of their choice either in Hong Kong or overseas in order to broaden their horizons. The clinical elective is conducted in Year 5 summer for four to six weeks. In 2015, 85% of the students completed their clinical electives in overseas attachments across 17 countries, while 10% completed the clinical electives in Hong Kong and 5% in China.

The university also has a long tradition of promoting term-time exchanges to give our students international exposure. Over the past few years, some of our medical students have taken part in one-year exchange study programmes in Europe and the United States.

With the new curriculum, we envisage an increase in flexibility to enhance these term-time exchange studies for medical students. In addition, the faculty is building a network of exchange schemes with overseas medical schools and institutions, such as the Karolinska Institutet (KI).

Launched in 2013, the GPS programme provides outstanding students with opportunities to take part in overseas exchanges and pursue graduate studies at top overseas institutions such as the University of Oxford and the University of Cambridge.

#### **Tommy LAI**

Elective in Toronto

Last summer, I had an elective placement in the Division of Neurosurgery at SickKids Hospital in Toronto. It allowed me to explore this ever-changing field in medicine in depth. I learned to appreciate the work of a neurosurgeon and the multi-disciplinary team involved in treating various neurological disorders in operation theatres and clinics.

Research has always been a crucial part of medical training in North America. During my time in Toronto, I made several visits to the key laboratories at SickKids on brain research, and attended a number of symposiums. From the basic mouse-work to a ground-breaking experiment in gold nano-particles, I had a glimpse into the future of neurosurgery.

I am very thankful for all the support from the faculty in making this experience possible.





elective, hoping to learn how to treat patients in resource-scarce settings. Care should not be limited by The most memorable experience was travelling to slum

outreach clinics. The slum-dwellers live in extreme poverty, unable to afford one meal per day. I met an elderly lady who was deaf, blind, and had malignant hypertension. She could not afford hospital admission, hence we only treated her with antihypertensives. As she could not care for herself, her neighbours shared food with her whenever possible. Despite her struggles, she wore a huge smile. Kindness is the language that the deaf can hear and the blind can see.

The earthquake hit while we were in Nepal. I experienced the intense anticipatory fear and worry accompanying near-death events. I hope to become a doctor who can empathise and walk with those during a life crisis.



# Studying Medicine at CUHK

The faculty encourages students to explore their potential, widen their perspectives and serve the community in addition to pursuing their studies. Through various student associations and a wide range of opportunities, our medical students are active on and beyond the campus.

#### To Learn

Our students are self-motivated learners. Besides attending lectures and receiving clinical training, students can practise physical examinations and clinical procedures at the Kai Chong Tong Clinical Skills Learning Centre and broaden their knowledge through online courses. Students also establish study groups and workshops to learn from each other in striving for the same goal – to be a good doctor.

#### **Teaching Facilities**

To facilitate student learning, we provide state-of-the-art facilities and various learning platforms ranging from a clinical skills centre, medical library and laboratories to an online teaching system:

- Choh-Ming Li Basic Medical Sciences Building
- Kai Chong Tong Clinical Skills Learning Centre
- Li Ka Shing Institute of Health Sciences
- Li Ping Medical Library
- Lo Kwee-Seong Integrated Biomedical Sciences Building
- Prince of Wales Hospital (teaching hospital)

#### **Suturing Workshops**

As a student-led surgical society in Hong Kong, the Student Surgical Association of Hong Kong (SSAHK) organised the first-ever suturing workshops for pre-clinical students in 2014. Experienced surgeons were invited from both the public and private sectors to teach participants basic suturing and knot-tying skills. Students were placed in a small group setting and provided with their own sets of materials. Through this learning experience, students were inspired by the skills and knowledge demonstrated by our tutors and glimpsed the life of surgeon.



#### **About SSAHK:**

The Student Surgical Association of Hong Kong (SSAHK) is a student organisation jointly run by medical students from The University of Hong Kong and The Chinese University of Hong Kong. It aims to broaden students' horizons in different surgical specialties by connecting medical students from both medical schools with the surgeons.

The association provides medical students with opportunities that range from extra skills learning to networking and socialising. Ultimately, its aim is to encourage surgical exposure, interest and education at the undergraduate level. By organising events such as career nights, it is hoped to provide a better communication platform between practising surgeons and medical students.



### **To Serve**

Compassion and passion are two of the most vital aspects of patient care. Our students are encouraged to participate in health projects serving both local and international communities. Some students go beyond merely participating and organise their own projects. Through these valuable experiences, students are able to broaden their horizons, hone interpersonal skills, and remind themselves what it is to be a good doctor.

#### The Ethnic Minority Health Project

The mission of the Ethnic Minority Health Project is to mitigate the adverse human impact of natural disasters, as well as to reduce behavioural and environmental health risks through evidence-based health education campaigns in remote, disaster-prone, and poverty stricken communities in rural China. The project is a collaborative effort among students, faculties, local and international professionals, as well as community representatives from a wide array of disciplines.

In 2015, the team visited the Dai ethnic group in Manbengtang Village at Xishuangbanna Dai Autonomous Prefecture of Yunnan Province, China. They aimed to empower the villagers with health interventions that alleviated the adverse impacts of natural disasters and health risks related to behavioural factors. Based on data that revealed villagers' preparedness for disasters and health awareness, students gave presentations on a variety of health topics including waste management, open trash burning and food safety.

#### **Judy CHAN**

"In January 2015, I followed a team of public health professionals on a five-day health intervention trip to Xishuangbanna, Yunnan. By means of drama and interactive games, we conveyed health messages to the villagers of the Dai ethnicity. Going on this field trip has inspired me to understand health issues in different cultural contexts and brought me one step closer to serving the global community in the future!"



#### **Uganda Medical Service Trip**

Medical Outreachers Hong Kong (MOHK) held its first international service in collaboration with Watoto in Uganda in the summer of 2015. Over the course of 15 days, medical students from both CUHK and HKU travelled to the rural areas of Kampala and Gulu. Together with doctors, students offered medical services in villages where health services and medicine are lacking. Students also visited village children and educated them on health issues. The outcome of the trip echoed that of MOHK: to cultivate devotion in the practice of medicine. The trip also left students reflecting on how they can fulfil their roles as global citizens and future doctors.



#### **About Medical Outreachers Hong Kong:**

Medical Outreachers Hong Kong (MOHK) is a non-governmental charitable organisation composed of medical students from both The University of Hong Kong and The Chinese University of Hong Kong. The organisation aims to cultivate and develop the passion of students in the practice of medicine while caring for others through various humanitarian actions. MOHK is cooperating with other NGOs to organise different services, ranging from local to international, for medical students.



#### MedStart

MedStart is a two-day medical school experience organised by The Asian Medical Students' Association Hong Kong (AMSAHK) for students from secondary schools who show an interest in applying for medical school. The programme spends one day each at CUHK and HKU, where students gain an understanding of medical school, knowledge of a career in medicine, and assistance in making an informed decision about medical school throughout the application process.

A variety of experiences and activities are included in the programme:

- Medical lectures by professors of CUHK and HKU medical faculties
- Tour of medical faculties
- Sharing by doctors at different stages of their medical career and medical students
- Clinical skills experience and training
- Case-study tutorial sessions
- Tutorial discussion on social topics

#### **About AMSAHK:**

The Asian Medical Students' Association Hong Kong (AMSAHK) is a student-led organisation jointly run by medical students from The University of Hong Kong and The Chinese University of Hong Kong. Bringing together medical students from two entities in Hong Kong, the AMSAHK aims to cultivate local awareness and global perspectives on health issues and beyond. AMSAHK is a founding member of AMSA International and an associate member of the International Federation of Medical Students' Associations recognised by both the WHO and the UN. It provides an extensive global network for medical students through overseas conferences and international student exchange programmes. Locally, AMSAHK organises public health projects and is the founder of the MedStart programme. AMSAHK encourages students not only to acquire medical knowledge from textbooks but also to form lasting bonds with students from different backgrounds through a variety of events.







### To Enjoy

We believe university life is more than study. It is also about meeting different people, building lifelong friendships, exploring your interests and discovering yourself. Through the activities organised by the faculty and student societies, you can make the best of your time as a medical student. The bonding does not just happen among students but also with professors and alumni — the family-like relationship has become a hallmark of CUHK Medicine.

#### **MedEgg Production**

MedEgg Production is a non-profit organisation with the aim of promoting dramatic productions among medical students. The team is purely composed of medical students, taking part from the frontstage to the backstage. By participating in MedEgg's productions, CUHK medical students are able to build self-confidence and develop teamwork skills as well as a sense of responsibility, all of which are critical to the development of a student's career. In 2015, MedEgg

became the first non-college drama team to take part in the Inter-Collegiate Drama Competition at CUHK. Besides the competition, MedEgg stages three productions each year, including the Variety Show held by the Medical Society in the Medical Students' Festival, the Annual Production and the Summer Production. Through drama, MedEgg also hopes to convey the views and aspirations of future doctors.





#### Medical Students' Festival

The Medical Students' Festival is a fundraising event for charity in October and November. Activities during the festival include a carnival, bubble soccer match, walkathon and variety show, all of which are designed to raise funds for patients.

Students can also learn about the charity during the festival and gain a deeper understanding of the charitable foundation. The festival further enables students to develop a sense of responsibility by serving the community while having fun and widening their social network.



#### **About the Medical Society:**

The 34th Medical Society is named Medeavor, a portmanteau word combining medicine and endeavor. Endeavor represents the resilience of 17 committee members serving medical students, while med implies the nature of the medical society. The whole name stands for its mission of serving medical students.

Starting in 2016, it will make the interests of medical students its first priority by helping them build a well-connected social network and bringing them a series of exciting activities. As expressed in its slogan — Endeavor. Together. For better — the society is endeavouring to form stronger bonds among medical students and with society at large for a richer and more enjoyable university experience.



# **Financial Aid and Scholarships**

Students can apply for territory-wide university, college and faculty scholarships. The university and the Faculty of Medicine offer around 300 scholarships and awards to students who achieve academic excellence, demonstrate outstanding leadership, and participate in extracurricular and community services. In 2014/15, the percentage of medical students receiving scholarships by year of study was 33%. To help students in need meet part of the cost of their university education, the government has made provisions for grants and loans through the Student Finance Office. The university and the Faculty of Medicine also administer their own bursaries, loans and campus work schemes for registered local and non-local students.





#### Polly LAM

Awardee of City Lions Club of Hong Kong Award and Kan Tong Po Gold Medal in Medical Studies

I would like to thank my teachers for their guidance and dedication in nurturing future doctors. They set excellent examples of good doctors who treat patients with a caring heart and professionalism.

Life in medical school was joyful yet tough. I was very lucky to have supportive friends

and family in my journey. After spending five years in medical school, it is my turn to step out of the protected zone and join the frontline. I shall continue to strive for excellence and become a doctor who heals physical illnesses and comforts souls.



#### **Catherine CHAN**

Awardee of Hong Kong Scholarship for Excellence Scheme and Diana LEE WONG Pui Yue Memorial Scholarship

It is my honour to be awarded the Hong Kong Scholarship for Excellence Scheme and Diana LEE WONG Pui Yue Memorial Scholarship for the Master of Research on Medical Robotics and Image Guided Intervention at Imperial College London in the academic year 2015/16.

With an aspiration of integrating the knowledge of both doctors and engineers,

the scholarships allow me to explore the novel field of medical robotics, to carry out innovative research and to meet friends sharing similar thoughts. Also, it provides a platform to establish global connections across different fields.

I hope to become a clinician-scientist in future, bringing cutting-edge technology to our society.

# Messages from Alumni

#### Dr The Hon Ka Lau LEUNG

Member, Legislative Council, HKSAR MBChB 1986; MD 2005

"In this profession, our primary goal is to work for the best of our patients. The greatest satisfaction comes from their full recovery."



#### Dr Che Chung LUK

Cluster Chief Executive, Hong Kong West Cluster, Hospital Authority MBChB 1986

"Being a doctor is never an easy job. You have to be resilient and tolerant of hardship, heavy workload, and the tremendous stress that comes with saving lives. However, your painstaking efforts are worth making when you witness the full recovery of your patients."



#### **Dr Fei Chau PANG** Chief Manager (Medical Grade),

. MBChB 1994

Hospital Authority

"The white coat any doctor wears is not merely uniform, but a symbol of respect and trust by patients. I thank CUHK Medicine for providing me with the clinical skills and professionalism I need as a doctor to serve patients. Nevertheless, the education of the medical school is the doorway which takes us into our lifelong career. Once through that door, there is still a long way to go to learn how to win trust from the community."





# Messages from Alumni

#### **Prof James C.S. CHIM**

SH Ho Professor, Haematology & Medical Oncology, Department of Medicine, The University of Hong Kong MBChB 1986

"To make a good clinician, knowledge, clinical skill, empathy and effective communication matter. To strive for excellence, passion counts in addition to all of the above. Translational research is the key to seeing the future of medicine."



#### Dr Namrata ARORA

MBChB 2011

"Through the one-month Overseas Exchange Student Programme, medical students can choose to visit hospitals in foreign countries. I had my elective clinical attachment in India, where I had the opportunity to experience medical practices there as well as the culture."



#### **Dr Wing Tai SIU**

Clinical Associate Professor (honorary), Department of Surgery, CUHK; Consultant Surgeon, Hong Kong Sanatorium & Hospital MBChB 1989

"The Faculty of Medicine of CUHK is an outstanding medical school. It is located in a comfortable and beautiful campus. Since my graduation, I have witnessed the growth of my Alma Mater. Young as she may be, our medical school is privileged in not being under the constraint of rigid traditions. Every member enjoys the freedom of innovation and development. I foresee a brilliant future for the Faculty of Medicine of CUHK."



#### **Dr Jennifer LUI**

Top Ten Regeneration Warriors 2005 MBChB 2012

"Studying medicine is tough and challenging, yet it became interesting and fulfilling with the support of all my classmates and teachers. With their help, I was able to overcome obstacles and solve problems I encountered. I studied with my classmates, prepared for examinations and celebrated festivals together. These friendships are the most invaluable thing I gained in these years."







## **Enquiries**

## **Transforming our Passion into Perfection**

**Choh-Ming Li Basic Medical Sciences Building** The Chinese University of Hong Kong Shatin, NT, Hong Kong

Telephone: (852) 3943 6891 / 3943 6806 Fax: (852) 2603 5821 / 2603 7997 Email: faculty@med.cuhk.edu.hk Website: www.med.cuhk.edu.hk



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