

The Chinese University of Hong Kong
School of Biomedical Sciences
香港中文大學生物醫學學院

A
Decade
of
Adventure
and
Growth



SCHOOL OF
BIOMEDICAL SCIENCES
CUHK

2010-2020

10





Content

FOUNDING DIRECTOR'S MESSAGE	1
CONGRATULATORY MESSAGES	3
MILESTONES IN RETROSPECT	9
RESEARCH EXCELLENCE	13
NURTURING TALENTS	31
OUTREACH ENDEAVOURS	61
OUR PEOPLE	75
PRECIOUS MOMENTS	81
THE WAY FORWARD	85



FOUNDING DIRECTOR'S MESSAGE



Professor Chan Wai-yee

Li Ka Shing Professor of Biomedical Sciences
Founding Director, School of Biomedical Sciences
The Chinese University of Hong Kong

Through amalgamating the former pre-clinical Departments of Anatomy, Biochemistry (Medicine), Pharmacology and Physiology under the Faculty of Medicine, the School of Biomedical Sciences (SBS) was officially inaugurated in January 2010. Our adventure started with the vision to nurture physicians and other healthcare workers who are abreast of current biomedical advances and scientific investigators who have the ability to do cutting-edge research that will lead to alleviation of human suffering. Today I proudly present this booklet titled ***A Decade of Adventure and Growth***, journeying our stakeholders and readers through the major milestones and accomplishments achieved in the School's first brilliant decade of development.

Over the years, we have devoted unfailing efforts and resources to achieving research excellence. In response to the fast-changing research landscape, we successfully restructured our Thematic Research Programs (TRPs) from five to three in 2016. The annual flagship SBS Research Day has been gathering our promising researchers to interact and explore collaborations since 2010. The set-up and continuous upgrading of centralised Core Laboratories and Animal Holding Core have greatly enhanced our research strengths and competitiveness. This is reflected by the steady increase in the amount of competitive grants awarded, and the impact factor of our research publications.



The School has continued to inject substantial resources to the well-rounded education to nurture future talents. We have successfully launched the articulated MPhil-PhD Programme in Biomedical Sciences in 2010 and the Bachelor of Science (BSc) in Biomedical Sciences Programme in 2016. The formation of Division of Education with various pedagogical innovation projects, the annual SBS Postgraduate Research Day, and the migration of the MSc in Genomics and Bioinformatics Programme to the School in 2018 have all shaped our School as a notable biomedical sciences education hub in the Asia-Pacific region.

With our ongoing efforts in academic outreach and networking, the School has established extensive scholarly links with various universities and research institutions through the development of over 20 Memoranda of Understandings regionally as well as globally to strengthen collaborative research partnerships. A number of joint laboratories and centres have also been established.

All these tremendous achievements have been made possible with the firm support of our senior management of the University and the Faculty, especially Prof. Lawrence J. Lau, Prof. Joseph J.Y. Sung, our former Vice-Chancellors and Presidents of CUHK; Prof. Rocky S. Tuan, current Vice-Chancellor and President; Prof. Fok Tai-fai, former Dean of Faculty of Medicine; and Prof. Francis K.L. Chan, our current Dean. I also wish to extend my heartfelt gratitude to the Vitasoy Group and Lo Kwee Seong Foundation for the generous contributions to our establishment and education scholarships. Last but not least, I would like to thank all School members and staff who have jointly built up our success today.

Moving forward to the next decade, there are surely many challenges and opportunities lying side by side in this ever-evolving era. Here, I would like to solicit your full support to the new School Director, Prof. Andrew M. Chan, who will lead the School to further success that could shed light on conundrums in biomedical sciences, and bring hope to the world.

CONGRATULATORY MESSAGES



Professor Rocky S. Tuan

Vice-Chancellor and President,
Lee Quo Wei and Lee Yick Hoi Lun Professor of
Tissue Engineering and Regenerative Medicine,
The Chinese University of Hong Kong

It gives me great pleasure to extend my heartiest congratulations to the School of Biomedical Sciences on the occasion of its 10th anniversary. The special milestone provides an opportune moment for us to celebrate the proud history and impressive achievements of the School.

The area of biomedical sciences has been one of the most innovative and rapidly developing research disciplines. In the early days of the School, I had the honour to serve on its Scientific Advisory Committee and have witnessed its successful development and transformation over the past ten years. The many cutting-edge and multidisciplinary research projects undertaken by groups of vibrant and interactive faculty members, the abiding passion to broaden and enhance students' professional outlook and learning experiences demonstrated by a strong team of committed teaching staff, and the dedicated pursuit of collaborative academic and research networks across the continents are just some of the prime examples that showcase the School's unflinching commitment to educational and research excellence.

Over the past decade, the School has continued to gain visibility and recognition in national, regional and international academic communities. This achievement would not have been possible without the visionary leadership and exceptional devotion of Prof. Chan Wai-ye, Founding Director of the School, as well as the enormous contributions and steadfastness of all the School members. My sincerest gratitude also goes to the many benefactors, in particular the Vitasoy Group and the Lo Kwee Seong Foundation, for their unwavering support that has allowed the School to lay a solid foundation in the pursuit of multidisciplinary biomedical research and pedagogical innovations.

I am wholeheartedly confident that the School will continue to thrive and reach new levels of success under the new directorship of Prof. Andrew Chan. I look forward to witnessing more research breakthroughs and discoveries by the School that will contribute to the understanding and treatment of human diseases.

Professor Lawrence J. Lau

Former Vice-Chancellor and President (2004–2010),
Ralph and Claire Landau Professor of Economics,
Lau Chor Tak Institute of Global Economics and Finance,
The Chinese University of Hong Kong

It is with great pleasure that I offer my hearty congratulations to the School of Biomedical Sciences in the Faculty of Medicine at the Chinese University of Hong Kong on its 10th anniversary.

When I served as the Vice-Chancellor and President, the University decided to develop biomedical sciences as one of the Focused Areas of Research. With the ceaseless efforts of the Faculty of Medicine, the School was formed through amalgamating the four former pre-clinical departments and inaugurated in January 2010. Being the first-of-its-kind institution established in local universities, the School made tremendous achievements across different areas in its first decade of development, particularly in terms of promoting multidisciplinary research, securing major competitive grants, nurturing biomedical and medical students, as well as reaching out to renowned academic institutions outside of Hong Kong.

I wish to extend my sincerest appreciation to Prof. Chan Wai-ye, Founding Director of the School, and the many members of the School for their invaluable contributions over the years. I deeply believe that under the new leadership of Prof. Andrew Chan, the School will continue to thrive and reach new heights of excellence in the next ten years and beyond.



Professor Joseph J.Y. Sung

Former Vice-Chancellor and President (2010–2017),
Mok Hing Yiu Professor of Medicine,
Department of Medicine and Therapeutics,
The Chinese University of Hong Kong

It is such a special time, in the midst of COVID-19 pandemic, for me to write a congratulatory message for the 10th anniversary of the School of Biomedical Sciences (SBS).

The establishment of SBS was based on a review of preclinical science departments initiated by the Faculty of Medicine and Prof. Chan Wai-ye being invited to chair. With his vision and experience, we decided to merge the departments of Anatomy, Biochemistry (Medicine), Physiology and Pharmacology into one, hence the School of Biomedical Sciences. On looking back, this is one of the cleverest decisions we have made in CUHK.

Over the past decade, SBS has developed into several solid themes of research producing admirable results. Research and teaching have been progressing well and they are enhancing each other. I want to thank Prof. Chan Wai-ye, the Founding Director for all the contributions he has made, from inception to maturation of SBS. I also want to congratulate Prof. Andrew Chan to take up this leadership and wish him to scale new heights for SBS.

The global outbreak of COVID-19, together with advances in genomics, metagenomics, metabolomics, and many other omics have proven to us that this is the era of biological sciences. As Yuval N. Harari said in his bestseller, *Homo Deus*, this is the era of New Human Agenda. Let us work together to create a better future for mankind.

Happy birthday, School of Biomedical Sciences!



Professor Benjamin W. Wah

Former Provost (2009–2019),
Wei Lun Professor of Computer Science and Engineering,
Department of Computer Science and Engineering,
The Chinese University of Hong Kong

I like to offer my heartfelt congratulations on the 10th anniversary of the School of Biomedical Sciences. Since its inception, the School has committed to conducting world-class biomedical research through interdisciplinary innovations and collaborations, as well as its acclaimed educational programmes of the Faculty of Medicine. Under the capable leadership of its former Director, Prof. Chan Wai-ye, and its current Director, Prof. Andrew Chan, we have witnessed the School's immense success in the last ten years.

The School has become one of the top educational and research institutes on biomedical sciences, with its ample funding of over HK\$350 million, numerous academic and research awards by its faculty and students, a balanced portfolio of research programmes and laboratories, and many collaborations with international partners. With the solid foundation built, we expect the School to bring our medical research to the next higher level and become a world-leading centre of research and education in the next decade.



Professor Fok Tai-fai

Pro-Vice-Chancellor / Vice-President,
Choh-Ming Li Professor of Paediatrics,
The Chinese University of Hong Kong

As the former Dean of the Faculty of Medicine, I am happy to say that one of my most memorable moments during my deanship was witnessing the merger of the previous four preclinical departments (namely Anatomy, Biochemistry, Pharmacology and Physiology) into the current School of Biomedical Sciences in the year 2010. This bold and unprecedented move has proven to be fruitful and rewarding, as reflected by the remarkable synergies achieved among researchers and teachers in the new School. The breaking down of departmental barriers has resulted in myriads of new ideas and innovative attempts to undertake interdisciplinary teaching and research. The success of the merger is well reflected by a progressive and steep enhancement in the School's productivity in terms of both quality and quantity of its research and pedagogical output in the past decade. I am delighted also to acknowledge the School's unceasing efforts in widening its scholarly network and deepening different forms of collaborations with partner institutions outside Hong Kong. The results of these efforts are obvious: we are now seeing an increasing presence of the School at the national, regional and international levels, a development which is most relevant to my present portfolio as the Pro-Vice-Chancellor overseeing external affairs.

The University is extremely fortunate to have Prof. Chan Wai-ye serving as the Founding Director of the School. With his vision and vast experience working with a decorated record holding leading positions in prestigious academic institutions overseas, Prof. Chan has laid down a solid foundation for the School during the first ten years of its formation. With the continuing support and devotion of all School members, I have every confidence that the School will continue to flourish and scale new heights under the leadership of the new Director, Prof. Andrew Chan. The School will stand tall as a nationally and globally renowned hub for biomedical education and research.

Professor Fanny M.C. Cheung

Pro-Vice-Chancellor / Vice-President,
Choh-Ming Li Professor of Psychology,
The Chinese University of Hong Kong

I am privileged to congratulate on the 10th anniversary of the School of Biomedical Sciences (SBS), Faculty of Medicine, CUHK.

It is a great delight to see the impressive strides that the School has made in its first decade under the outstanding leadership of the Founding Director, Prof. Chan Wai-ye. We witness the timely consolidation and restructuring of its Thematic Research Programs, the growing success rate in securing major competitive grants, the strategic recruitment of new talents and promising faculty, the steady achievements in research impact, the ongoing investment in its Core Laboratories and Animal Holding Core, and the establishment of cross-institutional collaborations and partnerships. All these efforts demonstrate the School's proactive response to the fast-changing research landscape and its strong commitment to extending the frontiers of biomedical research.

Capitalizing on its solid foundation and leverage with collaborators, I have every confidence that under Prof. Andrew Chan's new directorship, the SBS community will continue to grow from strength to strength in the next decade and beyond.



Professor Isabella W.Y. Poon

Pro-Vice-Chancellor / Vice-President,
The Chinese University of Hong Kong

I am pleased to extend my heartfelt congratulations to the School of Biomedical Sciences on its 10th anniversary.

The School has in the first decade of its establishment taken up an indispensable position in fulfilling the education missions of the Faculty of Medicine and the University. In addition to playing a pivotal role in the provision of preclinical teaching to medical students, its well-structured BSc in Biomedical Sciences Programme and MPhil-PhD Programme in Biomedical Sciences have successfully nurtured batches of exceptional physicians and basic scientists who excel in and contribute to the academic sector, various professions and industries, as well as the community.

The establishment of the Division of Education signifies the commitment of the School to teaching and learning. With the concerted efforts of the Division members, the School has achieved many accomplishments that are exemplary. Members have actively taken part in professional development activities such as sharing their experiences in the annual CUHK Teaching and Learning Expo and other educational events, and have also secured a handsome sum of grants for pedagogy and courseware development that facilitate continuous enhancement of teaching quality and enrichment of student learning experiences.

With the visionary goals shared by the outstanding and dedicated teaching team, the School has demonstrated its spirit of innovation, vibrancy and enormous potential. I am sure that the School will continue to grow as a world-class biomedical education hub that the School, the Faculty of Medicine and CUHK can take pride in.



Professor Francis K.L. Chan

Dean, Faculty of Medicine,
Choh-Ming Li Professor of Medicine and Therapeutics,
The Chinese University of Hong Kong

It is a great pleasure for me to congratulate the School of Biomedical Sciences on its 10th anniversary. The School is the first of its kind in Hong Kong by merging preclinical science Departments of Anatomy, Biochemistry (Medicine), Pharmacology and Physiology. Great strides have been made in different domains over the past decade.

The School's dedicated staff have provided high quality undergraduate and postgraduate education. Outstanding achievements are recognised by numerous local, national and international awards and honours conferred upon teachers, students and graduates.

Under the leadership of Prof. Chan Wai-yee, the Founding Director, the School has been successful in positioning itself as a reputable site in the region for conducting cutting-edge, interdisciplinary, and translational research. The strategic international partnerships forged are indicative of the School's capability in attracting talents from renowned institutions worldwide, to join hands to solve conundrums in biomedical sciences.

Building on this solid foundation, the new Director, Prof. Chan Man-lok, Andrew, will continue to lead staff to propel the work of the School to scale new heights of success.

I would like to thank all staff at the School for your contributions and happy 10th anniversary to you all!



Professor Vassilios Papadopoulos

Dean, School of Pharmacy,
John Stauffer Dean's Chair in Pharmaceutical Sciences,
Professor of Pharmacology & Pharmaceutical Sciences, University of Southern California

The founding of the School of Biomedical Sciences at The Chinese University of Hong Kong was an initiative at the forefront of the changes coming to research and education in the biological sciences across the globe. The establishment of new interdisciplinary and transdisciplinary programs within state-of-the-art facilities resulted in a unique scientific environment conducive to testing pioneering ideas and calling on the intellect of the next generation. Since its creation, the School of Biomedical Sciences has been a shining beacon – with academic excellence and integration within the various university units, with collaborative research across campus as well as partnerships and entrepreneurial initiatives locally and globally. All of this led to numerous successful academic, basic science, translational and commercialisation projects. Over the last decade, I, as the Chairperson of the Scientific Advisory Committee and of the Visiting Committee of the School, have been heartened by the vitality and energy of the place, the high quality of faculty and students, and the commitment to advancing biomedical research and education. The results of these efforts have increased the global impact of the School and the University.

I congratulate you on 10 years of success and look forward to the next decade!

Dr. Peter T.S. Lo

Chairman, Lo Kwee Seong Foundation

My warmest congratulations to the School of Biomedical Sciences, CUHK on this memorable occasion of its 10th anniversary.

With the same vision of promoting human well-being and education in our community, the Lo Kwee Seong Foundation built up a closer partnership with CUHK by pledging a donation for setting up the Lo Kwee-Seong Biomedical Research Fund and constructing Lo Kwee-Seong Integrated Biomedical Sciences Building where the School has been housed since 2012. In the past decade, we witnessed the impressive development of the School, from the provision of exemplary biomedical and medical training, the nurturing of future scientific and medical leaders, to the promotion of cutting-edge research that helps ease human suffering. In the coming years, we are eager to explore more collaborative opportunities with the School and the University to nurture more sought-after talents and achieve more breakthroughs and discoveries for the betterment of society and mankind.

On behalf of the Lo Kwee Seong Foundation, I wish the School continued success in breaking new grounds and in achieving its missions in education, research and knowledge transfer in the future years.



Professor Danny Chan

S Y and H Y Cheng Professor in Stem Cell Biology and Regenerative Medicine
Interim Director, School of Biomedical Sciences, Li Ka Shing Faculty of Medicine,
The University of Hong Kong

Dr. Albert W.K. Chan

Chairman, Advisory Board on Students' Career and Development,
School of Biomedical Sciences, The Chinese University of Hong Kong
Partner, Law Offices of Albert Wai-Kit Chan, PLLC

It is with great pleasure that I offer my congratulations to the School of Biomedical Sciences (SBS), The Chinese University of Hong Kong. I am especially pleased to offer my congratulatory message and best wishes in this anniversary year.

For years, SBS has been nurturing students' social insights and responsibilities through various professional programs. Its accomplishments have been acclaimed by many.

As proud SBSians, the students have received not just excellent education, but also access to true wisdom and independent thinking. This is evidenced by the high calibre of SBS students who have interned at our law offices. Every year, we were inspired by their hard work, resourcefulness and grit in exploring intellectual property protection for science and technology. We have the unique privilege to witness their growth in both professionalism and personality and are proud to have contributed to their success.

I am confident that SBS will continue its effort to bring development and improvement to Biomedical Sciences as a whole.

We wish SBS every success in its continuing pursuit of excellence.

**Professor Nancy Ip**

Vice-President for Research and Development,
The Morningside Professor of Life Science,
The Hong Kong University of Science and Technology

On behalf of HKUST, it is my great pleasure to extend our heartfelt congratulations to CUHK's School of Biomedical Sciences on its decade of growth and development, which has been marked by outstanding breakthroughs and accomplishments. Thanks to its visionary leadership, and the dedicated efforts of its faculty, the School has progressed from strength to strength in both education and research. Achieving excellence in these areas within a short period of time is no small feat. Indeed, it is an inspiring endeavour, which places the School in good stead for undertaking advanced impactful research with significant benefits to society. Many of our faculty at HKUST, including myself, actively collaborate with faculty in the School of Biomedical Sciences to extend the boundaries of knowledge in critical areas of inquiry. We celebrate your success and look forward to continuing our collaborations for many years to come.



MILESTONES IN RETROSPECT

Establishment of the School of Biomedical Sciences (SBS), CUHK (June 2009)

Formation of the Teaching and Learning Unit, SBS (October 2009)
(renamed as Division of Education in July 2018)



Initial members of the Teaching and Learning Unit

2009

SBS Logo Design Competition (November 2009)



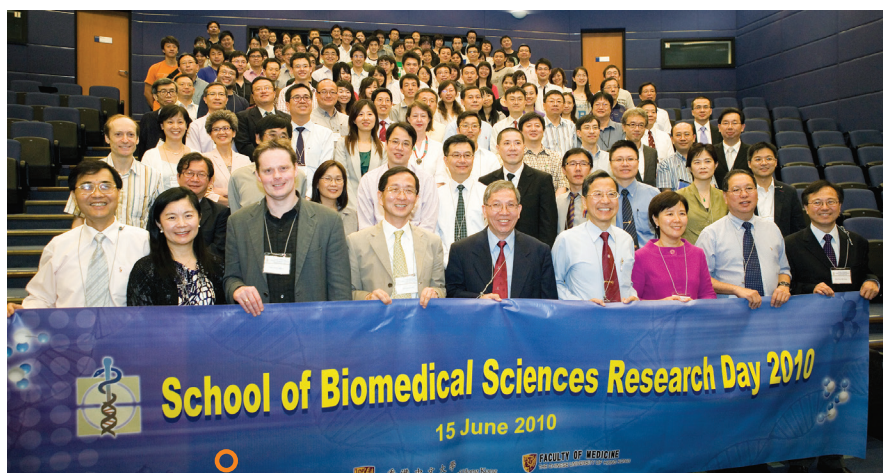
The winning logo



2010



Formation of the 1st Scientific Advisory Committee of SBS (January 2010)



1st SBS Research Day (15 June 2010)



Inauguration Ceremony of SBS (8 January 2010)



2011

1st SBS Postgraduate Research Day
(29 October 2010)



Foundation Stone Laying Ceremony
for the Lo Kwee-Seong Integrated
Biomedical Sciences Building
(1 September 2010)



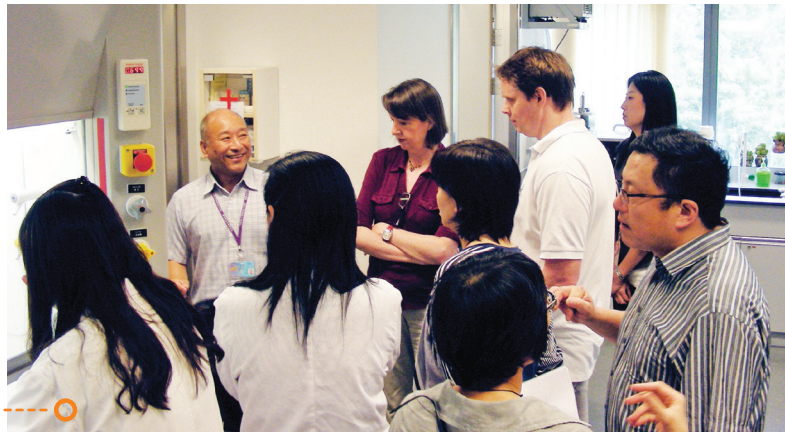


Inauguration Ceremony of
the 1st Executive Committee of
SBS Postgraduate Student
Association (28 July 2011)



SBS Core Laboratories Open Day (7 June 2012)

2012

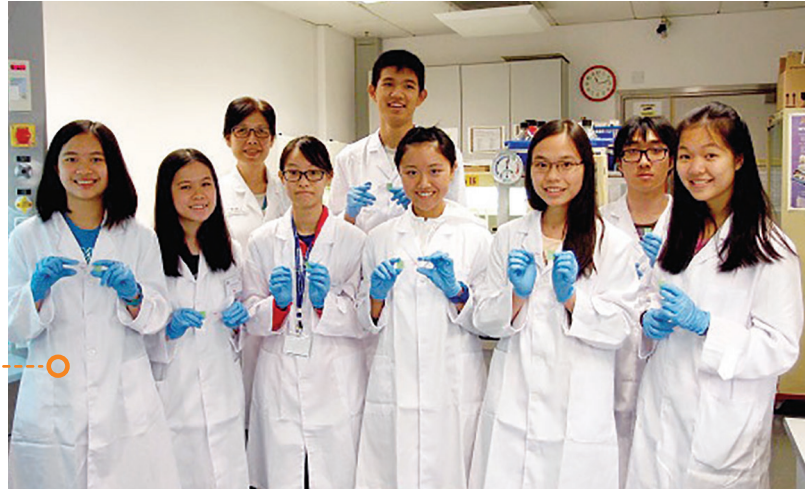


Opening Ceremony of the Lo Kwee-Seong Integrated
Biomedical Sciences Building (29 August 2012)



Launch of the Biomedical Research Academy (BioMeRA) for secondary school students (July - August 2015)

2015



2016



Visit of the 2nd Scientific Advisory Committee of SBS (25 - 29 January 2016)



JS4550 Bachelor of Science
BIOMEDICAL SCIENCES

Launch of BSc in Biomedical Sciences
Programme (August - September 2016)



Restructuring of Thematic Research Programs (September 2016)





Formation of the Advisory Board on Students' Career and Development (September 2016)

2017



Inauguration of the Society of Biomedical Sciences, BSc in Biomedical Sciences Programme (23 February 2017)

2018



Visit of the Visiting Committee (19 - 22 March 2018)

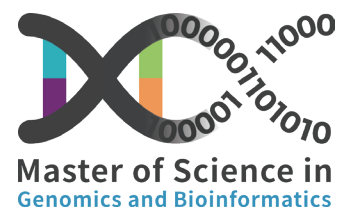
2020



SCHOOL OF
BIOMEDICAL SCIENCES
2010-2020
CUHK



Migration of MSc in Genomics and
Bioinformatics Programme to SBS (August 2018)



Inauguration Ceremony of BSc in Biomedical Sciences Programme (12 January 2018)

RESEARCH EXCELLENCE

The School has developed several Thematic Research Programs (TRPs) aiming to promote closer collaborations among Principal Investigators (PIs) with similar research interests and strengths and also to provide platforms for external collaborations.

With the strong commitment and dedication of our PIs, the School has seen a steady increase in the number of external research grants, publications, research awards and scholarships in its first decade. A number of research teams under respective TRPs have demonstrated regional and international competitiveness and reputation in several fields of biomedical research.

Research Outputs

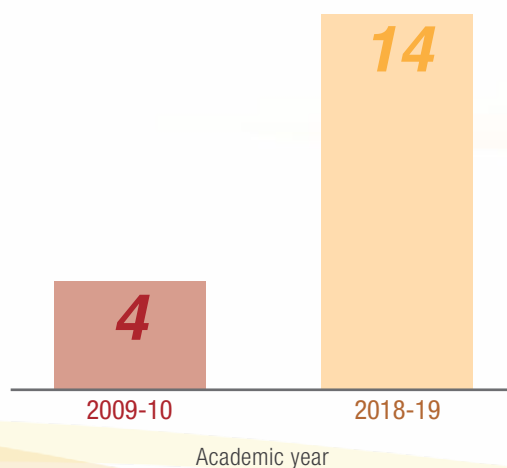
Academic publications from 1 July 2009 to 30 June 2019

Average number of scientific publications per academic year	233.4
Average impact factor (IF) per publication	4.06
Average number of scientific publications with IF ≥ 10 per academic year	8.4

Average impact factor (IF) per scientific publication in 2009-10 and 2018-19

Academic year	Average impact factor (IF)
2009-10	3.18
2018-19	5.01

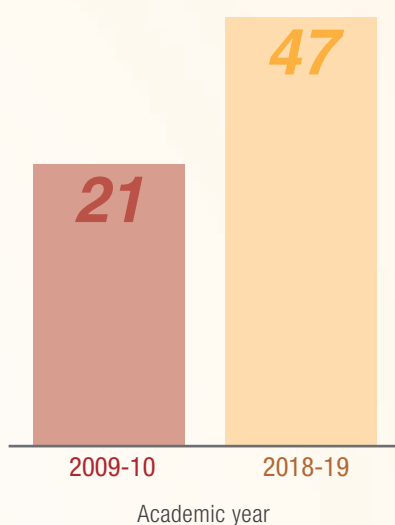
Number of scientific publications with impact factor (IF) ≥ 10 in 2009-10 and 2018-19



External Competitive Grants

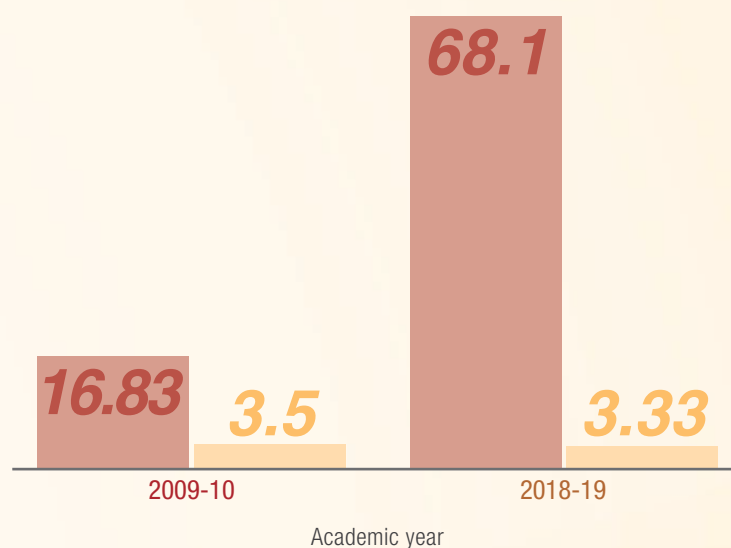
External competitive grants obtained by School members in the capacity of Principal Investigators (PIs) and Co-PIs

By number



By amount

HK\$ in million
RMB¥ in million



Major Research Grants Council (RGC) funding obtained from 1 July 2009 to 30 June 2019

Funding scheme name	Capacity of School member(s)	Number	Amount awarded (HK\$ in million)
Collaborative Research Fund (CRF)	PI	6	40.42
	Co-PI [#]	14	13.24 [#]
Theme-based Research Scheme (TRS)	Co-PI [#]	11	17.07 [#]
Research Impact Fund (RIF)	PI	1	3.15
Areas of Excellence Scheme (AoE)	Co-PI [#]	3	7.91 [#]

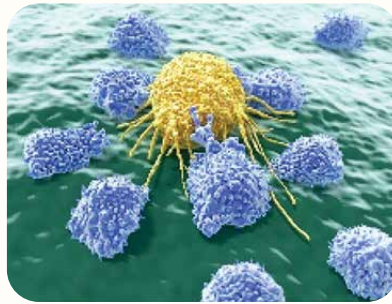
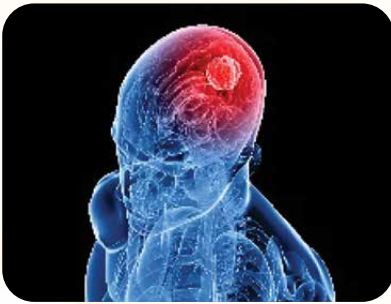
[#] The figures only include the actual amount allocated to the School members serving as the Co-PIs of the corresponding projects under respective funding schemes. It does not reflect the total project amount awarded.

Flagship Research Programs

Cancer Biology and Experimental Therapeutics (CBET)

The CBET theme has made significant discoveries in understanding the molecular basis of liver, prostate, pancreatic, gastric, brain, and head and neck cancers. Advancements in next-generation sequencing and bioinformatics have allowed team members to decode the genomes of pathogens, and to facilitate the repurposing of drugs.

For translational research, our investigators have deployed sensitive detection assays for hepatotoxins, generated novel therapeutic antibodies, gained understanding of mast cells, and explored traditional Chinese medicine in fight against cancers. With state-of-the-art animal models, effective antiemetic drugs are being developed to treat nausea and vomiting among cancer patients.



Events organised by CBET program:



Seminar by Prof. Peter Burbach, University Medical Center Utrecht, the Netherlands



Seminar by Prof. Tim Huang, University of Texas Health Science Center, USA



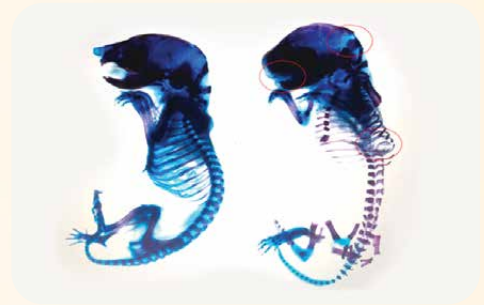
CBET Journal Club



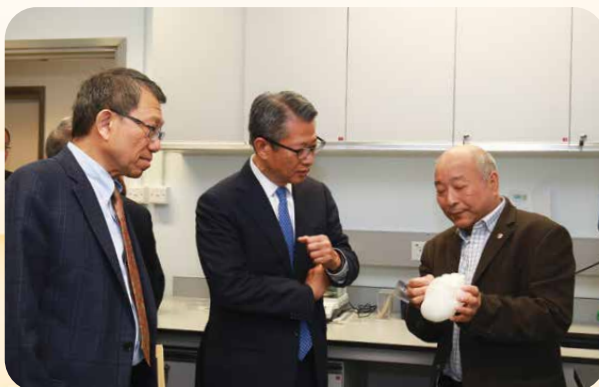
Symposium on Stem Cell and Cancer Research, jointly organised by SBS and Renji Clinical Stem Cell Research Center, Shanghai Jiao Tong University

Developmental and Regenerative Biology (DRB)

The DRB program has made impressive progress and recently been blessed with an influx of young and talented professors from world-renowned universities. DRB members are engaged in research programs that focus on biological mechanisms underlying embryonic development and reproductive biology with particular relevance to human diseases. Some members are actively engaged in research relating to stem cell biology and tissue engineering which aim at replacing organs and tissues degenerated through diseases and aging.



Visits hosted by DRB program



Visit of Mr. Paul Chan Mo-po, GBM, GBS, MH, JP, Financial Secretary, HKSAR Government

Major research topics:

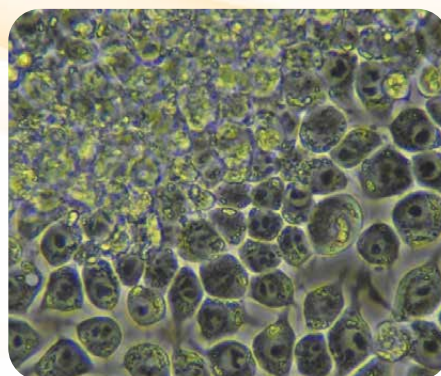
- Gene editing, using CRISPR-Cas9 to knock-in and knock-out gene with the aim of removing undesirable mutation and inserting desirable genes for treatments of cancers and congenital disorders
- Use of a bioengineering approach of stem cells and novel biomaterials to create bone, cartilage and tendon for regenerative medicine
- 3D-bioprinting, stem cells and biomaterials to biofabricate heart patches for treatment of ischemic heart disease
- Use of microfluidics and stem cells-derived hepatocytes for drug screening and understanding the pathology of liver fibrosis
- Investigation of human germ cell development, epigenetics and aging to understand associated infertility and cancer

Events organised by DRB program:

Seminar by Prof. Aaron Ciechanover, Nobel Laureate in Chemistry 2004



CUHK — Max Planck Institute (MPI) — Guangzhou Institutes of Biomedicine and Health (GIBH)
Joint Symposium on Stem Cell and Molecular Medicine



Neural, Vascular, and Metabolic Biology (NVMB)

Our members in NVMB theme engage in research areas of neurophysiology, vascular inflammation, diabetes and ion channels.

Major research topics:

- Decipher of the neural circuits underlying animal behaviours and cognitive functions
- Neuroplasticity
- Neurodegenerative diseases, such as Alzheimer's disease and Parkinson's disease
- Endothelial and metabolic dysfunction in vascular disease
- Molecular clock in cardiovascular functions
- Ion channels in cardiovascular system
- Neurovascular inflammation and diabetes

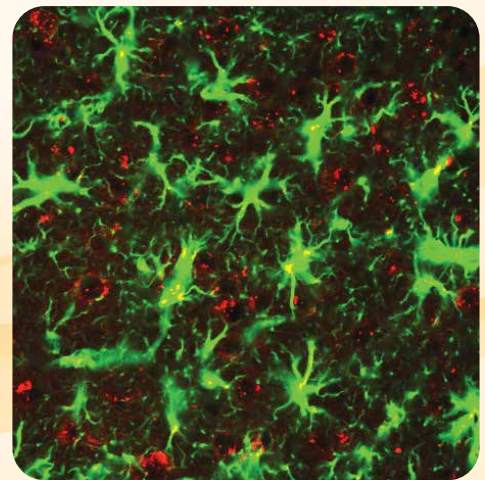
Events organised by NVMB program:



Seminar by Dr. Osbaldo Lopez Charcas, University of Tours, France



Seminar by Prof. Jiang Qiuxing, University of Florida, USA

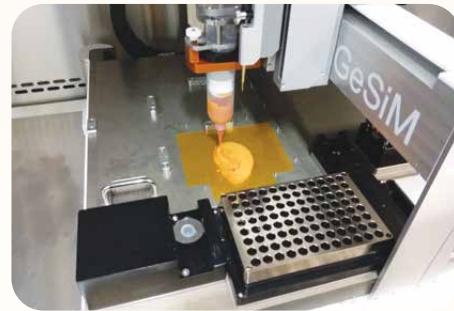


For more information on our Thematic Research Programs,
please visit <https://www2.sbs.cuhk.edu.hk/en-gb/research/thematic-research-programs>

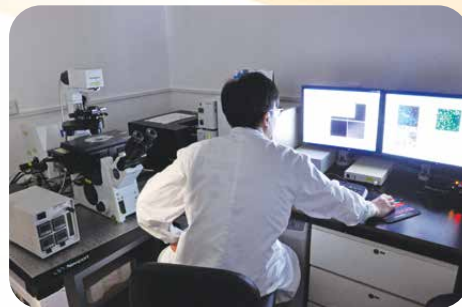
Core Research Facilities

The centralised core laboratories established by the School have been providing our researchers and their collaborators with technical expertise and consultation as well as comprehensive training on the use of the state-of-the-art equipment and instrumentation, which facilitate innovative, collaborative and high-impact research.

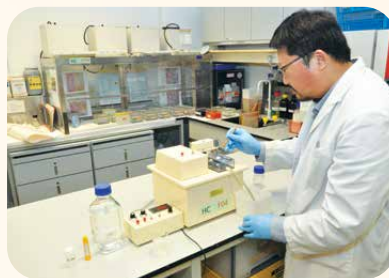
Bio-Fabrication Core



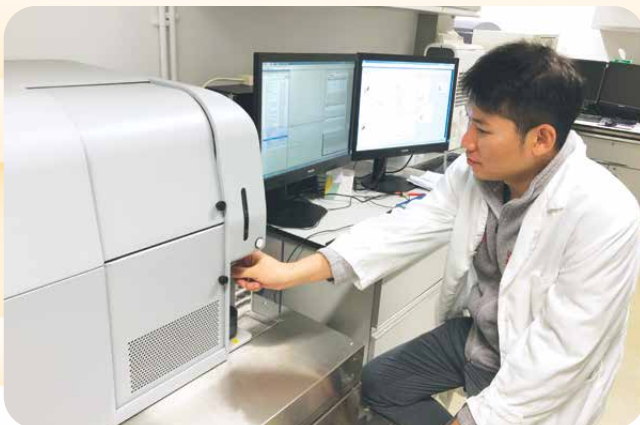
Microscopy and Imaging Core



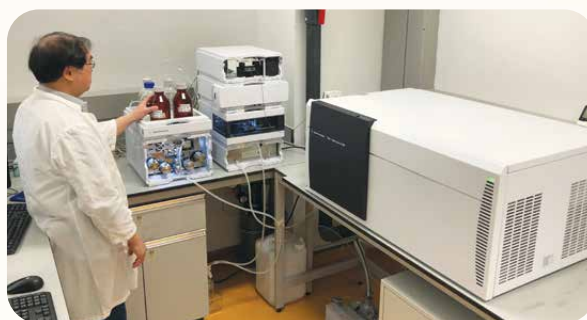
Histology Core



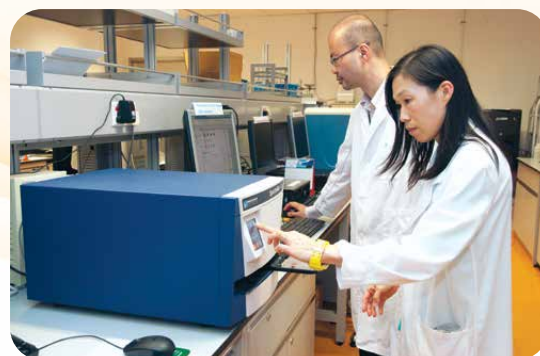
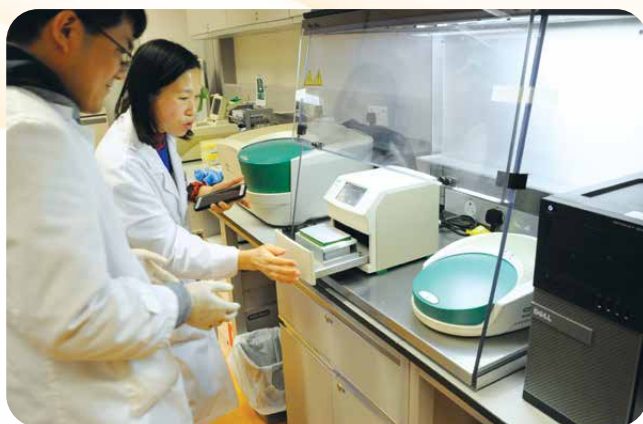
Flow Cytometry Core



Proteomics Core



Molecular Biology Core



Animal Holding Core



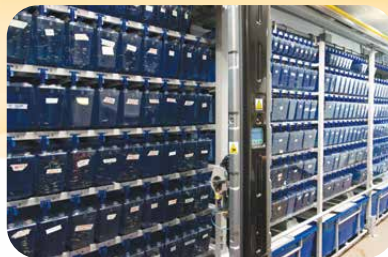
Mammalian Zone



Imaging Zone



Surgical Zone



Aquatic Zone



Behavioural Zone

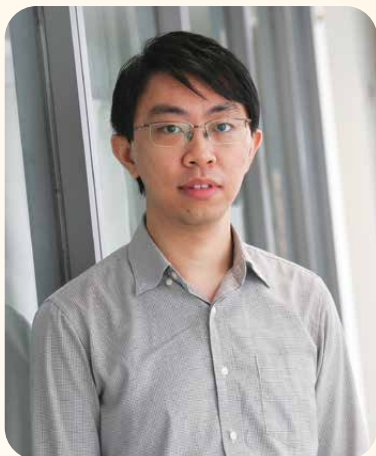
Scholarly Recognitions



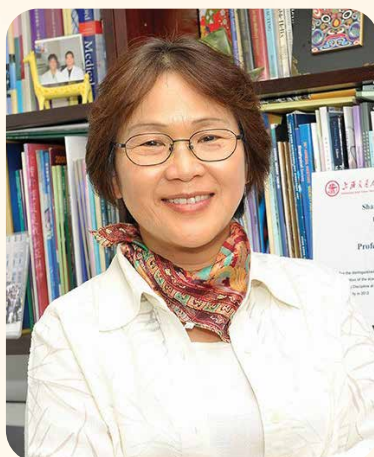
Major awards and honours obtained by academic faculty

Prof. Chan Hon-fai ^(a)	Young Scholar Award, World Association for Chinese Biomedical Engineers (2019)
Prof. Chan Hsiao-chang ^(b) and Prof. Ruan Yechun	First Prize, National Science and Technology Award for Women and Children's Health, Chinese Women and Children Health Research Association (2016)
Prof. Chan Wai-ye ^(c)	Endowed Professorship as Li Ka Shing Professor of Biomedical Sciences (2020)
Prof. Chen Yangchao ^(d)	Young Investigator Award, American Pancreatic Association and International Association of Pancreatology (2012)
Prof. Alfred S.L. Cheng ^(e)	Young Researcher Award 2014, CUHK (2015) Most Promising Young Researcher Award 2014, Food and Health Bureau, HKSAR Government (2014)
Prof. Christopher H.K. Cheng ^(f)	Second-class Award, 2009 State Natural Science Award, China (2009)
Prof. Cho Chi-hin ^(g)	Lifetime Achievement Award, the Western Returned Scholars Association Entrepreneur Alliance, Beijing, China (2009)
Prof. Huang Yu ^(h)	Croucher Senior Research Fellowships 2014-15 (2013)
Prof. Huang Yu and Prof. Tian Xiaoyu ⁽ⁱ⁾	Second-class Award, 2017 State Natural Sciences Award, China (2018)
Prof. Jacque P.K. Ip ^(j)	Young Investigator Award, Brain & Behavior Research Foundation, USA (2019)
Prof. Jiang Yangzi ^(k)	Second Prize, COA Orthopaedics Youth Research Award, Chinese Orthopaedic Association (COA), Chinese Medical Association (2018)
Prof. Kenneth K.H. Lee ^(l)	Diamond Jubilee International Visiting Fellowship, University of Southampton, UK (2014)
Prof. So Hon-cheong ^(m)	Young Researcher Award 2018, CUHK (2019)
Prof. Tian Xiaoyu ⁽ⁱ⁾	Health and Medical Research Fund (HMRF) Research Fellowship Scheme 2016, Food and Health Bureau, HKSAR Government (2016)
Prof. Stephen K.W. Tsui ⁽ⁿ⁾	Excellent Research Award, Food and Health Bureau, HKSAR Government (2019)
Prof. Yung Wing-ho ^(o)	Research Excellence Award 2012-13, CUHK (2013)
Prof. Zhou Jingying ^(p)	Young Investigator Award, Hong Kong Society for Immunology (HKSI) 2018 Scientific Meeting (2018) National Scholar Award, the United European Gastroenterology Week 2016 (2016)

For details on individual awards previously obtained by respective academic faculty, please visit
<https://www2.sbs.cuhk.edu.hk/en-gb/publications/printed-publications/sbs-annual-report-and-anniversary-booklet-or>
<https://www2.sbs.cuhk.edu.hk/en-gb/news-and-events/news>



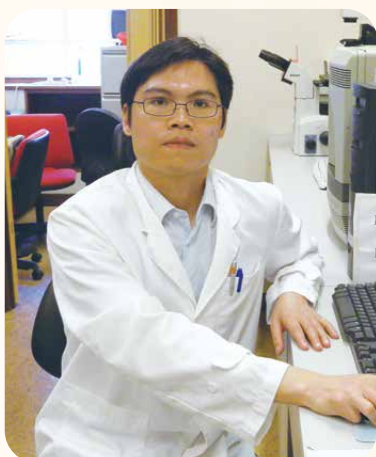
(a) Prof. Chan Hon-fai



(b) Prof. Chan Hsiao-chang



(c) Prof. Chan Wai-ye



(d) Prof. Chen Yangchao



(e) Prof. Alfred Cheng (left)



(f) Prof. Christopher Cheng



(g) Prof. Cho Chi-hin

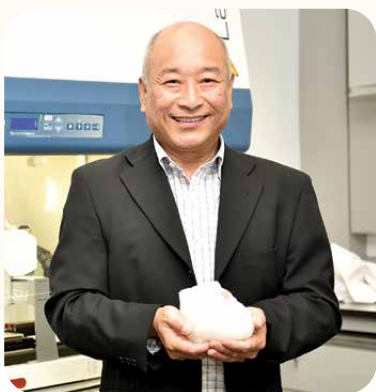
(h) Prof. Huang Yu (1st from right)(i) Prof. Tian Xiaoyu (2nd from right)



(j) Prof. Jacques Ip



(k) Prof. Jiang Yangzi



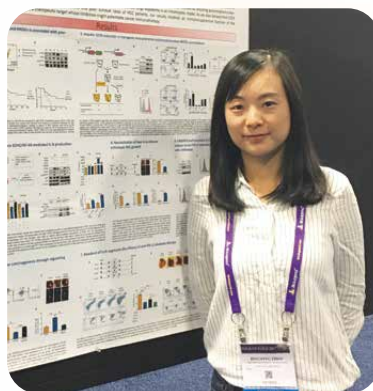
(l) Prof. Kenneth Lee



(m) Prof. So Hon-cheong

(n) Prof. Stephen Tsui (2nd from right)

(o) Prof. Yung Wing-ho



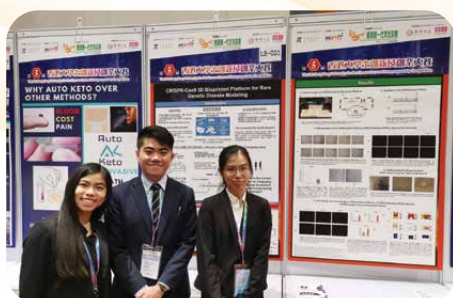
(p) Prof. Zhou Jingying

Student and alumni attainments

Mr. Cheng Yin-chun	Hong Kong Jockey Club Scholarships 2017-18 (2018)
Ms. Gao Lin	Best Poster Award, 9 th CUHK International Symposium on Stem Cell Biology and Regenerative Medicine (2019)
Dr. Linda S. Gu	Outstanding Postdoctoral Award, Association of Chinese Geneticists in America (ACGA) (2015)
Dr. Guo Jinghui	Postgraduate Research Output Award 2012, CUHK (2013)
Ms. Guo Yue	First Prize of Poster Presentation Award, Guangdong – Hong Kong Postgraduate Research Symposium and Exchange on Regenerative Medicine 2019, Ministry of Education (MOE) Key Laboratory for Regenerative Medicine (2019)
Dr. He Xiangjun	Postgraduate Research Output Award 2016, CUHK (2017)
Mr. Michael W.H. Ho	Poster Presentation Award, INFECTION 2018, CUHK (2018)
Ms. Law Wing-yan	Best Poster Award, 7 th Cross-Strait and Hong Kong Life Sciences Cultural Festival, School of Life Sciences, Peking University (2019)
Dr. Li Qian	Postgraduate Research Output Award 2013, CUHK (2014) Hong Kong Association of University Women Annual Scholarship 2011-12 (2012)
Ms. Liu Jiaxun and her teammates	Gold medal, International Genetically Engineered Machine (iGEM) 2019 Giant Jamboree (2019)
Dr. Liu Man	Poster Presentation Award, Hong Kong Society for Immunology (HKSI) 2018 Scientific Meeting (2018)
Ms. Sophie S.S. Liu	Endocrine Society Outstanding Abstract Awards in conjunction with ICE/ENDO 2014, USA (2014) Merit Prize, Professor Charles K. Kao Student Creativity Awards 2013 (2013) National Institutes of Health (NIH) Graduate Student Research Award, the 9 th NIH Graduate Student Symposium, USA (2013)
Mr. Tommy L.M. Lo	1 st Runner-up Prize of FameLab Hong Kong 2014, British Council (2014)
Ms. Lo Wing-tung	Merit Prize, Undergraduate Student Paper Competition, IEEE Engineering in Medicine and Biology Society Hong Kong – Macau Chapter (2019)
Ms. Lou Ut-kei and Mr. Wong Chi-hin	Third-class, Innovation Category, Hong Kong University Student Innovation and Entrepreneurship Competition 2019, HKNGCA (2019)
Mr. Bruce T.K. Pang	Certificate of Merit, Professor Charles K. Kao Student Creativity Awards 2019, CUHK (2019)
Mr. Bruce T.K. Pang, Ms. Ha Tin-yan, Ms. Alexandria Lau	Third-class, Innovation Category, Hong Kong University Student Innovation and Entrepreneurship Competition 2019, Hong Kong New Generation Cultural Association (HKNGCA) (2019)
Mr. Bruce T.K. Pang and his teammate	Innovation Award and Second-class in Life Sciences, Innovation Category, Hong Kong University Student Innovation and Entrepreneurship Competition 2018, HKNGCA (2018)
Mr. Enoch H.L. Poon	First Prize of Oral Presentation Award, Guangdong – Hong Kong Postgraduate Research Symposium and Exchange on Regenerative Medicine 2019, MOE Key Laboratory for Regenerative Medicine (2019)
Dr. Tang Wenshu	Poster of Distinction in International Digestive Disease Forum 2019, CUHK (2019)

Ms. Wang Yanyan	Outstanding Poster Presentation, Chinese Medical Association 10 th Osteoporosis and Bone Mineral Diseases Conference, Chinese Medical Association (2019)
Mr. Wong Chi-hin	Travel Grant Award for 51 st Annual Meeting of the European Pancreatic Club, Bergen, Norway (2019)
	Travel Award Grant, Pancreas 2017 and Latin American Pancreatic Study Group (LAPSG) (2017)
Mr. Yan Mingfei	Best Oral Presentation Award, Frontier in Cancer Science 2016, National University of Singapore (2016)
Ms. Zeng Xuezheng	Cold Spring Harbor Asia Fellowship (2019)

For details on individual awards previously obtained by respective students and alumni, please visit <https://www2.sbs.cuhk.edu.hk/en-gb/publications/printed-publications/sbs-annual-report-and-anniversary-booklet>, <https://www2.sbs.cuhk.edu.hk/en-gb/education/graduate-education/graduate-students-and-alumni-s-news>, and <https://www.facebook.com/cubiomedsci>



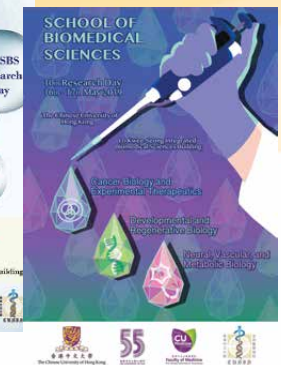
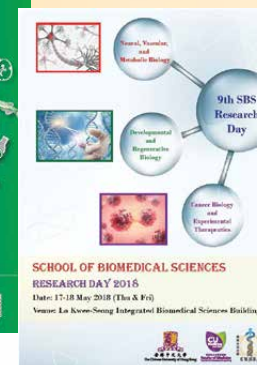
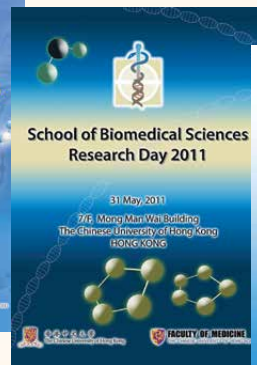
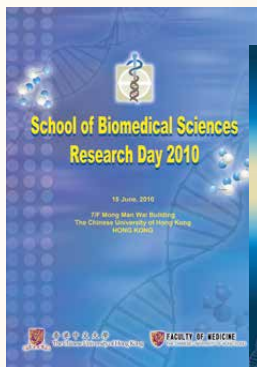
Spin-off companies led by School members

School member	Position	Company name	Year established
Prof. Vincent C.K. Cheung	Co-founder, Shareholder	Pureform Technology Limited	2017
Prof. Feng Bo	Chairperson, Director	A-Biotech (HK) Co. Ltd. (香港易生物技術股份有限公司)	2017
Prof. Kenneth K.H. Lee	CEO, Founder, Shareholder	Stapworks Stem Cell Ltd.	2015
Prof. Lee Tin-lap	Director, Shareholder	EggLogics (優殖)	2018
Prof. Stephen K.W. Tsui	Chairman	InnoTech Biosciences Co., Ltd. (中基生物科技有限公司)	2015
	Shareholder	OmicsCloud Asia Ltd.	2016
	Director, Shareholder	BioMed Technology Holdings Limited (生物醫學科技控股有限公司)	2018
	Director, Shareholder	Wellmind Biomed Technology Holdings Limited (活智生物科技控股有限公司)	2019

SBS Research Day

As the annual flagship event of the School, SBS Research Day has been an excellent opportunity for our School members to showcase their latest research findings and to interact with investigators from other departments of CUHK and other tertiary institutions. It has continued to offer an effective platform for promoting multidisciplinary and cross-institutional collaborations between our academic faculty and researchers in different fields of biomedical research.





For more information on our previous SBS Research Day, please visit <https://www2.sbs.cuhk.edu.hk/en-gb/publications/printed-publications/sbs-research-day>

NURTURING TALENTS

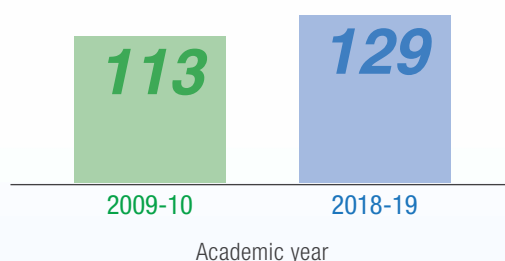
GRADUATE EDUCATION

MPhil-PhD Programme in Biomedical Sciences

Since its launch in 2010-11, the Articulated MPhil-PhD Programme in Biomedical Sciences aims to train and equip postgraduate students with broad and in-depth theoretical knowledge, advanced research skills, as well as critical thinking and knowledge application abilities in pursuing different areas of biomedical sciences.

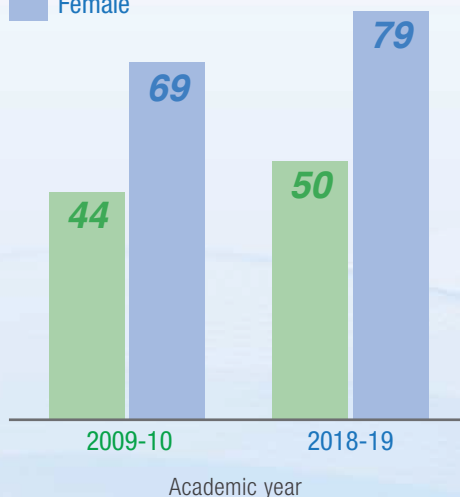
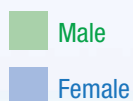
To keep abreast of the fast-moving progress in biomedical research and to enable our students to competently meet the changing needs and expectations of the graduate market and community, the programme curriculum was reviewed and restructured in 2016-17. Consisting of two compulsory courses and three elective courses based on our Thematic Research Programs, the new curriculum was launched on 1 August 2017.

Number of postgraduate students in 2009-10 and 2018-19

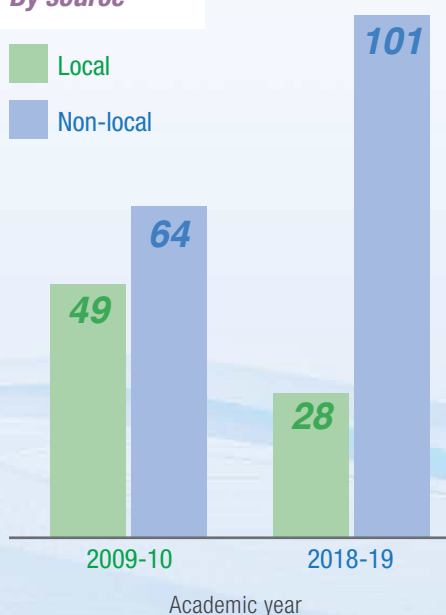


Distribution of postgraduate students in 2009-10 and 2018-19

By gender



By source



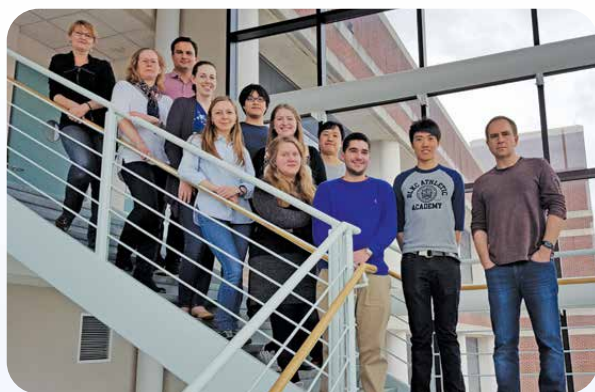
Laboratory rotation scheme

Our School is the first among all local universities to introduce the laboratory rotation scheme for newly admitted students to choose their research projects and supervisors based on their research interests and capabilities.



International exposure

Through the School's extensive academic links with world-leading research institutions, students are exposed to various opportunities for receiving overseas training. In particular, CUHK – NIH (National Institutes of Health, USA) Graduate Partnership Program has allowed participating students to benefit from working with numerous eminent scientists at NIH for an extended period of about three years.



Training at NIH, USA

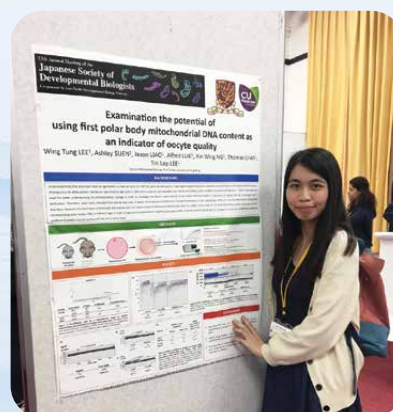


Our students have also been encouraged to attend summer schools, workshops, and conduct research in overseas institutions, including the University of Basel in Switzerland, the University of Newcastle in Australia, and Karolinska Institutet in Sweden.



SBS Research Postgraduate Student Conference Grant

The grant was established in 2010 as an additional funding source to support students in attending international conferences to exchange research ideas with scientists and peers all over the world.



Conference participation



5th Cross-strait Symposium on Biomedical Sciences 2017



Postgraduate Research Day 2017 by Kunming Institute of Zoology, Chinese Academy of Sciences



Guangdong – Hong Kong Postgraduate Research Exchange and Symposium on Regenerative Medicine 2019 at Jinan University, Guangzhou



4th Pan-Asian Biomedical Science Conference in Danang, Vietnam in 2018

Postgraduate Research Day

Postgraduate Research Day serves as an annual platform to showcase our students' research work and enhance interactions with their research peers and mentors. Since 2014, we have started inviting postgraduate students and their mentors from national and international institutions to join the event for extending our academic connection.



Career talks and alumni network

Since 2015, our graduate alumni have been invited to give career talks to current students. In June 2019, the alumni database was successfully established to stay connected with our alumni.



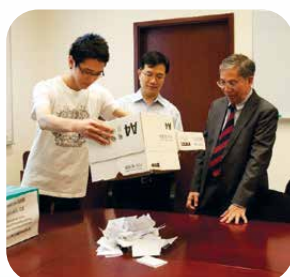
Career Information Day 2018



Career Information Day 2016

SBS Postgraduate Student Association

Since its formation in 2011, the SBS Postgraduate Student Association (PSA) has been actively supporting their fellow students by offering assistance in course selection and conference grant applications, as well as organising various activities such as orientation programmes, badminton tournament, photo competition, and support in SBS Christmas Party.



For more information on our MPhil-PhD Programme, please visit <https://www2.sbs.cuhk.edu.hk/en-gb/education/graduate-education/mphil-stream>

Graduate sharing



Dr. Sophie S.S. Liu

PhD graduate in 2016

Management Consultant, Bayer Strategy and Business Consulting

I am sincerely grateful for the guidance and opportunities provided by the School of Biomedical Sciences, which allow me to explore more possibilities in medical and life science industry and business.

After graduation from the joint PhD programme with National Institutes of Health, USA in 2015, I started my career in management consulting in an international strategy and business consulting company. The intelligence, confidence and expertise I have gained from my days in the School have equipped me with a strategic vision in the healthcare industry.

Dr. Linda S. Gu, FACMG

PhD graduate in 2013

Assistant Professor, School of Biomedical Sciences, CUHK

Assistant Professor (by courtesy), Department of Obstetrics and Gynaecology, CUHK

Being the first batch of graduate students administered by SBS, I was so fortunate and grateful to witness and engage in the surge and prosperity of our School. As the founding chairperson of SBS Postgraduate Student Association, I was one of the organisers of its first Postgraduate Research Day, and was luckily awarded with the first prize.

The supporting and nurturing environment of SBS built a solid foundation for me in pursuing the field of medical genetics. Now at the 10-year milestone of SBS, I am again extremely grateful and excited to come back and further develop my career.



Dr. Franki K.H. Tse

PhD graduate in 2014

Assistant Professor, Department of Health Technology and Informatics,
The Hong Kong Polytechnic University (PolyU)

Upon graduation from the School in 2014, I joined the Hong Kong University of Science and Technology as a postdoctoral fellow to continue my study on glial cells in the human brain. During my doctoral training in the School, I realised the importance of scientific rigor, transparency and resilience in my research career. These principles become the cornerstones when I set up my laboratory in PolyU.

I would like to express my gratitude to all the teachers and colleagues. Happy 10th anniversary! I wish the School every success for decades to come.

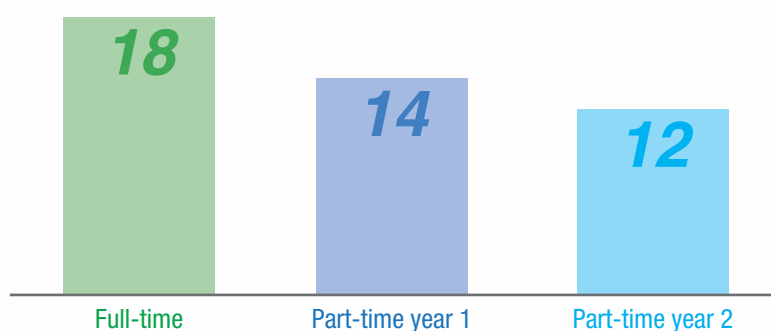
Master of Science (MSc) in Genomics and Bioinformatics Programme



The MSc in Genomics and Bioinformatics Programme was officially launched in 2011 and migrated from the CUHK – BGI Innovation Institute of Trans-omics to the School of Biomedical Sciences since the academic year 2018-19.

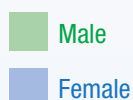
Featuring full-time and part-time modes of study, the programme aims to train individuals interested in joining the emerging industry in genomics, bioinformatics and precision medicine, and to equip medical practitioners and specialists, researchers and employees in biotechnology industry with the skills and knowledge to conduct genomics and bioinformatics research.

Number of MSc students in academic year 2019-20



Distribution of MSc students in academic year 2019-20

By gender



By source



In addition to classroom lectures, students are also exposed to various learning activities, ranging from complementary tutorial sessions on programming and biocomputing, individual research projects, to overseas study tours.

Orientation lunch and staff-student consultative meeting



Seoul study trip 2019

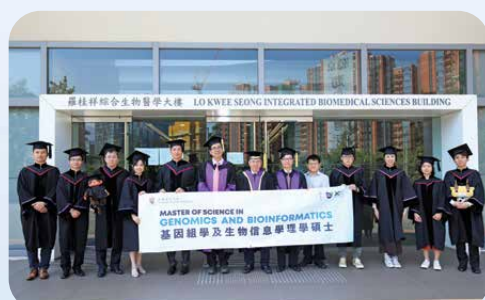


Meeting with representatives of Seoul National University, South Korea



Meeting with representatives of Yonsei University, South Korea

Graduation Ceremony 2018-19



Graduate sharing

Since its establishment, the programme has trained graduates from a wide range of professions, including medical doctors, clinical practitioners, scientific officers, medical technologists, as well as researchers, managers and CEOs in commercial and biotechnological companies.



Dr. Brian H.Y. Chung

MSc graduate in 2013

Clinical Associate Professor, Department of Paediatrics and Adolescent Medicine,
Li Ka Shing Faculty of Medicine, The University of Hong Kong

I have learnt the most cutting-edge knowledge on bioinformatics from the course, which remains useful today in my clinical practice and my research. The research attachment with Prof. Stephen Tsui was very inspiring.

Prof. Zeng Xi

MSc graduate in 2014

Associate Professor, College of Informatics,
Huazhong Agricultural University, China

The MSc Programme strengthened my knowledge base of bioinformatics and made me more competitive in PhD application. Also, I got the chance to meet many teachers and classmates in the programme, which helps me a lot in my career development after graduation.



Dr. Steven K.F. Loo

MSc graduate in 2017

Specialist in Dermatology,
Director, BioMed Technology Holdings Limited

This well-structured MSc course provides an excellent learning platform with professors and tutors experienced in the rapidly developing fields of genomics and bioinformatics. I started a gut microbiome testing company after graduation, with the vision of providing holistic care to my patients through modulation of the gut microbiome with personalised microbiome-based therapeutics.

UNDERGRADUATE EDUCATION

BSc in Biomedical Sciences Programme



With the mission of training the next generation of biomedical scientists to engage in research, innovation, entrepreneurship and health services, our School launched its first bachelor programme – BSc in Biomedical Sciences Programme (BSc Programme) in September 2016. On top of the multidisciplinary, comprehensive and integrative nature, our BSc Programme offers different concentration areas to prepare graduates for diversified career paths including biomedical research, diagnostics, genetics and bioinformatics, quality management of new therapies and biopharmaceuticals, legal, health services and lab management.

Total number of BSc students admitted from 2016 to 2019	122	
Number of students receiving Honours at Entrance / Admission Scholarship	29 (23.77%)	
By gender	Male: 41%	Female: 59%
By source	Local: 82%	Non-local*: 18%

*From India, Kazakhstan, Macau, Mainland China, Malaysia, South Korea, Taiwan

Outreach initiatives

Being the youngest programme in the Faculty of Medicine, we have actively participated in different events to promote our programme among local and overseas secondary school students, teachers and the public. Since 2015, we have joined over 70 outreach activities including workshops, exhibitions, science and admission talks, as well as summer research programmes for secondary school students and media interviews.



Promotion at Radio Television Hong Kong (RTHK) (October 2015)



CUHK press conference to announce the launch of BSc Programme (October 2015)



Enrichment programme for and visit by elite secondary school students (November 2016)



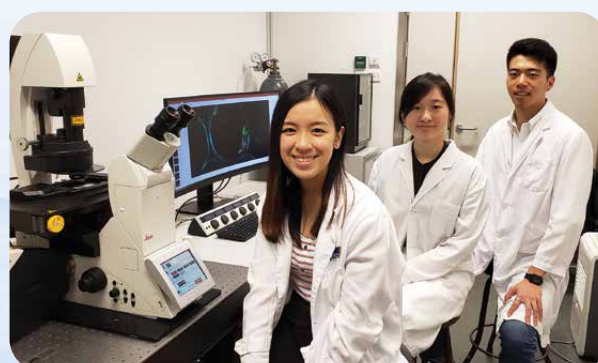
CUHK Programme Exploration Day for JUPAS applicants 2018



Participation in Hong Kong Science Festival, Hong Kong Science Museum



CUHK University Taster Fair for secondary school students (March 2019)



Media interview of students on career prospects (June 2019)

Student career development

Our BSc Programme has a strong emphasis on hands-on training and experiential learning experience. As a part of graduation requirement, students have to complete either a Capstone Research Project or biomedical internship.

To better equip our students to respond to the market demand, the School has established the Advisory Board on Students' Career and Development, aligning views from the leaders in both public and private sectors, and developing partnerships for internship programmes. We also organised various career-oriented activities to keep students abreast of the latest market trend and to offer them a wide range of opportunities for career and further studies.

Founding members of the Advisory Board on Students' Career and Development

Dr. Albert W.K. Chan (Chairperson) Partner Law Offices of Albert Wai-Kit Chan, PLLC	Dr. Johnson Y.N. Lau Chief Executive Officer Athenex Incorporation
Dr. Lee Chi-ming Director Ever East Consultants Limited	Dr. Daniel H.S. Lee Former Head, Biotechnology Cluster Hong Kong Science & Technology Parks Corporation
Dr. Shawn S.O. Leung Chief Executive Officer SinoMab Bioscience Limited	Dr. Ng Chi-ho Chairman and Managing Director Suga International Holdings Limited
Dr. Ambrose S.F. So Chief Executive Officer SJM Holdings Limited	Dr. Joseph W.O. Tam Chief Executive Officer DiagCor Bioscience Incorporation Limited
Dr. Chris Tan Founding Chief Executive Officer Angsana Molecular & Diagnostics Laboratory (HK) Limited	

Industry partners offering internships in 2019-20

Companies (in alphabetical order)	Internship location
Albert Wai-Kit Chan Intellectual Property Limited and Law Offices of Albert Wai-Kit Chan, PLLC	Hong Kong and New York
A-Biotech (Hong Kong) Company Limited	Hong Kong
Darui Assisted Reproduction Technologies	Guangzhou
DiagCor Bioscience Incorporation Limited	Hong Kong
HEC Pharm	Dongguan
New B Innovation Limited	Hong Kong
OmicsCloud Asia Limited	Hong Kong
Phase Scientific International Limited	Hong Kong
Qi Diagnostics Limited	Hong Kong
SinoMab BioScience Limited	Hong Kong
TGD Life Company Limited	Hong Kong
WuXi Biologics	Shanghai / Wuxi



Career Information Day 2018



Career talk series (November 2019)



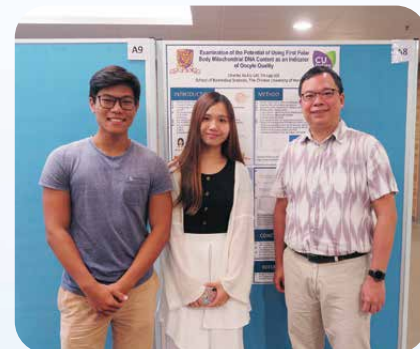
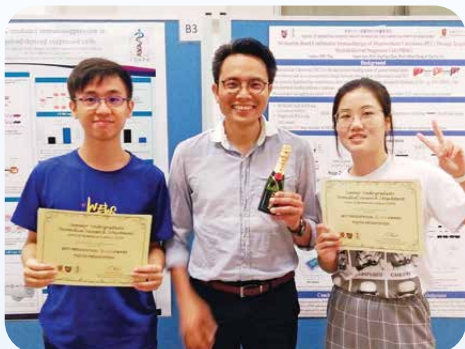
Visit to HEC Pharm in China



Visit to Fire and Ambulance Services Academy

Summer Undergraduate Biomedical Research Attachment

Through the in-house Summer Undergraduate Biomedical Research Attachment (SUBRA) scheme, our students are enabled to realise their research strengths and interests before selecting their concentration areas.



Exchange and research attachment



University of Southampton, UK



University of Auckland, New Zealand



Research attachment at Guangzhou Institutes of Biomedicine and Health (GIBH), Chinese Academy of Sciences (CAS), China



Participation in a conference organised by students at Peking University, China

Scholarships and awards

The School is grateful for the generous support of donors in establishing different prizes and scholarships to recognise our students' outstanding leadership and academic achievements, and to support their overseas internships. Over 50 prizes and scholarships were presented in the first four years since the programme was launched.

Scholarships and awards for BSc in Biomedical Sciences Programme (in alphabetical order)

Admission awards / Scholarships

Lo Kwee-Seong Biomedical Research Fund Admission Award 羅桂祥生物醫學研究基金入學獎

Professor John Yeung Memorial Scholarships 楊鶴強教授紀念獎學金

Suga International Holdings Limited Scholarship 信佳國際集團獎學金

Academic awards

Dr Clement Chan Academic Prize 陳亮國醫生學術獎

Mr Chin Chun Fuk & Madam Lo Hang Sheung Scholarship 錢振福先生及盧杏常女士獎學金

Fung Kwok Pui Ming De Xin Min Alumni Prize 馮國培明德新民校友獎

Lo Kwee-Seong Biomedical Research Fund Academic Prizes 羅桂祥生物醫學研究基金學術獎

Staff Scholarships for BSc in Biomedical Sciences Programme 生物醫學理學士課程教職員獎學金

Research awards and activity fund

Dr Clement Chan Research Scholarship 陳亮國醫生研究獎學金

Dr Joseph Tam Award for Internship 譚榮安博士實習獎

Lo Kwee-Seong Biomedical Research Fund – Academic Activity Fund 羅桂祥生物醫學研究基金 – 學術活動基金

Lo Kwee-Seong Biomedical Research Fund – Awards for Undergraduate Research and Internship
羅桂祥生物醫學研究基金 – 本科生研究及實習獎

Patricia Wong To Research Scholarship for Biomedical Sciences 杜黃妙玉生物醫學研究獎學金

Staff Scholarship for Undergraduate Biomedical Sciences Internship 生物醫學本科生實習教職員獎學金

Suga International Holdings Limited Scholarship 信佳國際集團獎學金

Service award

Dr Clement Chan Service Awards 陳亮國醫生服務獎

Student accomplishments



Mr. Cheng Yin-chun (2nd from left), awardee of The Hong Kong Jockey Club Scholarships 2017-18 and JC Scholar



Ms. Wang Jingyi, awardee of HKSAR Government Scholarship 2019-20



Ms. Lee Zhixuen, awardee of Belt and Road Scholarship (Malaysia) 2019-20



Ms. Liu Jiaxun (front row, 3rd from left) and CUHK iGEM Team win gold medal in the International Genetically Engineered Machine Competition (iGEM) 2019, the annual premier synthetic biology competition

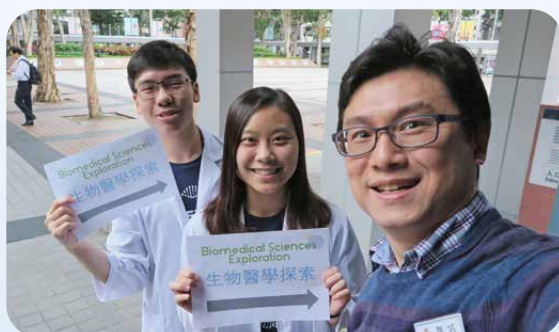


Ms. Jenny Y.S. Chan (front row, 2nd from left) and CUHK iGEM Team win gold medal in iGEM 2018



Ms. Lou Ut-kei (1st from left), recipient of CUHK Outstanding Students Awards 2019

Student activities



Student sharing



Ms. Alexandria Lau

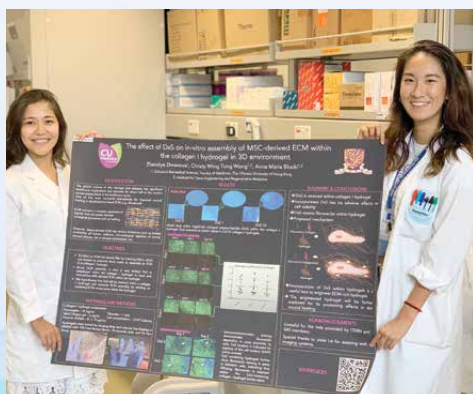
What makes SBS stand out among various biomedical sciences programmes across the globe is the focus of cultivating future researchers from day one. As freshmen, we have been showered with care and attention in many aspects of our career as scientists, including stimulating courses, mentors with rich experiences in academia and internship opportunities in actual research labs. As an undergraduate student, I am grateful to experience the charm of different sub-fields within biomedical sciences from this all-round programme. I will never regret a moment I spent at SBS.

Mr. Cheng Yin-chun

The Biomedical Sciences Programme provides students with a strong foundation of biomedical sciences with different concentration areas based on students' interests. It exposes us to the frontiers of biomedical sciences, such as gene therapy, gut microbiota, next-generation sequencing and pharmacogenomics. The School also offers students various forms of learning opportunities, including but not limited to Summer Undergraduate Biomedical Research Attachment (SUBRA), as well as internships at different biotechnological and biopharmaceutical companies.



Mr. Cheng Yin-chun (right)



Ms. Zhamilya Zhirenova (left)

Ms. Zhamilya Zhirenova

With the supportive academic environment, I enjoy my experience as an international student at SBS very much. I mostly appreciate the interactive courses which provide us with valuable opportunities to practically access scientific data and acquire laboratory techniques.

Medical and Service Teaching

In addition to BSc in Biomedical Sciences Programme, the School offers undergraduate courses to students of a wide range of medical and non-medical programmes within and outside the Faculty of Medicine, including the Bachelor of Medicine and Bachelor of Surgery (MBChB), Pharmacy, Chinese Medicine, Biomedical Engineering Programmes, etc., as well as General Education courses at CUHK.

		Number of courses / panels offered by SBS	
Faculty	Undergraduate Programmes	2009-10	2019-20
Medicine	MBChB	20 (Panel-based Integrated Curriculum)	9 (New Curriculum launched in 2015)
	Biomedical Sciences	Launched in 2016-17	34
	Chinese Medicine	4	5
	Nursing	2	2
	Pharmacy	8	10
	Public Health	0	2
Science	Biology (Human Biology Stream)	12	offered up to 2014-15
	Food and Nutritional Sciences	1	offered up to 2014-15
Engineering	Biomedical Engineering	Launched in 2012-13	3
University General Education	Non-Faculty of Medicine	2	2
Total:		49	67

Dissecting laboratory and dissection classes

Dissection classes



“Silent Teacher” Body Donation Programme



Participation of medical students in the farewell ceremony with family members of “Silent Teachers”



Body donation at a glance

Year	Number of donated body	Number of body donation registration
2009	4	8
2018	110	1,627

External funding and donations received in support of Dissecting Teaching and Body Donation Programme

Year	Total amount (HK\$)
From 2013 to 2019	2,760,000

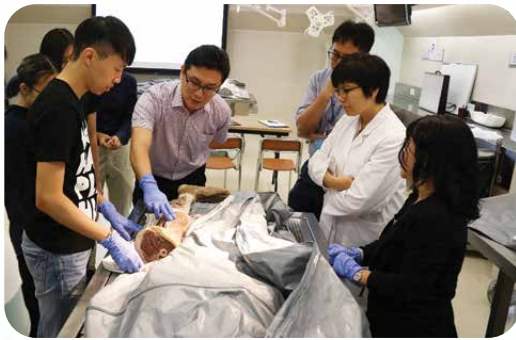


Donations from the Board of Management of the Chinese Permanent Cemeteries



Summer workshop on dissection techniques

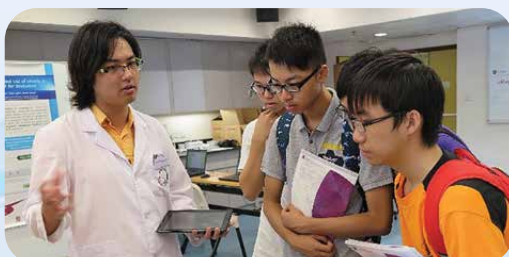
Coordinated by our Dissecting Laboratory, the annual workshop aims to enable medical students to have in-depth learning of human anatomy for enhancing dissection skills, which helps inspire the students to pursue surgical specialties in the future.



Information Day



Electrocardiogram (ECG) interpretation



Demonstration of UReply, an interactive classroom communication system



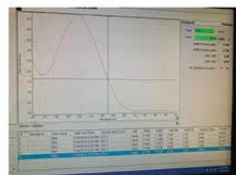
Summer Research Internship Scheme for medical students

In the past ten years, over 300 medical students took part in this annual scheme which enables them to acquire hands-on research experience under the supervision of our Principal Investigators.

TANG Man Yui

“ Meanwhile, I have also learnt to be patient, cautious and calm especially facing unpredicted difficulties. I believe that these are also elements that a good doctor needs to have ... ”

Research Supervisor:
Prof. KWAN Yiu Wa



Sharing of participating students

WEI Kejun

“ I have had a clear idea of what research should be and what good quality a good researcher possesses. I believe these would not only help me if I participate in research in the future but also my medical study. ”

Research Supervisor:
Prof. CHENG Sze Lok Alfred



Division of Education

The establishment of the Division of Education (previously known as the Teaching and Learning Unit) aims to develop and promote the use of effective tools and best practices for advancing teaching quality and student learning, to facilitate the application of outcome-based approaches in teaching and learning, and to promote the professional development of academic staff in teaching.

Year	Number of Division of Education members
2009	7
2019	17



Pedagogical grants and awards

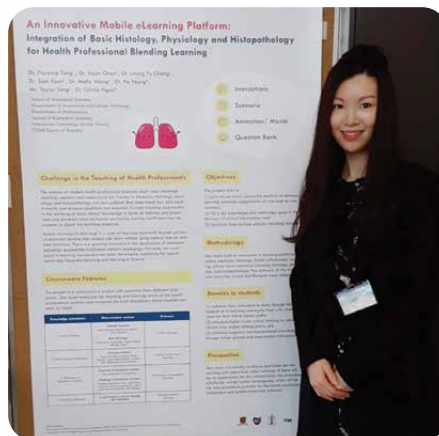
Members in the Division are committed to developing new e-learning courseware and innovative pedagogical approaches. In the past 10 years, we successfully secured 47 pedagogical grants provided by the University, the Quality Education Fund, and the University Grant Council, involving a total sum of HK\$5,480,959. We also received 20 pedagogical awards in the Teaching and Learning Innovation EXPO organised by the University and in other education conferences.

Year	Number of pedagogical grants*	Funded amount (HK\$)
2009-10	1	\$80,000
2010-11	2	\$120,000
2011-12	4	\$224,000
2012-13	2	\$108,000
2013-14	2	\$165,000
2014-15	3	\$214,800
2015-16	7	\$484,286
2016-17	10	\$1,456,510
2017-18	10	\$664,218
2018-19	6	\$1,964,145
Total	47	\$5,480,959

*With School members as Project Leader / Principal Supervisors



(From left) Dr. Florence Tang, Dr. Ann Lau and Dr. Rebecca Lee



Dr. Molly Wong



Dr. Rebecca Lee (2nd from left)

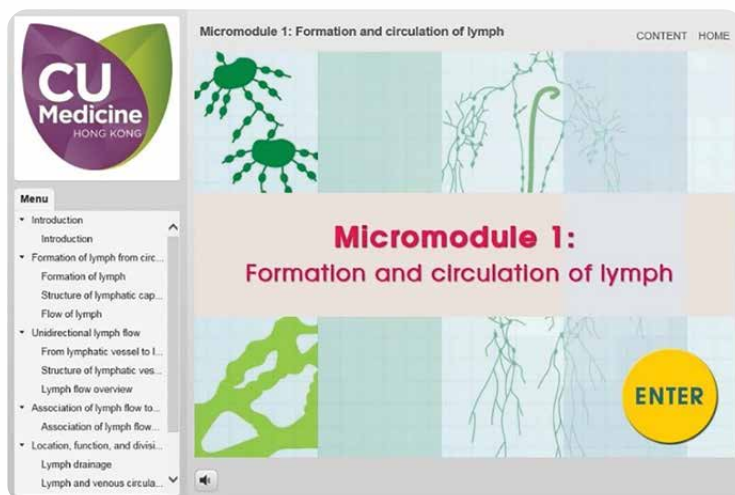


Dr. Florence Tang (middle)



Dr. Wong Wai-kai (2nd from left)

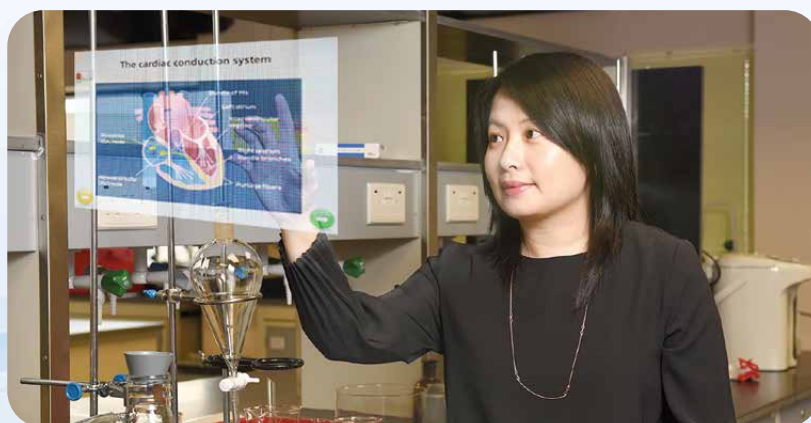
Signature pedagogical projects



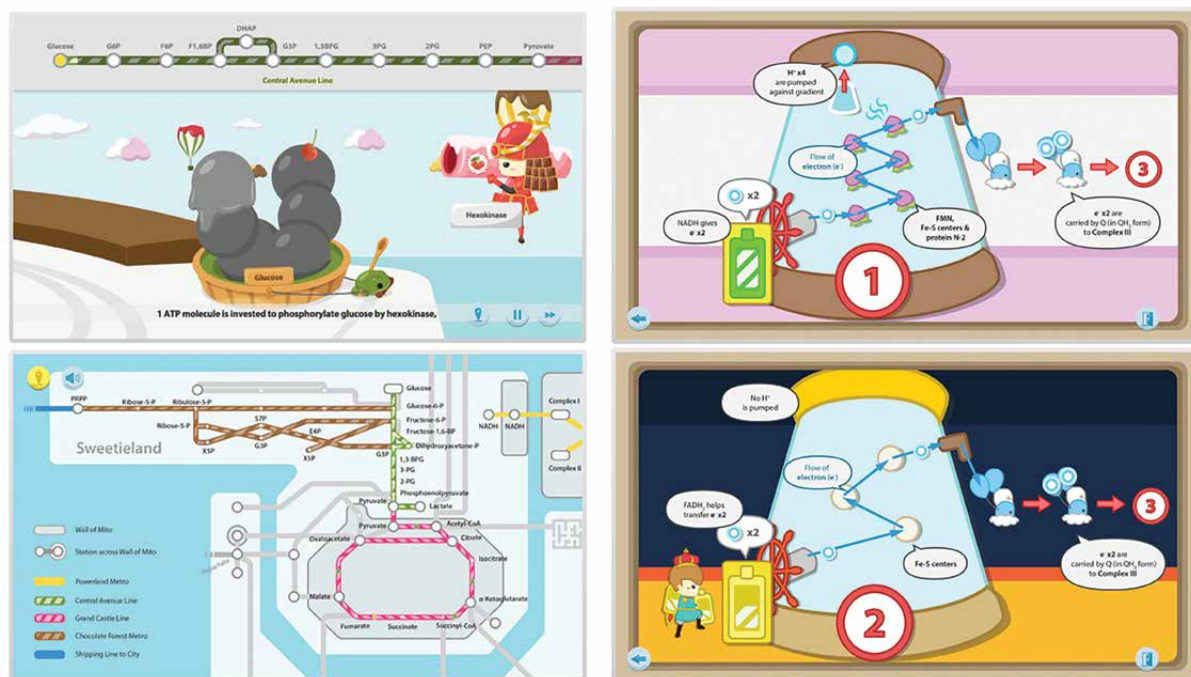
Enhancing student's ability to articulate lymphatic anatomy: interactive way of teaching lymphatic system for medical students



Application of Augmented Reality (AR) and Virtual Reality (VR) for teaching multidisciplinary topics in biomedical sciences: a single tool to combine teaching of anatomy, physiology, biochemistry and pharmacology for medical and non-medical students



Micromodules and coursewares developed to assist student learning in physiology



Articulation of metabolic pathways using articulate storyline (sweetieland & powerland): a creative way to teach cellular metabolic pathway

Teaching experience sharing



At Sun Yat-sen University Zhongshan School of Medicine



At Medical Education Conference organised by Hong Kong Academy of Medicine

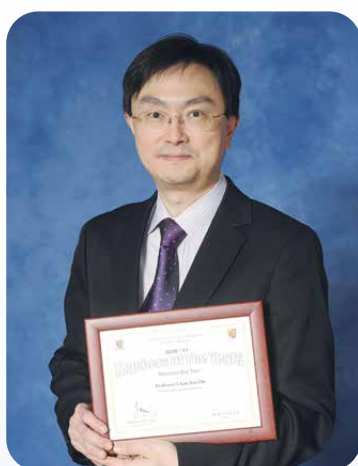
For details on the pedagogical innovation projects of our School, please visit
<https://www2.sbs.cuhk.edu.hk/en-gb/education/division-of-education/pedagogical-innovation-projects>

Teaching Excellence

In the first decade, our School members received different teaching awards from the Faculty of Medicine and the University.

Award name	Award year	Awardees
CUHK Vice-Chancellor's Exemplary Teaching Award	2011 2012 2013 2015	Prof. Hector S.O. Chan ^(a) Prof. Simon C.L. Au ^(b) Prof. Christopher H.K. Cheng ^(c) Dr. Rebecca K.Y. Lee ^(d)
CUHK Exemplary Teaching Award in General Education	2015	Dr. Rebecca K.Y. Lee ^(d)
Master Teacher, Faculty of Medicine	2010-11	Prof. Eric Y.P. Cho ^(e)
Outstanding (Faculty) Education Award, Faculty of Medicine	2012-13 2014-15 2017-18	Prof. Kwong Wing-hang ^(f) Dr. Isabel S.S. Hwang ^(g) Dr. Ann S.N. Lau ^(h)
Teachers of the Years Awards, Faculty of Medicine	2009-10	Prof. Simon C.L. Au ^(b) Prof. Hector S.O. Chan ^(a) Prof. Kwong Wing-hang ^(f) Dr. Rebecca K.Y. Lee ^(d) Prof. Alisa S.W. Shum ⁽ⁱ⁾ Prof. David T.W. Yew ^(j)
	2010-11	Prof. Simon C.L. Au ^(b) Prof. Hector S.O. Chan ^(a) Prof. Eric Y.P. Cho ^(e) Prof. Ng Tzi-bun ^(k) Prof. Alisa S.W. Shum ⁽ⁱ⁾ Prof. David T.W. Yew ^(j)
	2011-12	Prof. Simon C.L. Au ^(b) Prof. Kwong Wing-hang ^(f) Prof. Leung Po-sing ^(l) Prof. Alisa S.W. Shum ⁽ⁱ⁾ Prof. Yung Wing-ho ^(m)
	2012-13	Prof. Simon C.L. Au ^(b) Prof. Hector S.O. Chan ^(a)
	2013-14	Prof. Simon C.L. Au ^(b) Dr. Rebecca K.Y. Lee ^(d) Prof. Yung Wing-ho ^(m)

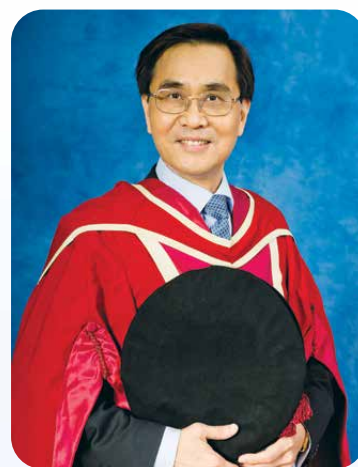
Teachers of the Years Awards, Faculty of Medicine	2014-15	Prof. Simon C.L. Au ^(b) Dr. Isabel S.S. Hwang ^(g) Dr. Rebecca K.Y. Lee ^(d) Prof. Alisa S.W. Shum ⁽ⁱ⁾ Prof. Yung Wing-ho ^(m)
	2015-16	Prof. Simon C.L. Au ^(b) Dr. Rebecca K.Y. Lee ^(d)
	2016-17	Prof. Simon C.L. Au ^(b) Dr. Rebecca K.Y. Lee ^(d) Prof. Alisa S.W. Shum ⁽ⁱ⁾
	2017-18	Prof. Simon C.L. Au ^(b) Prof. Alisa S.W. Shum ⁽ⁱ⁾ Dr. Wong Wai-kai ⁽ⁿ⁾
	2018-19	Prof. Simon C.L. Au ^(b) Dr. Ng Yuen-keng ^(o) Dr. Wong Wai-kai ⁽ⁿ⁾



(a) Prof. Hector Chan



(b) Prof. Simon Au (left)



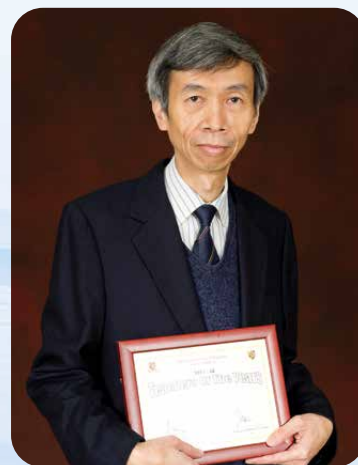
(c) Prof. Christopher Cheng



(d) Dr. Rebecca Lee



(e) Prof. Eric Cho



(f) Prof. Kwong Wing-hang



(g) Dr. Isabel Hwang



(h) Dr. Ann Lau (right)



(i) Prof. Alisa Shum (left)



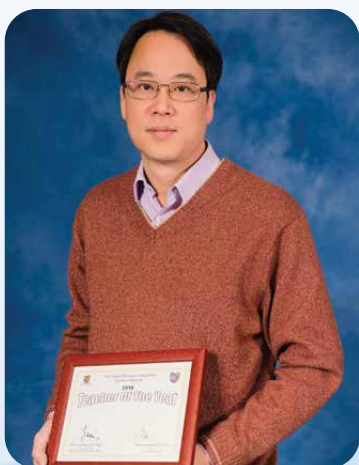
(j) Prof. David Yew



(k) Prof. Ng Tzi-bun (left)



(l) Prof. Leung Po-sing



(m) Prof. Yung Wing-ho



(n) Dr. Wong Wai-kai (left)



(o) Dr. Ng Yuen-keng

OUTREACH ENDEAVOURS

Since its establishment, the School of Biomedical Sciences has attached great importance to academic and community outreach to broaden and enhance our network and visibility. It has been progressively achieved through the signing of collaborative agreements, setting up of joint laboratories, mutual visits, student and staff exchanges, as well as organisation of joint scientific activities and participation in academic events hosted by our partner institutions.

Academic Connections

Our School has built up scholarly links with numerous world-renowned universities and research institutions through the development of Memoranda of Understanding (MoU) for promoting collaborative research partnership. These partner institutions include:



MoU signing moments



Pan-Asian Biomedical Science Consortium



South Sichuan Institute of Translational Medicine, China



Max Planck Institute for Heart and Lung Research, and
Max Planck Institute for Molecular Biomedicine, Germany



Chongqing Medical University, China



University of Copenhagen, Denmark



University of Oslo, Norway

Joint establishments



CUHK – Shanghai Institute of Materia Medica, Chinese Academy of Sciences (CAS) Joint Research Laboratory for Promoting Globalization of Traditional Chinese Medicine (March 2011)



CUHK – BGI Innovation Institute of Trans-omics (July 2011)



CUHK – Guangzhou Institutes of Biomedicine and Health, CAS Joint Research Laboratory on Stem Cell and Regenerative Medicine (August 2012)



CUHK – Jinan University Ministry of Education Key Laboratory for Regenerative Medicine (December 2013)

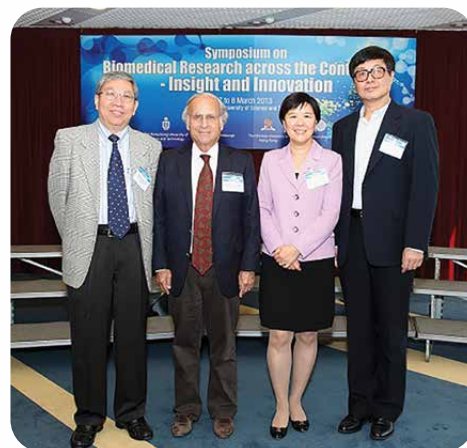


CUHK – Shandong University Joint Laboratory on Reproductive Genetics (December 2013)



CUHK – University of Southampton Joint Laboratory for Stem Cell and Regenerative Medicine (October 2016)

Joint conferences and symposia



Joint Symposium on Biomedical Research across the Continents – Insight and Innovation (March 2013)



2013 Gordon Research Conference on Germinal Stem Cell Biology (July 2013)



2nd Pan-Asian Biomedical Sciences Conference (December 2014) and 4th Pan-Asian Biomedical Science Conference (December 2018)



CUHK – National Natural Science Foundation of China (NSFC) Academic Symposium on Adolescent Mental Health and Disorders 2015 (October 2015)



Conference on Cancer: From Biology to Treatment, jointly organised with Erasmus University Medical Centre, the Netherlands (May 2016)



Symposium on Animal Models and Human Disease Mechanisms cum Postgraduate Research Day (August 2016)



First CUHK – Monash Joint Symposium on Regenerative Biology and Tissue Engineering (July 2018)



2nd Retreat of the Max Planck – GIBH Centre for Regenerative Biomedicine and CUHK – MPI – GIBH Joint Symposium on Stem Cell and Molecular Medicine (October 2018)



SBS-CUHK – Shanghai Jiao Tong University Joint Symposium on Stem Cell and Cancer Research (June 2019)

Exchange and training programmes

Cross-strait Symposiums on Biomedical Sciences



June 2014



November 2016



November 2017



September 2018

Summer Research Placement Programme



2016

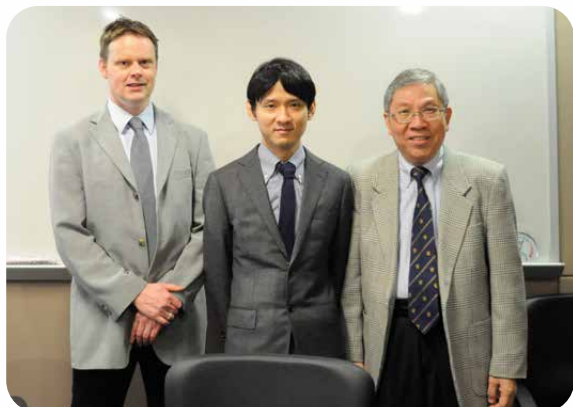


2017



2018

Other major visits



Saitama University, Japan (March 2015)



College of Medicine, Korea University, South Korea (October 2016)



Faculty of Medicine, Nursing and Health Sciences, Monash University, Australia (May 2016)



University of Leeds, UK (June 2016)

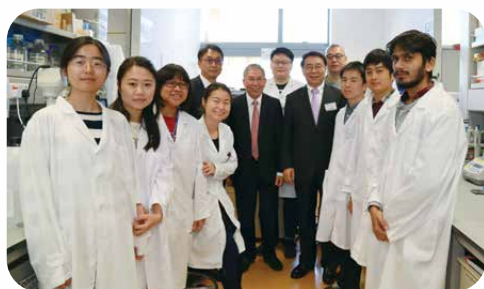


University of Glasgow, UK (September 2016)



Delegation visit to Monash University, Australia (February 2017)





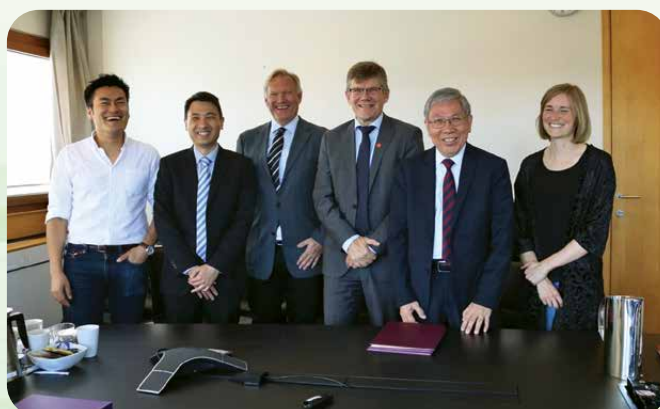
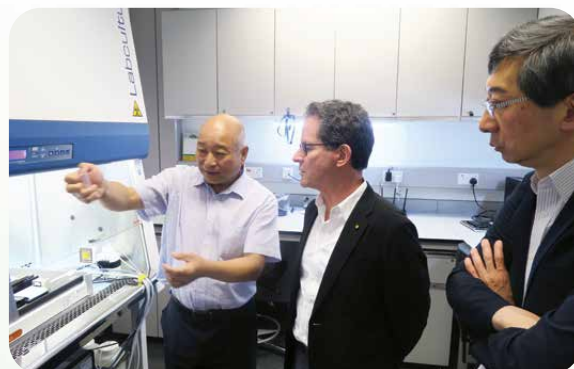
Chinese Academy of Sciences, China (December 2017)



Utrecht University, the Netherlands (January 2019)



Department of Molecular Genetics, University of Toronto, Canada (June 2019)



Delegation visit to University of Copenhagen, Denmark and University of Oslo, Norway (June 2019)

Community Outreach

"Silent Teachers" Body Donation Programme



Publication on *Silent Teachers – The Lecture on Life and Death Education Given to Us by the Body Donors* captures the history of the programme with sharing from various parties who have benefitted from the body donors.

Since its publication, the book has been awarded numerous prizes, including Hong Kong Golden Book Awards 2018, and the 16th Top 10 Book Picks Awards, etc.





Secondary school visits to Dissecting Laboratory



2016年5月14日 星期六

[← 上一篇](#)
[下一片 →](#)

中大醫學院告別21無言老師 將軍澳紀念花園舉撒灰儀式 (20:01)

[8](#)
[t](#)
[f](#)
[v](#)
[u](#)
[y](#)
[A+](#)
[A-](#)
[圖](#)
[音](#)
[書](#)


圖2-1 - (華人永遠墳場提供)



中大醫學院今日為參與「無言老師」遺體捐贈計劃的21名無言老師，於將軍澳紀念花園舉行告別及撒灰儀式，並將他們的名字刻在紀念牆牌上，對其奉獻表達敬意。

醫學院助理院長（教育）陳新安表示，華人永遠墳場管理委員會為遺體捐贈者而設的無言老師撒灰區，給先人安息之所，亦對無言老師貢獻社會致以肯定和尊重。

參與中大遺體捐贈計劃的人士按年增加，現時已超過1萬宗，當中在2015年共有106名人士捐出遺體。2013年起，所有參與計劃的無言老師，可於辭世及完成醫學研究任務後，將骨灰撒放於將軍澳紀念花園。



South China Morning Post

Health & Wellness

How Hong Kong embalmer's graphic artist training helps him beautify bodies

Pasu Ng followed his family into the embalming trade and now handles cadavers used by student doctors at one of city's universities, where he's helped end dissection of unclaimed bodies

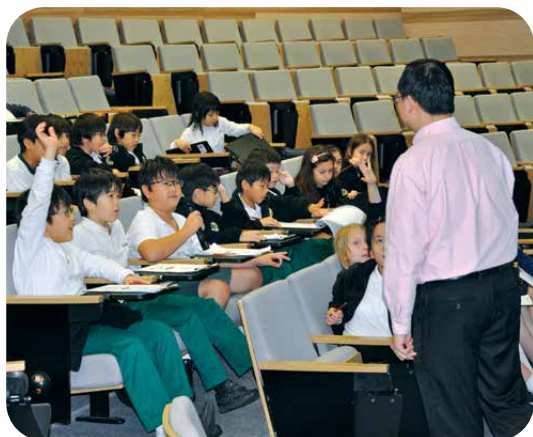
Olivia Chan
Published: 7:30am, 17 Apr 2017



Former graphic designer Pasu Ng is in charge of the dissecting room at the Chinese University of Hong Kong's medical school. Photo: K.Y. Cheng

Pasu Ng Kwai-lun, 36, is a soft-spoken young man. Fashionably dressed, he fixes his funky glasses as he speaks passionately about his craft – preserving dead bodies.

Reception of government officials and other organisations



Japanese International School (November 2012)

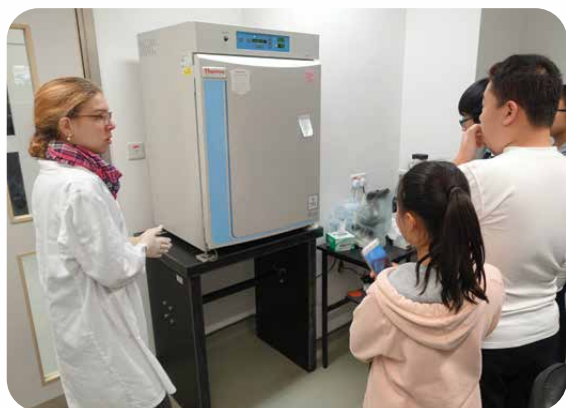


Independent Schools Foundation Academy (December 2012)



Department of Health, HKSAR Government (March 2013)





Students of Winter Program for the Gifted and Talented 2017 (December 2017)



University Grants Committee (May 2018) and Research Grants Council (June 2018)



Innovation and Technology Commission, HKSAR Government and Hong Kong Science and Technology Parks Corporation (August 2019)



Financial Secretary, HKSAR Government (December 2018)

Local and international media visits



Local media heads (July 2018)



Thomson Reuters (November 2018)



The Wall Street Journal (November 2018)



Workshop on Biomedical Sciences for local media (February 2019)



Media coverage and publicity



The Faculty of Medicine of CUHK and the Li Ka Shing Faculty of Medicine of HKU launch the city's first collaborative study with the aim of providing expert affordable multi-gene mutation - drug matching for recurrent ovarian cancer patients. From left: Prof. Hsiao Yun-Sheng, Li Ka Shing Faculty of Medicine, HKU; Prof. Stephen Kwok-Wing, CUHK Professor, School of Biomedical Sciences and Prof. Vivian Wai-Yan Lui, Associate Professor, School of Biomedical Sciences, Faculty of Medicine, CUHK.

20 August 2017
CUHK proposes bioinformatics approach to reposition drugs
Anti-inflammatory and lipid-lowering agents may treat psychiatric disorders



OUR PEOPLE



Director's and General Office



Research Administration Team



Graduate Education Team



BSc in Biomedical Sciences Team



Undergraduate Education Team



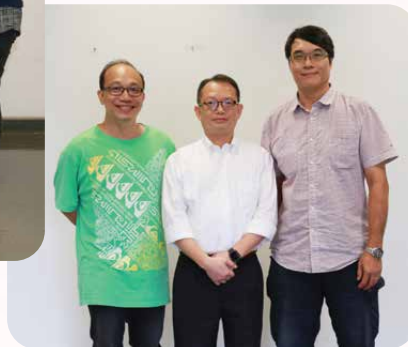
Division of Education



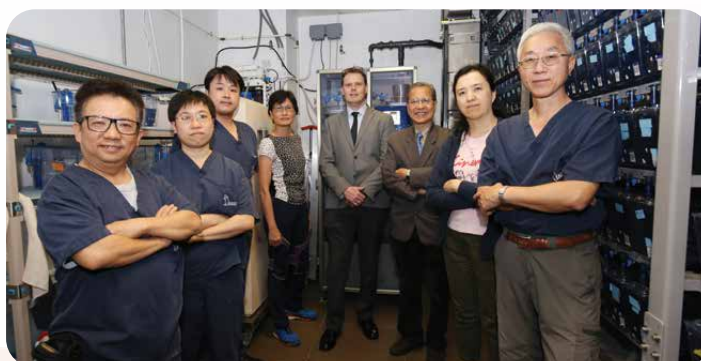
Dissecting Laboratory



Safety and Buildings Management Team



Core Laboratories Team



Animal Holding Core Team



Cancer Biology and Experimental Therapeutics Program



Developmental and Regenerative Biology Program



Neural, Vascular, and Metabolic Biology Program



Undergraduate and Postgraduate Students



Executive Committee of Postgraduate Student Association



Executive Committee of BSc Student Association





Graduates of MPhil-PhD in Biomedical Sciences from 2012 to 2018



MSc graduates in 2018 and 2019



PRECIOUS MOMENTS

SBS inauguration dinner



Festive parties





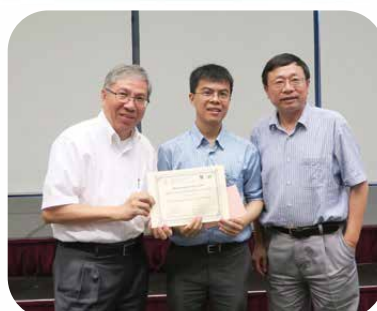
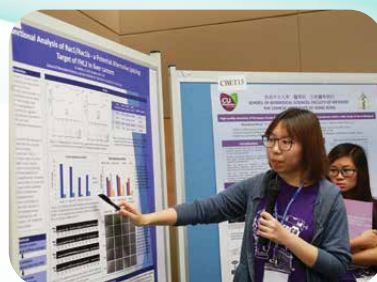
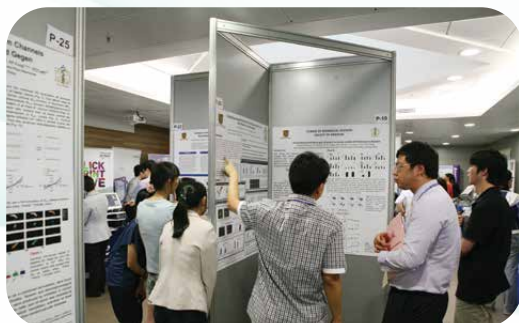
Housewarming Lunch for Relocation to Lo Kwee-Seong Integrated Biomedical Sciences Building



Retreats



Annual Research Days and Postgraduate Research Days



Activities organised by student associations



THE WAY FORWARD



Professor Andrew M. Chan

Professor and Director
School of Biomedical Sciences
The Chinese University of Hong Kong

It is delightful to recognise the journey that we have been on, and set goals for the future. Over the past decade, being a relatively young institution, the School of Biomedical Sciences has already established a strong foundation to reach the next level of research and education excellence in biomedical sciences.

Human capital will certainly remain the key strategic priority in strengthening research and education capacity. We will continue to attract top-tier biomedical scientists, as well as promising researchers and students, to become a part of us to accelerate multidisciplinary collaborations and hence drive further progress in cutting-edge research and academic achievements, with the introduction of innovative technologies and collaboration among basic scientists and clinicians. We will spare no effort to equip our students with knowledge on advanced technology and the latest development in biomedical sciences, while at the same time guiding their transformation into highly qualified and sought-after scientists in Hong Kong, Mainland China, Asia-Pacific, and worldwide.

To cope with the continuous growth, we will extend our infrastructure which will provide a conducive and facilitative environment for our researchers to further pursue scientific excellence. Along with the Faculty's Expansion Project in Area 39 on the University campus, we are excited to expand the School's premises with new state-of-the-art facilities where research will continue to thrive.

Of course, we will go beyond the existing projects to fully capitalise the collaborative and funding opportunities. These include but not limited to the Innovation and Technology initiatives spearheaded by the HKSAR Government, which are being implemented across the Greater Bay Area. We will further strengthen our academic exchanges and establish new collaborative programmes with major universities and biomedical research centres at the national and international levels. We are also eager to expand our partnerships with colleagues in the hospitals and pharmaceutical industries, which could help forge the growth of interdisciplinary and translational research, and bring positive social impact to the community.

We believe that all these will support us to realise our aspiration to become one of the leading hubs for biomedical research and education regionally and globally. We invite you all to join hands with the School for another remarkable decade.





Editorial Board

Chairman

Prof. Andrew M. Chan

Members

Prof. Hector S.O. Chan

Prof. Chan Wai-yee

Prof. Woody W.Y. Chan

Prof. Fung Kwok-pui

Prof. Huang Yu

Dr. Ann S.N. Lau

Mr. Chan Chi-ho

Ms. Grace S.C. Wong

Ms. Alva K.W. Chung

Additional thanks to the academic staff, students and alumni for their contribution to various chapters of this anniversary booklet.

Contact Us

School of Biomedical Sciences

Faculty of Medicine

The Chinese University of Hong Kong



Room G03, G/F, Lo Kwee-Seong Integrated
Biomedical Sciences Building, Area 39,
The Chinese University of Hong Kong,
Shatin, New Territories, Hong Kong



Telephone: (852) 3943 1233



Fax: (852) 2603 5123



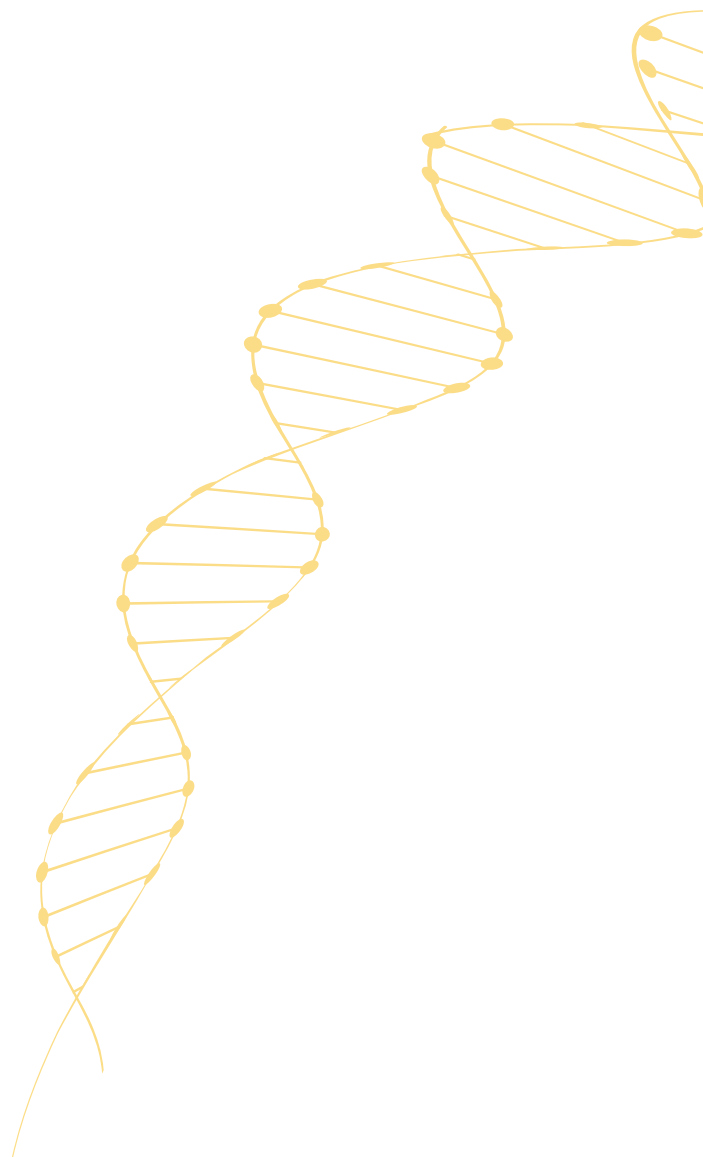
Email: sbs.med@cuhk.edu.hk



Website: <https://www2.sbs.cuhk.edu.hk/en-gb/>



LinkedIn: <https://www.linkedin.com/school/cuhk-sbs/>





To protect the environment by minimizing your carbon footprints, please share a copy with friends or read it online at your own leisure (<https://www2.sbs.cuhk.edu.hk/en-gb/publications>).