

THE CHINESE UNIVERSITY OF HONG KONG  
SCHOOL OF BIOMEDICAL SCIENCES  
香港中文大學生物醫學學院

Reminiscences  
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# DIRECTOR'S MESSAGE

## 院長題詞



PROFESSOR CHAN WAI-YEE  
PROFESSOR OF BIOMEDICAL SCIENCES &  
DIRECTOR, SCHOOL OF BIOMEDICAL SCIENCES  
THE CHINESE UNIVERSITY OF HONG KONG

香港中文大學生物醫學學院院長及生物醫學講座教授  
陳偉儀教授

Time flies, and five years have gone by in the twinkling of an eye since the School of Biomedical Sciences came into existence in mid-2009. To commemorate our 5<sup>th</sup> Anniversary, I proudly present to you this special booklet, **“School of Biomedical Sciences: Reminiscences of the First Quinquennium”**, which journeys you through our major achievements and milestones attained in the first five years of development.

When asked about how far the original objectives of establishing the School have been achieved, I responded, without hesitation, that there is still a long way to go for a young academic institution like us, although we progressed rapidly and satisfactorily in different domains over the past years. As a result of the smooth integration of the former pre-clinical departments, the School was well enabled to actively engage in theme-based, interdisciplinary collaborative research, backed up by our internal merit-based incentive scheme, the several first-class core laboratories and animal holding facilities, and a cluster of academic staff mixed with young and bright as well as senior and experienced investigators. With the facilitation of the five Thematic Research Programs and the researchers' diverse yet complementary expertise, the quantity and quality of our scientific outputs have been markedly improved, as reflected in the steady increase in the number of high impact publications and in the amount of external competitive funding. No less important was the continued enrichment of our overall teaching and learning, which has been achieved through a coordinated team of teaching staff with strong passion to guiding and inspiring our students in the lifelong quest of knowledge, and through many other education-related initiatives such as the successful introduction of the articulated M.Phil.-Ph.D.

時光飛逝，成立於2009年中旬的生物醫學學院，轉眼間已度過五個寒暑。為慶祝學院成立五周年，我們誠意製作這冊《**生物醫學學院：創建五年紀事回顧**》特刊，藉此總結學院在首個五年取得的各項重要成就和發展里程碑。

每當被問及學院實現了多少個於成立時所訂下的目標，我會毫不猶豫地回答：過往數年，雖然我們於各個範疇都發展迅速，並取得令人滿意的成績，但對於我們這所年輕的學院來說，日後仍然有漫長的道路要走。在順利整合四個臨床前期學系後，學院成功推行以績效為本的內部獎勵機制及建立數個先進的中心實驗室等設施，加上擁有一個結合了年輕又有衝勁與資深且經驗豐富的學術研究團隊，因此得以積極發展跨學科主題協作研究。憑藉五個主題研究組的大力推動及各科研人員多樣且能互補的專長，我們的科研成果，尤其是在獲取校外競爭性研究撥款及發表高影響力論文數目方面，都有顯著提升。此外，透過相互配合、充滿熱忱、並以啟導學生終身追求知識為己任的教學團隊，學院得以順利推出生物醫學哲學碩士 — 博士銜接課程、年度暑期研究實習計劃、及成立生物醫學學院研究生會等教學相關項目，持續提升並豐富了整體的教與學質素。當然，不可不提是學院兩個年度旗艦活動 — 「生物醫學學院研究日」及「生物醫學學院研究生日」，兩者有效地

# DIRECTOR'S MESSAGE

## 院長題詞

Programme, the annual Summer Research Internship Scheme, and the formation of the SBS Postgraduate Student Association, and so on. Surely, the two annual flagship events, namely, the “SBS Research Day” and the “SBS Postgraduate Research Day”, have effectively created an interactive platform for our investigators and students to showcase their research outcomes and share the related experience with peers. All these have, on one level, gained the School wider recognition in the region as evidenced in our extensive academic network with mainland and overseas prestigious institutions, and on another level, successfully enhanced the branding and visibility of the School, the Faculty of Medicine and the University in national, regional and global academic realms.

When further asked if satisfied with the progress made so far, I remarked, spontaneously, that we should not feel contented but continue to look ahead and venture with confidence, modesty and prudence. In the face of the ever-changing landscapes of higher education and of biomedical research, we will restructure our Thematic Research Programs and academic staff composition, reorganize the administrative structure of the School with a concrete succession plan in place, continually support the Faculty's revamp of the medical curriculum, and enhance our outreaching efforts through establishing joint laboratories with overseas strategic partners, and so on. With these initiatives and the valuable experience derived from our first five years of growth, I am fully convinced that the School will be well geared up for the many challenges ahead and the every opportunity to move forward to the next level of scholarly excellence and prominence.

I would like to take this opportunity to express again my earnest gratitude to the Senior Management of the University, the Faculty of Medicine as well as the many benefactors and friends for their unflinching trust and support. I am also wholeheartedly thankful to the Vitasoy Group and the K.S. Lo Foundation for bringing us the Lo Kwee-Seong Integrated Biomedical Sciences Building, a sophisticatedly-designed and well-equipped new home for our School. Last but not the least, I am greatly indebted to all of our School members, especially the Associate Directors, the Theme Chiefs, the Managing Directors of core laboratories and animal holding facilities, the Manager of the School, as well as the Heads of different functional teams, for their complete devotion and collective efforts without which our thriving development in the past few years would not have been possible.

I eagerly look forward to sharing with you again the many more accomplishments in our 10<sup>th</sup> Anniversary and beyond.

創建了一個互動的平台，讓我們的科研人員和學生們展示他們的研究成果，並與同行及同輩分享相關的經驗。凡此種種，一方面讓學院與內地及海外著名院校建立了更廣闊的學術聯繫網絡，並於區內得到更廣泛的認同；另一方面亦成功地提升了學院、醫學院與大學在國際及國內學術界的形象與知名度。

當被問及是否滿意學院迄今所取得的成果，我會回應：我們不會自滿，反而會繼續以謙虛謹慎卻不失自信的態度和去展望將來、迎接挑戰。面對急劇變化的高等教育及生物醫學研究大環境，我們將重新審視各主題研究組和學術人員的組成、重組學院的行政管理架構並制定具體的繼任安排；同時，我們將繼續支持醫學院的內外全科醫學課程的革新規劃，並透過與海外策略合作夥伴合建聯合實驗室，加強對外的學術拓展。憑藉上述各項措施和我們首五年發展所獲得的寶貴經驗，我確信學院已作好充分準備，並能把握眼前機遇、繼續前進，以追求更傑出卓越的學術成就。

我謹此再次衷心感謝香港中文大學及醫學院管理層、眾多捐獻者、及各方良朋在過往五年對學院的堅定信任與支持。我亦銘謝維他奶集團和羅桂祥基金的慷慨捐助，支持建造設計新穎且設備齊全的羅桂祥綜合生物醫學大樓，作為生物醫學學院的新家。最後，我由衷感激學院所有成員，特別是諸位副院長、各主題研究組主任、中心實驗室營運總監、實驗動物存養中心設施營運總監、學院經理，以及各職能團隊的主管，全賴他們的無私奉獻和集體努力，成就學院過去數年的蓬勃發展。

我殷切期望在我們十周年誌慶及往後日子，能再度與你們分享學院更多的成就。

# CONGRATULATORY MESSAGES

## 各方賀辭



PROFESSOR JOSEPH J.Y. SUNG  
 VICE-CHANCELLOR AND PRESIDENT  
 THE CHINESE UNIVERSITY OF HONG KONG

香港中文大學校長  
 沈祖堯教授

It gives me immense pleasure to extend my warmest congratulations to the School of Biomedical Sciences in the Faculty of Medicine at The Chinese University of Hong Kong on its 5<sup>th</sup> Anniversary.

Guided by the University's keen determination of developing biomedical sciences under its five Focused Areas of Research, the School was established in mid-2009 through amalgamating the four former preclinical departments. Being the first of its kind in a local university, the School has made encouraging and remarkable progress in various domains since its inception, especially in terms of promoting interdisciplinary research collaborations, postgraduate and undergraduate training, as well as academic outreach.

On behalf of the University, I wish to extend my heartiest appreciation to Professor Chan Wai-ye, Founding Director of the School of Biomedical Sciences and his many School members for their concerted efforts and profound contributions to the School. I would also like to express my deepest gratitude to the many benefactors for their unfailing support over the years, especially the Vitasoy Group and the K.S. Lo Foundation for their generous donation for constructing the well-designed and well-equipped Lo Kwee-Seong Integrated Biomedical Sciences Building, a new and bigger home for the School that promotes more vigorous scholarly inquiries and scientific intercourse amongst its academic, research and student members.

I have every confidence that the School will continue to grow from strength to strength in the many years to come.

欣逢香港中文大學醫學院生物醫學學院成立五周年，本人謹書數語，以誌祝賀。

為了銳意發展「生物醫學」研究，大學將它列為五大重點研究領域之一，並於2009年年中把醫學院轄下四個臨床前期學系合併，成立在本地大學第一所專注發展生物醫學研究與教學的生物醫學學院。自創立以來，學院於各方領域，尤以推動跨學科協作研究、研究生及本科生教育、及海外學術聯繫方面，均取得長足的進步。

本人謹代表大學，由衷感謝生物醫學學院創院院長陳偉儀教授及學院上下同工，他們一直以來付出的共同努力及為學院所帶來的深遠貢獻。我亦謹向一眾捐贈者致意，感激他們過往數年對院所予以堅定的支持。我們更深深感謝維他奶集團和羅桂祥基金的慷慨捐助，支持大學建造了設計新穎且設備齊全的羅桂祥綜合生物醫學大樓，為學院提供了一個既新且寬敞的家，進一步促進教學、研究人員與學生之間更多的學術與科研交流。

我深信生物醫學學院將繼往開來、茁壯成長。

# CONGRATULATORY MESSAGES

## 各方賀辭



PROFESSOR FOK TAI-FAI  
PRO-VICE-CHANCELLOR / VICE-PRESIDENT  
THE CHINESE UNIVERSITY OF HONG KONG

香港中文大學副校長  
霍泰輝教授

I offer my heartiest congratulations to Professor Chan Wai-ye and all members of the School of Biomedical Sciences on the School's 5<sup>th</sup> Anniversary.

As the former Dean of Medicine, I was most delighted to see the integration of the former pre-clinical departments to establish the School under the Faculty of Medicine in mid-2009. The synergism resulting from the disappearance of departmental barrier, together with the hard work and dedication of all the colleagues, has enabled the School to scale new heights in carrying out her missions in research and education.

Under the able leadership of its Director Professor Chan Wai-ye, the School has been most successful in building up academic connections with renowned universities and institutions worldwide. Through the close partnership with its overseas and Mainland collaborators, joint laboratories and centres have been established, joint scientific meetings and conferences have been organized, and exchange programmes for academic and research personnel have been put in place. With the support of the University and the Faculty, the research capacity of the School has been greatly enhanced in terms of both research expertise and infrastructure. This has enabled the School to actively engage in more ambitious and high impact collaborative research. The unflinching outreaching efforts have not only broadened the research spectrum of the School with enhanced competitiveness, but also gained her international recognition and repute.

All in all, growing on the foundation of the former pre-clinical departments, the School has thrived extremely well in the past five years. I wish her continued success in achieving excellence in the many more five years to come!

喜值生物醫學學院五周年之際，本人謹向院長陳偉儀教授及學院全人致以衷心祝賀。

隨著大學於2009年年中把醫學院轄下四個臨床前期學系合併以成立生物醫學學院，我作為醫學院前任院長，尤其欣見學院成員能上下一心、通力合作，打破過往學系間的固有壁壘，當中所帶來的相生效益，俾使學院能實踐更高層次、更宏大的研究與教育使命。

在陳偉儀教授的卓越領導下，生物醫學學院在與世界各地著名院校建立學術聯繫方面，可謂碩果纍纍。學院透過與海外及國內合作者的緊密夥伴關係，合辦了不同項目，包括建立聯合實驗室、舉辦聯合科學研討會、及設立學術與科研人員交流計劃等。在大學及醫學院的支持下，學院研究專才與儀器設備的數目均大幅提升，使之得以積極參與更具規模及更高影響力的協作研究項目。配以持續不斷的海外學術拓展工作，不但拓寬了學院的研究領域及提升了其整體的研究競爭力，還讓學院在國際上贏得認同和美譽。

總括而言，生物醫學學院憑藉以往臨床前期學系所建立的基礎，在過往五年欣榮發展、穩紮成長。我祝願學院在追求卓越的道路上持續邁進，以迎接未來更多的五年。

# CONGRATULATORY MESSAGES

## 各方賀辭



PROFESSOR FANNY M.C. CHEUNG  
PRO-VICE-CHANCELLOR / VICE-PRESIDENT  
THE CHINESE UNIVERSITY OF HONG KONG

香港中文大學副校長  
張妙清教授

It is with great pleasure I offer this congratulatory message to the School of Biomedical Sciences on its 5<sup>th</sup> Anniversary. While five years is admittedly a short span of time for developing any academic institution, the School has indeed made tremendous progress in many areas, especially in terms of research advancement.

With the vision and leadership of Professor Chan Wai-ye, Founding Director, as well as the collective efforts and wisdom of all School members, we witnessed not only its successful transformation to a well-integrated team-based model emphasizing interdisciplinary collaborative research, but also its steady enhancement in both the quality of scientific output and research competitiveness, as reflected in the increasing number of high impact publications and successful external competitive grants, including those from the Research Grants Council. These synergies have on one level, powerfully demonstrated the University's farsightedness in establishing the School by merging the former four pre-clinical departments, and on the other level, complemented the University's continuous commitment to promoting research excellence in selected fields of biomedical sciences, being one of its five Focused Areas of Research.

Facing the fast-evolving landscape in local, national and international higher education, I have great confidence that the School of Biomedical Sciences, with its solid foundation built over the past five years, will stride forward to the next level of academic excellence in the years to come.

適逢生物醫學學院五周年誌慶，本人謹向學院致以熱烈祝賀。對任何一所學術機構而言，五年的發展時間著實短瞬；縱然如此，學院在多個範疇中均能取得令人鼓舞的成就，尤以追求卓越研究方面，成績斐然。

在創院院長陳偉儀教授的領導下、及學院一眾成員的不斷努力與集思廣益，學院不但成功轉型以主題研究模式運作，重點發展跨學科協作研究；而從其科研人員所發表的高影響力論文、及獲取的校外競爭性（包括研究資助局）研究撥款的數目來看，學院整體的科研成果的質素與研究競爭力亦同時得以持續提升。透過合併四個臨床前期學系以成立生物醫學學院，其帶來的各種協同效益，一方面足證大學當日的高瞻遠矚，另一方面，亦切實配合大學決心發展五大重點研究領域之一的「生物醫學」及相關研究。

儘管面對海外與本地高等教育急劇轉變的大環境，我深信生物醫學學院能憑藉過去五年所建立的穩固基礎，在追求學術卓越的道路上不斷奮進，百尺竿頭、更進一步。



# CONGRATULATORY MESSAGES

## 各方賀辭



PROFESSOR FRANCIS K.L. CHAN  
DEAN, FACULTY OF MEDICINE  
THE CHINESE UNIVERSITY OF HONG KONG

香港中文大學醫學院院長  
陳家亮教授

On this happy occasion of the 5<sup>th</sup> Anniversary of the School of Biomedical Sciences, I would like to congratulate Professor Chan Wai-ye, the Founding Director and all School members on the notable achievements and encouraging progress made in the first quinquennium.

The establishment of the School of Biomedical Sciences marks one of the most important milestones in the recent history of the Faculty of Medicine at The Chinese University of Hong Kong. The effective consolidation of resources and expertise through a successful integration of the four former pre-clinical units has favourably positioned the School to strive for academic and educational excellence. With the joint efforts and selfless devotion of its staff and students, the School has witnessed a significant growth in various domains such as research output and amount of external competitive funding, delivery of postgraduate and undergraduate education, as well as academic networking. Equally important was the success in capacity building through hiring young and promising faculty, and the development of several first-rate core laboratories. Looking ahead, I believe that the School of Biomedical Sciences is well placed to play an even more prominent and indispensable role in supporting the Faculty's different initiatives such as the revamp of the medical curriculum, the vigorous promotion of multidisciplinary collaborative research and its continued outreaching endeavors—all these will be conducive to further boosting the image and brand of the Faculty, thus ultimately enabling the Faculty and the University to assert a strong presence in the national and global academia landscape.

We are particularly thankful to the Vitasoy Group and the K.S. Lo Foundation for their munificence to support the construction of the Lo Kwee-Seong Integrated Biomedical Sciences Building and the setting up of the Lo Kwee-Seong Biomedical Research Fund, which are essential for sustaining the long-term development of the School and for promoting high-impact and cutting-edge biomedical research within the University.

With a solid foundation built over the past five years, I am confident that the School will continue to thrive, further pushing forward the boundaries of biomedical education and research in the next five years and beyond.

在生物醫學學院五周年誌慶之際，我欣見學院於首五年所取得的豐碩成果與令人鼓舞的發展，並謹此向創院院長陳偉儀教授及學院一眾成員致以由衷感謝及祝賀。

生物醫學學院的成立，是近年香港中文大學醫學院發展其中一個最為重要的里程碑。透過合併四個臨床前期學系及整合且善用既有的資源和專才，使生物醫學學院得以穩紮根基，追求卓越的學術研究與教育。在上下同工及研究生的共同努力與無私奉獻下，學院整體的研究產量與獲取的校外競爭性研究撥款資助顯著增加；在提供研究生和本科生教育、及建立海外學術聯繫方面，亦取得卓著成績；此外，學院成功招攬了一批深具潛力的年輕教研人員和建立了數個一級中心實驗室，進一步增強自身的發展能力。展望將來，生物醫學學院將於醫學院內扮演一個更為重要和不可或缺的角色，尤其在醫學課程的修訂、積極推廣跨學科協作研究、及持續對外推廣工作方面，將發揮更大的作用。凡此種種，不但有助提升醫學院的形象與名聲，更能加強香港中文大學及其醫學院於國際及國內學術界的地位與影響力。

在此，我們特別鳴謝維他奶集團和羅桂祥基金的慷慨捐贈，讓我們建造了羅桂祥綜合生物醫學大樓及成立了羅桂祥生物醫學研究基金，以成就生物醫學學院的長遠發展，並支持大學進一步拓展具影響力及嶄新的生物醫學研究。

憑藉過往五年所奠下的穩紮基石，我深信生物醫學學院將繼續茂壯發展、昂首邁步，並在下一個五年及以後，持續拓展生物醫學教育和研究領域的版圖。

# CONGRATULATORY MESSAGES

## 各方賀辭



PROFESSOR OWEN M. RENNERT  
 PRINCIPAL INVESTIGATOR AND HEAD  
 LABORATORY OF CLINICAL GENOMICS  
 EUNICE KENNEDY SHRIVER NATIONAL  
 INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT  
 NATIONAL INSTITUTES OF HEALTH, U.S.A.

美國國立衛生研究院  
 尤尼斯·甘迺迪·施萊佛國家兒童健康及人類發展研究所  
 臨床基因組學實驗室主管及首席研究員  
 OWEN M. RENNERT 教授

It is my pleasure and privilege to write this congratulatory message commemorating the fifth anniversary of the School of Biomedical Sciences at The Chinese University of Hong Kong. Indeed it has been an auspicious and most successful half-decade. The School, under the leadership of Professor Chan Wai-ye, has thrived – it has established itself as a leading academic and research program within the University.

I have had the honor to act as the Chairperson of the Scientific Advisory Committee of the School, thus, I and the members of its Committee had the opportunity to see the development of a new and exciting biomedical investigative program, a renewed commitment on the part of the faculty to teaching excellence, and their participation in developing a research vision and objectives that stressed the importance of fundamental research to the wellbeing of man, and its relevance to the greater community of Hong Kong and Asia.

The directorship of Professor Chan and the joint efforts of the faculty have led to re-organization of laboratory-based, fundamental research and made them a vital component of biomedical science that has, as its objectives, the improvement of the human condition and the eradication of disease. These have in turn integrated the research efforts into the clinical arena so that laboratory based scientists and clinicians work as a single team to understand basic biology, clinical problems and enhance the outlook of graduate students, medical students, and students in health-related disciplines. The School offers these trainees an educational program that widens their horizons and perspectives.

Indeed, our Committee is pleased to have played a small role in enhancing this transformation. The success of the faculty and the School is evidenced by the quality of its scientific publications, by its success at attracting research funding, by its recognition from the wider scientific community, by its capacity to attract new, young faculty to its ranks, and by the accomplishments of its new trainees. On behalf of the Advisory Committee, we extend our congratulations on the fifth birthday of the School of Biomedical Sciences.

本人深感榮幸，能為香港中文大學生物醫學學院成立五周年撰寫賀辭。在陳偉儀院長的領導下，學院於首五年順利且成功地蓬勃發展，在學術研究方面成就與日俱增，逐步成為大學內具領導地位的重要單位。

有幸成為學院科學顧問委員會主席，我除了能跟其他委員會成員，一起見證了這個全新又令人振奮的專研生物醫學的學院的誕生與成長，還欣見一眾教員對追求卓越教學所展示的更大承擔，及他們致力針對一些與人類健康(尤其是對香港以至亞洲社群)具影響的題目，參與制定和推動基礎研究的願景和目標。

在陳偉儀院長的帶領及教員們的共同努力下，學院內不同的實驗室研究項目得以重新整合，不但促使學院成為大學生物醫學科研重要的一環，更達到學院致力實踐改善人類健康及消除疾病的目標。此外，學院的研究亦得以與臨床範疇相互結合，讓基礎科學家及臨床醫生以團隊形式合作，進一步了解基本生物學和臨床方面的各種問題，並藉著不同的教育課程，拓闊研究生、醫科生和其他研究健康相關課題的學生們的視野與觀點，從而為他們開展更美好的前景。

我們科學顧問委員會慶幸能為學院的順利轉型略盡綿力。從學院成員在科研期刊所發表的文章質素、取得的研究資助的數量、在科學界所獲得的更大認受性、成功招攬的年輕教授們、以及新成員與研究生的優秀學術成就等各方面，都足以印證學院及所有教研人員的努力不懈。本人謹代表科學顧問委員會，由衷祝賀生物醫學學院五周歲生辰。

# CONGRATULATORY MESSAGES

## 各方賀辭



DR. PETER T.S. LO  
CHAIRMAN  
THE K.S. LO FOUNDATION

羅桂祥基金主席  
羅德承博士

I would like to extend my heartiest congratulations to the School of Biomedical Sciences on the joyful occasion of its 5<sup>th</sup> Anniversary.

Sharing the same mission of promoting education and well-being of humankind, the K.S. Lo Foundation pledged a donation in support of the future development of The Chinese University of Hong Kong, including the setting up of the Lo Kwee-Seong Biomedical Research Fund for advancing biomedical research and the construction of the Lo Kwee-Seong Integrated Biomedical Sciences Building named after the late Dr. K.S. Lo, the Founder of the Vitasoy Group and the K.S. Lo Foundation. Housed within this state-of-the-art building since early 2012, the School has been well enabled to make remarkable enhancement in its research and teaching capacity as well as its academic visibility. With the continued dedication and passion of its members, I believe the School will stride ahead and make more profound contributions to biomedical education and multidisciplinary translational research, hence achieving furtherance of health, alleviation of human suffering and betterment of the community at large - the common objectives that both the Foundation and the School are eagerly striving for.

On behalf of the K.S. Lo Foundation, I wish the School of Biomedical Sciences every success in the future years.

喜逢生物醫學學院成立五周年，本人謹此致以熱誠祝賀。

羅桂祥基金與香港中文大學擁有共同信念，一直以推動教育、造福人類為使命。透過我們基金的捐贈，在大學成立了羅桂祥生物醫學研究基金，以促進及開拓生物醫學研究，並支持建造以已故維他奶集團及羅桂祥基金創辦人羅桂祥博士命名的羅桂祥綜合生物醫學大樓。生物醫學學院自2012年年初搬遷至這幢配置了尖端設施的大樓後，在科研、教學能力及學術地位上均得以明顯提升。我相信憑藉學院成員持續的奉獻和熱誠，生物醫學學院將邁步成長，為生物醫學教育與跨學科轉化研究方面帶來更多深遠的貢獻，從而促進大眾健康、減輕人類因疾病所受的痛苦，實踐我們回饋社會、惠澤社群的一致目標。

我謹代表羅桂祥基金，祝願生物醫學學院繼續蓬勃發展，開創成功未來。

# MILESTONES IN RETROSPECT

## 紀事回顧



Inauguration Ceremony of the School  
學院成立典禮



SBS Logo Design Competition  
學院院徽設計比賽

2009 - 2010



1st visit of Scientific Advisory Committee  
科學顧問委員會第一次造訪



SBS Research Day 2010  
2010生物醫學學院研究日



Foundation Stone Laying Ceremony for Lo Kwee-Seong Integrated Biomedical Sciences Building  
羅桂祥綜合生物醫學大樓奠基典禮



SBS Research Day 2011  
2011生物醫學學院研究日



SBS Postgraduate Research Day 2011  
2011生物醫學學院研究生日



Grand Opening of the Lo Kwee-Seong Integrated Biomedical Sciences Building  
羅桂祥綜合生物醫學大樓開幕典禮



SBS Postgraduate Research Day 2010  
2010生物醫學學院研究生日



2nd visit of Scientific Advisory Committee  
科學顧問委員會第二次造訪



Inauguration Ceremony of CUHK-BGI Innovation Institute of Trans-omics  
香港中文大學—華大基因跨組學創新研究院成立典禮



1st CUHK International Symposium on Stem Cell Biology and Regenerative Medicine  
第一屆幹細胞生物學及再生醫學國際研討會



SBS Research Day 2012 cum Cancer and Inflammation Symposium 2012  
2012生物醫學學院研究日暨2012癌症與炎症研討會

2011

2012



CUHK-NSFC 2010 Academic Symposium on Developmental Studies in Health and Diseases  
香港中文大學—國家自然科學基金會2010發育過程中健康與疾病的研究學術研討會



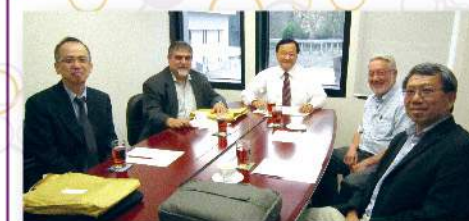
Opening Ceremony of CUHK-SIMM CAS Joint Research Laboratory for Promoting Globalization of Traditional Chinese Medicine  
香港中文大學—中國科學院上海藥物研究所促進中藥全球化聯合實驗室揭幕典禮



Inauguration Ceremony of the Executive Committee of SBS Postgraduate Student Association  
生物醫學學院研究生會執行委員會就職典禮



Inauguration Ceremony of CUHK Transgenic Core Service Centre  
香港中文大學基因轉移服務中心成立典禮



3rd visit of Scientific Advisory Committee  
科學顧問委員會第三次造訪



SBS Housewarming Lunch Gathering  
生物醫學學院喬遷午餐聚會



SBS Postgraduate Research Day 2012  
2012生物醫學學院研究生日



Inauguration Ceremony of CUHK - GIBH CAS Joint Research Laboratory on Stem Cell and Regenerative Medicine  
香港中文大學 - 中國科學院廣州生物醫藥與健康研究院幹細胞與再生醫學聯合實驗室成立典禮



1st Joint Symposium on Biomedical Research across the Continents - Insight and Innovation  
第一屆跨地域生物醫學研究：新知與創見聯合研討會



2013 Gordon Research Conference on Germinal Stem Cell Biology  
2013戈登研究會議 - 胚幹細胞生物學



3rd CUHK International Symposium on Stem Cell Biology and Regenerative Medicine  
第三屆幹細胞生物學及再生醫學國際研討會



2nd Joint Symposium on Biomedical Research across the Continents - Insight and Innovation  
第二屆跨地域生物醫學研究：新知與創見聯合研討會

2013



1st SBS Table Tennis Competition  
第一屆生物醫學學院乒乓球比賽



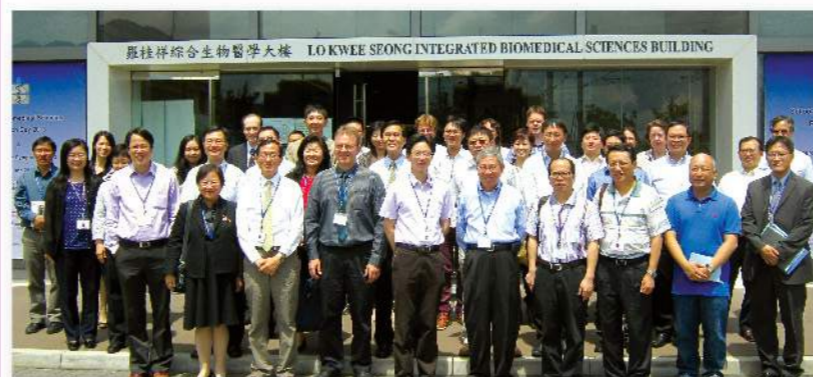
First Director's Cup - SBS Badminton Tournament  
第一屆生物醫學學院院長盃羽毛球賽



SBS Postgraduate Research Day 2013  
2013 生物醫學學院研究生日



2nd CUHK International Symposium on Stem Cell Biology and Regenerative Medicine  
第二屆幹細胞生物學及再生醫學國際研討會



SBS Research Day 2013 cum Neuroscience Symposium 2013  
2013 生物醫學學院研究日暨 2013 神經科學研討會

2014



Inauguration Ceremony of CUHK - Shandong University Joint Laboratory on Reproductive Genetics cum the 1st International Symposium on Reproductive Genetics  
香港中文大學 - 山東大學生殖遺傳聯合實驗室成立典禮暨第一屆生殖遺傳研究國際學術研討會

# MILESTONES IN RETROSPECT

## 紀事回顧



Inauguration Ceremony of CUHK - Shanghai Jiao Tong University  
Joint Research Center for Human Reproduction and Related Diseases  
香港中文大學 - 上海交通大學人類生殖及相關疾病聯合研究中心成立典禮



SBS Research Day 2014 cum Cancer and Inflammation Symposium 2014  
2014生物醫學學院研究日暨2014癌症與炎症研討會



1<sup>st</sup> SBS Photo Competition  
第一屆生物醫學學院攝影比賽



RESEARCH ACCOMPLISHMENTS  
研究成果



# RESEARCH ACCOMPLISHMENTS

## 研究成果

With the adoption of theme-based model, the School of Biomedical Sciences has been able to achieve desirable integration of our investigators, and enhanced our overall research competitiveness as well as dynamics and synergies in selected areas of biomedical research since formation in June 2009.

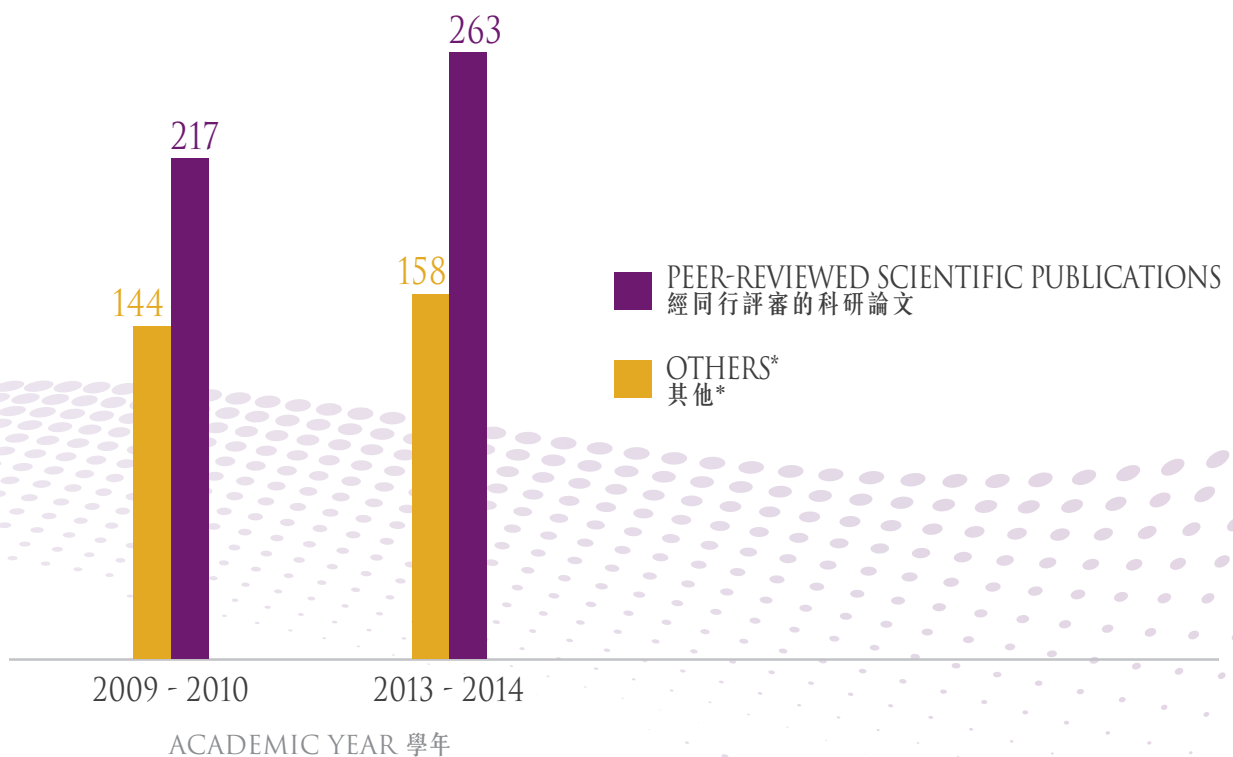
生物醫學學院自2009年6月成立以來所採用的「主題研究」模式，成功實踐了研究人員之間的相互融合，並提升了學院整體的科研競爭力與在個別重點發展的生物醫學研究範疇的動力及協同效益。

## RESEARCH OUTPUTS

### 研究產量

### ACADEMIC PUBLICATIONS

#### 學術著作



\* Including conference papers / abstracts, scholarly books, monographs and book chapters  
包括會議論文 / 摘要、學術書籍、專題著作和書籍章節

# RESEARCH ACCOMPLISHMENTS

## 研究成果

PUBLICATIONS IN JOURNALS WITH IMPACT FACTOR (IF) GREATER THAN 10 (in chronological order)  
 於影響指數高於十的期刊中所發表的科研論文 (以發表日期順序排列)

Author(s) from the School 相關作者	Title of the Published Paper 相關論文題目	Publication Date (YYYY/MM) 發表日期 (年/月)
Prof. Chen Yangchao Prof. Kung Hsiangfu 陳揚超教授 孔祥復教授	Targeting Cadherin-17 Inactivates Wnt Signaling and Inhibits Tumor Growth in Liver Carcinoma. <i>Hepatology</i> vol.50 no.5 pp.1453-1463.	2010/01
Prof. Yung Wing-ho 容永豪教授	ExpheXin1 is Required for Structural Maturation and Neurotransmission at the Neuromuscular Junction. <i>Neuron</i> vol.65 no.2 pp.204-216.	2010/01
Prof. Francis F.Y. Lam 林富源教授	Functional Mesenchymal Stem Cells Derived from Human Induced Pluripotent Stem Cells Attenuate Limb Ischemia in Mice. <i>Circulation</i> vol.121 pp.1113-1123.	2010/02
Dr. Lam Wai-yip 林偉業博士	Co-infection with Pandemic H1N1 and Seasonal H3N2 Influenza Viruses. <i>Annals of Internal Medicine</i> vol.152 no.9 pp.618-619.	2010/05
Prof. Chan Hsiao-chang 陳小章教授	Mechanosensitive Gating of CFTR. <i>Nature Cell Biology</i> vol.12 no.5 pp.507-512.	2010/05
Prof. Cho Chi-hin 曹之憲教授	Macroautophagy Modulates Cellular Response to Proteasome Inhibitors in Cancer Therapy. <i>Drug Resistance Updates</i> vol.13 no.3 pp.87-92.	2010/06
Prof. Huang Yu 黃聿教授	Activation of TRPV1 by Dietary Capsaicin Improves Endothelium-dependent Vasorelaxation and Prevents Hypertension. <i>Cell Metabolism</i> vol.12 no.2 pp.130-141.	2010/08
Prof. Woody W.Y. Chan 陳活彝教授	Analysis of the Sacral Neural Crest Cell Contribution to the Hindgut Enteric Nervous System in the Mouse Embryo. <i>Gastroenterology</i> vol.141 no.3 pp.992-1002.	2011/09
Prof. Yung Wing-ho 容永豪教授	$\alpha$ 2-Chimaerin Controls Neuronal Migration and Functioning of the Cerebral Cortex through CRMP-2. <i>Nature Neuroscience</i> vol.15 no.1 pp.39-47.	2011/12
Prof. Zhang Jin-fang, Prof. Kung Hsiangfu Prof. Lu Gang 張錦芳教授 孔祥復教授 路鋼教授	Primate-Specific microRNA-637 Inhibits Tumorigenesis in Hepatocellular Carcinoma by Disrupting Signal Transducer and Activator of Transcription 3 Signaling. <i>Hepatology</i> vol.54 no.6 pp.2137-2148.	2011/12
Prof. Ke Ya 柯亞教授	Inhibition of Beta-Amyloid Peptide Aggregation by Multifunctional Carbazole-based Fluorophores. <i>Angewandte Chemie-International Edition</i> vol.51 no.8 pp.1804-1810.	2012/02
Prof. Chan Hsiao-chang Prof. Jiang Xiaohua 陳小章教授 蔣曉華教授	Activation of the Epithelial Na <sup>+</sup> Channel Triggers Prostaglandin E2 Release and Production Required for Embryo Implantation. <i>Nature Medicine</i> vol.18 no.7 pp.1112-1117.	2012/07

# RESEARCH ACCOMPLISHMENTS

## 研究成果

Author(s) from the School 相關作者	Title of the Published Paper 相關論文題目	Publication Date (YYYY/MM) 發表日期 (年/月)
Prof. Huang Yu Prof. Yao Xiao-qiang 黃聿教授 姚曉強教授	From Skeleton to Cytoskeleton: Osteocalcin Transforms Vascular Fibroblasts to Myofibroblasts via Angiotensin II and Toll-like Receptor 4. <i>Circulation Research</i> vol.111 no.3 pp.e55-e66.	2012/07
Prof. Lee Tin-lap 李天立教授	Turning Pipe Dreams into Reality. <i>Genome Biology</i> vol.13 no.8 pp.318.	2012/08
Prof. Chan Hsiao-chang Prof. Jiang Xiaohua 陳小章教授 蔣曉華教授	CFTR Mediates Bicarbonate-dependent Activation of miR-125b in Preimplantation Embryo Development. <i>Cell Research</i> vol.22 no.10 pp.1453-1466.	2012/10
Prof. Yung Wing-ho 容永豪教授	TrkB Phosphorylation by Cdk5 is Required for Activity-dependent Structural Plasticity and Spatial Memory. <i>Nature Neuroscience</i> vol.15 no.11, pp.1506-1515.	2012/11
Prof. Huang Yu Prof. Yao Xiao-qiang 黃聿教授 姚曉強教授	Calcitriol Protects Renovascular Function in Hypertension by Down-regulating Angiotensin II Type 1 Receptors and Reducing Oxidative Stress. <i>European Heart Journal</i> vol.33 no.23, pp.2980-2990.	2012/12
Prof. Yung Wing-ho Prof. Ke Ya 容永豪教授 柯亞教授	Therapeutic Deep Brain Stimulation in Parkinsonian Rats Directly Influences Motor Cortex. <i>Neuron</i> vol.75 no.5 pp.1030-1041.	2012/12
Prof. Chen Yangchao 陳揚超教授	Enhancer of Zeste Homolog 2 Silences MicroRNA-218 in Human Pancreatic Ductal Adenocarcinoma Cells by Inducing Formation of Heterochromatin. <i>Gastroenterology</i> vol.144 no.5 pp.1086-1097.	2013/05
Prof. Feng Bo 馮波教授	SON Connects the Splicing-regulatory Network with Pluripotency in Human Embryonic Stem Cells. <i>Nature Cell Biology</i> vol.15 no.10 pp.1141-1152.	2013/10
Prof. Cho Chi-hin Prof. Alfred S.L. Cheng 曹之憲教授 鄭詩樂教授	A Novel Crosstalk between Two Major Protein Degradation Systems: Regulation of Proteasomal Activity by Autophagy. <i>Autophagy</i> vol.9 no.10 pp.1500-1508.	2013/10
Prof. Chan Hsiao-chang 陳小章教授	Whole-genome and Whole-exome Sequencing of Bladder Cancer Identifies Frequent Alterations in Genes Involved in Sister Chromatid Cohesion and Segregation. <i>Nature Genetics</i> vol.45 no.12 pp.1459-1463.	2013/12
Prof. Alfred S.L. Cheng 鄭詩樂教授	Cell Cycle-related Kinase Mediates Viral-host Signalling to Promote Hepatitis B Virus-associated Hepatocarcinogenesis. <i>Gut</i> vol. 63 no.11 pp.1793-1804.	2013/12
Prof. Stephen K.W. Tsui 徐國榮教授	Differences in Asthma Genetics between Chinese and Other Populations. <i>Journal of Allergy and Clinical Immunology</i> vol.133 no.1 p.42-48.	2014/01
Prof. Christopher H.K. Cheng 鄭漢其教授	In Vivo Chemoembolization and Magnetic Resonance Imaging of Liver Tumors by Using Iron Oxide Nanoshell / Doxorubicin / Poly(Vinyl Alcohol) Hybrid Composites. <i>Angewandte Chemie-International Edition</i> vol. 53 no.19 pp.4812-4815.	2014/05
Prof. Kung Hsiangfu 孔祥復教授	Novel Recurrently Mutated Genes and a Prognostic Mutation Signature in Colorectal Cancer. <i>Gut</i> vol.64 no.4 pp.636-645.	2014/06

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### EXTERNAL COMPETITIVE GRANTS

#### 校外競爭性研究資助

**Table 1 : New grants obtained by School members in the capacity of Principal Investigators (PIs) in 2009 - 2010 and 2013 - 2014**

表一：學院成員以首席研究員／課題負責人身份分別於2009 - 2010及2013 - 2014年度所獲取的新的研究項目資助

Types of External Competitive Grants 各種校外競爭性研究資助	2009-2010		2013-2014	
	No. 數量	Amount (in HKD\$ / RMB¥) 總額 (港幣\$ / 人民幣¥)	No. 數量	Amount (in HKD\$ / RMB¥) 總額 (港幣\$ / 人民幣¥)
Research Grants Council (RGC) - General Research Fund (GRF) 研究資助局—優配研究金	13	\$13,873,184	17	\$14,988,970
RGC - Others <sup>(i)</sup> 研究資助局—其他研究資助計劃 <sup>(i)</sup>	4	\$1,481,950	2	\$1,398,800
Other non-RGC Local Funding Schemes <sup>(ii)</sup> 其餘由非研究資助局提供的本地研究資助計劃 <sup>(ii)</sup>	6	\$2,085,703	20	\$16,927,981
Funding Schemes in Mainland China <sup>(iii)</sup> 國內的各種研究資助計劃 <sup>(iii)</sup>	1	¥3,500,000	7	¥7,781,000

**Table 2 : Ongoing grants held by School members in the capacity of PIs in 2009 - 2010 and 2013 - 2014**

表二：學院成員以首席研究員／課題負責人身份分別於2009 - 2010及2013 - 2014年度所負責的持續研究項目資助

Types of External Competitive Grants 各種校外競爭性研究資助	2009-2010		2013-2014	
	No. 數量	Cumulative Amount (in HKD\$ / RMB¥) 累積總額 (港幣\$ / 人民幣¥)	No. 數量	Cumulative Amount (in HKD\$ / RMB¥) 累積總額 (港幣\$ / 人民幣¥)
Research Grants Council (RGC) - General Research Fund (GRF) 研究資助局—優配研究金	39	\$39,755,904	47	\$51,757,954
RGC - Others <sup>(i)</sup> 研究資助局—其他研究資助計劃 <sup>(i)</sup>	7	\$10,568,850	8	\$12,480,948
Other non-RGC Local Funding Schemes <sup>(ii)</sup> 其餘由非研究資助局提供的本地研究資助計劃 <sup>(ii)</sup>	21	\$14,809,085	33	\$31,694,065
Funding Schemes in Mainland China <sup>(iii)</sup> 國內的各種研究資助計劃 <sup>(iii)</sup>	7	¥3,500,000 + \$2,862,008	28	¥75,651,000

(i) For example, the Collaborative Research Fund (CRF), Areas of Excellence Scheme (AoE), Theme-based Research Scheme, and several Research Grants Council joint schemes, and so on  
 如協作研究金、卓越學科領域計劃、主題研究計劃、及其他研究資助局聯合計劃等

(ii) For example, the Innovation and Technology Fund (ITF), Research Fund for the Control of Infectious Diseases (RFCID), Health and Medical Research Fund (HMRF), and so on  
 如創新科技基金、控制傳染病研究基金、及醫療衛生研究基金等

(iii) For example, National Major Basic Research Program of China (973 Program), National High-Tech Research & Development Program (863 Program), National Science Foundation of China (NSFC) Grants, NSFC (Key Program) Grant, and so on  
 如國家重點基礎研究發展計劃 (973計劃)、國家高技術研究發展計劃 (863計劃)、國家自然科學基金年度撥款、國家自然科學基金年度「重點項目」等

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### FLAGSHIP RESEARCH PROGRAMS

#### 旗艦研究項目

Members of the five Thematic Research Programs (TRPs) have actively participated in interdisciplinary collaborative research. Several flagship programs are listed as follows:

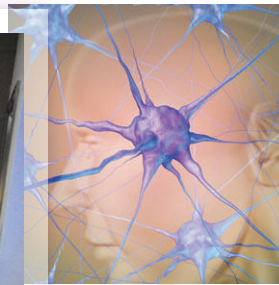
學院五個主題研究組成員一直積極參與多項跨學科協作研究，其中數個旗艦項目概述如下：

### DEGENERATIVE DISORDERS AND PREVENTION

#### 退化性疾病與預防

A team from the *Neuro-Degeneration, -Development and Repair* Theme employs multidisciplinary approaches to study neuro-degenerative diseases, with focuses on the pathogenesis, prevention and novel treatment strategies for Parkinson's disease and Alzheimer's disease. Another team in the *Stem Cell and Regeneration* Theme actively works on osteoarthritis (OA), one of the most common degenerative diseases in which the articular cartilage around the joints is eroded due to mechanical insult and / or chronic inflammation. The team is exploring molecular and cellular mechanisms of OA and osteoporosis, aiming to discover novel therapeutics for degenerative bone and joint diseases.

一個由神經退化、發育及修復學主題研究組領導的研究團隊，利用跨學科的方法去研究與神經退化有關的疾病，並集中探討帕金森症及阿爾茨海默氏症（認知障礙症）的發病機制、預防及新的治療策略。另一個由幹細胞及再生醫學主題研究組領導的研究團隊，則積極地研究骨性關節炎，一種由於機械損傷及 / 或慢性炎症所造成的關節軟骨磨蝕的常見退化疾病。團隊專研此炎症與骨質疏鬆症的分子與細胞機制，希望為退化性骨病及關節疾病尋找新的治療策略。



# RESEARCH ACCOMPLISHMENTS

## 研究成果

### DEVELOPMENTAL AND REPRODUCTIVE BIOLOGY

#### 發育與生殖生物學

Impressive progress has been made in developmental biology research. Members in the *Reproduction, Development and Endocrinology* Theme engage in research programs that focus on biological mechanisms underlying embryonic development and reproductive biology with particular relevance to human diseases such as diabetes, Hirschsprung's disease, male and female infertility and testicular carcinoma. Research topics include: (a) to systematically analyze the development of neural crest cells, their migration into the hindgut, and the abnormalities of these developmental processes leading to Hirschsprung's disease, with exploration of related therapeutic treatments; (b) to investigate the pathogenic mechanisms of various types of birth defects, especially the complications associated with maternal diabetes; (c) to elucidate epithelial cell function in reproduction, particularly the roles of epithelial ion channels like CFTR and ENaC in regulating the microenvironments of male and female reproductive tracts; and (d) to study the epigenomic mechanism of testicular germ cell tumors.

生殖、發育及內分泌學主題研究組成員在發育生物學的研究，尤其是與人類疾病如糖尿病、先天性巨結腸症、男女性不育及睪丸癌等範疇中，一直取得可觀的進展。學院成員一直參與以生物學機制解構胚胎與生殖缺陷及疾病的研究，藉以探究各種出生致病機制，研究課題包括：(1) 系統性分析神經脊細胞、其轉移至後腸與相關異常發育的過程，如何引致先天性巨結腸症，以助研發針對此症的治療方案；(2) 各種出生缺陷的致病機制，尤其是與孕婦糖尿病相關的併發症；(3) 上皮細胞在生殖方面的功能，特別是如CFTR和ENaC這些上皮細胞離子通道，如何調節男性和女性生殖道的微環境；(4) 睪丸癌的表觀基因組學研究。



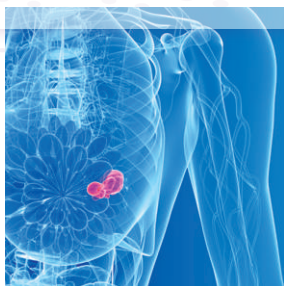
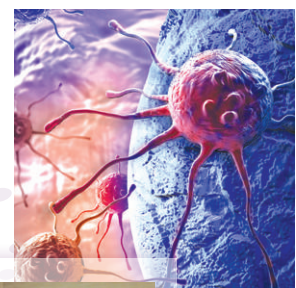
# RESEARCH ACCOMPLISHMENTS

## 研究成果

### MOLECULAR ONCOLOGY AND THERAPEUTICS 分子腫瘤學與治療

Members of the *Cancer and Inflammation* Theme conduct different research projects that aim to unravel the working mechanisms of cancer genes and to develop novel tools for cancer diagnosis and treatment. Their studies include: (a) elucidating the molecular pathogenesis of cancers of the digestive system; (b) characterization of cancer-associated genes, such as the role of the cystic fibrosis gene, CFTR, in human breast and prostate cancer; and (c) translational research in cancer diagnosis and therapy through developing a diagnostic peptide, TCP-1, as a tool for tumor imaging and drug delivery, and through exploring the possibility of using mesenchymal stem cells (MSC) in delivering therapeutics to cancer cells.

癌症與炎症主題研究組成員一直致力進行不同的研究項目，藉以解開癌症基因的運作機制，並開發新的工具，以助癌症的診斷和治療。主要的研究包括：(1) 闡釋消化系統的癌症分子發病機理；(2) 癌症相關基因的鑑定，如囊性纖維化基因CFTR在人類乳腺癌和前列腺癌的角色；(3) 透過將診斷肽TCP-1應用於腫瘤成像及藥物傳遞，並探討利用間充質幹細胞(MSC)治療癌細胞，以助進行癌症診斷和治療的轉化研究。



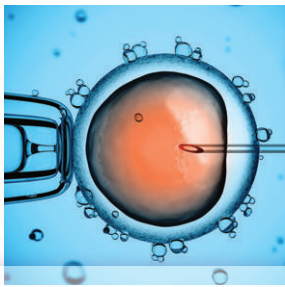
# RESEARCH ACCOMPLISHMENTS

## 研究成果

### STEM CELLS IN NORMAL AND PATHOLOGICAL DEVELOPMENT 正常發育與病理性發育中的幹細胞

In spite of its short history, members of the *Stem Cell and Regeneration* Theme have made impressive headway in several important areas of stem cell biology. These include: (a) to investigate the pancreatic islet stem cell / progenitor cell biology with cells originated from adults and fetuses and to study the developmental biology of these cells for diabetes treatments; (b) to decode germ cell biology during normal development and under disease conditions, hence developing alternative stem cell sources in regenerative medicine; and (c) to dissect the molecular mechanisms that govern stemness and lineage commitment of pluripotent stem cells (ES cells and iPS cells), hence developing robust procedures for generating reliable functional cell types for cell therapy and disease modeling.

幹細胞與再生醫學主題研究組的成員在短短的五年裡，已經在以下的課題取得良好的成績：(1) 憑藉取自成人和胎兒的細胞，研究胰島幹細胞/ 祖細胞生物學、及這些細胞的發育生物學機制，以助開發糖尿病治療；(2) 透過解構在正常發育及疾病情況下的生殖細胞生物學，從而在再生醫學中研發替代幹細胞來源；(3) 剖析控制多能幹細胞 (ES細胞和iPS細胞) 的幹性及譜系提交的分子機理，藉以生成可靠的功能性細胞類型，以應用於細胞治療及建立疾病模型。





# RESEARCH ACCOMPLISHMENTS

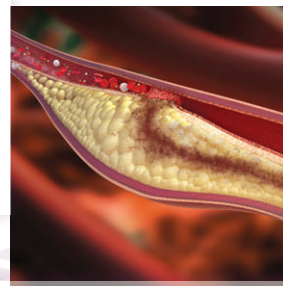
## 研究成果

### VASCULAR BIOLOGY AND MEDICINE

#### 血管生物學與醫學

Investigators from the *Vascular and Metabolic Biology* Theme have focused their studies in elucidating: (a) the physiological and pathophysiological importance of  $Ca^{2+}$  signaling, especially the functional aspects of TRP channels in the cardiovascular system; and (b) the cellular and molecular events involved in the initiation and progression of endothelial dysfunction, aiming to uncover the biomarkers for vascular dysfunction, to develop venues to reverse vascular dysfunction in animal models of cardio-metabolic diseases, and to advance the new concept of “adipose-vascular loop” hence supporting the adipose tissue as a promising target for ameliorating diabetic vasculopathy.

血管及代謝生物學主題研究組成員主力研究：  
(1) 鈣離子 $Ca^{2+}$ 信號傳遞的生理和病理生理位置，特別是TRP通道在心血管系統方面的功能；(2) 細胞與分子活動在血管內皮功能障礙的啟動和演化，藉以發現血管功能障礙的生物標記，及在心臟血管代謝疾病的動物模型中，建構合適的場所去改善血管功能障礙，並同時推展「脂肪血管袂」的新概念，以支證脂肪組織可被視為有望能改善糖尿病血管病變的一種靶點。

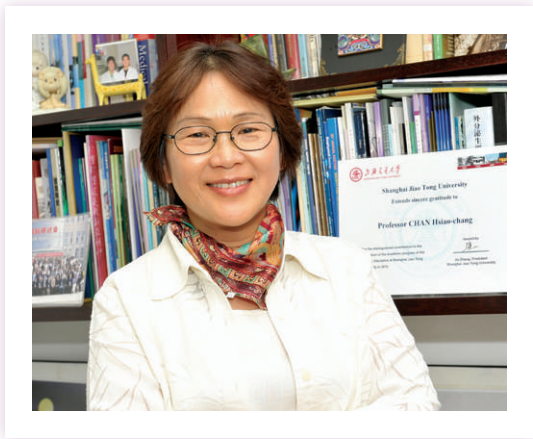


# RESEARCH ACCOMPLISHMENTS

## 研究成果

### DEDICATED INVESTIGATORS

#### 傑出研究員



PROF. CHAN HSIAO-CHANG  
 陳小章教授

Prof. Chan Hsiao-chang is Li Ka Shing Professor of Physiology, and a member of the *Reproduction, Development and Endocrinology* Theme of the School. She is also the Director of Epithelial Cell Biology Research Center of the University. Since the establishment of the School, Prof. Chan and her research team have made some important discoveries that help reveal several unexpected roles of ion channels in important physiological functions. The findings include the essential role of epithelial Na<sup>+</sup> channel (ENaC) in the initiation and signal transduction during embryo implantation, and the significant reduction of uterine expression of ENaC in patients with implantation failure when compared to the subjects with successful pregnancy. These findings shed new lights on the cause of miscarriage and low successful rate in IVF and were published in *Nature Medicine* in 2012. Another major breakthrough has been made in the understanding of diabetes mellitus, especially in the disease cystic fibrosis (CF), demonstrating for the first time that an anion channel, CFTR, is involved in regulating pancreatic  $\beta$ -cell membrane potential and calcium oscillations that lead to insulin secretion, defect of which can result in impaired insulin secretion as seen in CF related diabetes. The related findings were published in *Nature Communications* in 2014.

陳小章教授現為李嘉誠生理學講座教授及本學院生殖、發育及內分泌學主題研究組成員，並同時兼任香港中文大學上皮細胞生物學研究中心主任。陳教授領導之研究團隊，在本學院成立後已有數個重要的科學發現，揭示了離子通道在幾個重要的生理過程中的全新功能。該團隊發現上皮鈉通道 (ENaC) 在胚胎著床的啟動和信號轉導過程中所發揮重要的作用，並同時在對比胚胎植入失敗及成功受孕的個案中，發現了前者子宮內膜上的ENaC表達量比正常的顯著減少，提示ENaC的缺陷可能是妊娠失敗的一個重要原因。這些發現為流產及試管受精低成功率作了新的闡釋，還為不育症的診斷及避孕提供了嶄新的方法。相關研究成果已於2012年發表在醫學期刊 *Nature Medicine*。另外，該團隊在闡明糖尿病，尤其是囊性纖維化相關糖尿病的發病機制研究中，有突破性的發現。他們首次證明了囊性纖維化跨膜轉運體調控蛋白 (CFTR)，作為一種陰離子通道，參與調控胰腺 $\beta$ 細胞的膜電位及細胞內鈣震盪反應，從而影響胰島素分泌。因此，CFTR的缺陷將導致胰島素分泌不足，並解釋了囊性纖維化相關糖尿病的發病機制。相關研究成果已於2014年發表在國際綜合學科期刊 *Nature Communications*。

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### PROF. ANDREW M.L. CHAN 陳文樂教授

Prof. Andrew Chan is a Professor and a member of the *Cancer and Inflammation* Theme of the School. His research team mainly focuses on the role of a cell signaling pathway, PI3K, in cancer development and immune cell functions, involving the understanding of how G-protein and tumor suppressor, PTEN, regulate this pathway. He is the first to demonstrate a novel function for the G-protein, R-Ras, in mediating the interaction between dendritic cells and lymphocytes. Together with his discovery of how PTEN is regulated by various chemical modifications, the research efforts of Prof. Chan have made great impacts on understanding the mechanisms of tumor immunity and the progression of many types of cancers.



陳文樂教授現為本學院教授和癌症及炎症主題研究組成員。陳教授的團隊主力集中研究細胞信號傳導途徑PI3K在癌症發展與免疫細胞功能的作用，當中涉及對G蛋白及一個腫瘤抑制基因PTEN如何調控此一傳導途徑的深入研究。陳教授是首位學者證明G蛋白R-Ras在介導樹突狀細胞和淋巴細胞之間的功能，並發現不同的化學修飾過程如何影響及調控腫瘤抑制基因PTEN。他各種的研究成果，為理解腫瘤免疫及不同癌症的發展，帶來深遠的影響。



### PROF. FENG BO 馮波教授

Prof. Feng Bo is an Assistant Professor and a member of the *Stem Cell and Regeneration* Theme of the School. She is also the Deputy Director of The Chinese University of Hong Kong-Guangzhou Institutes of Biomedicine and Health (GIBH), Chinese Academy of Sciences (CAS) Joint Research Laboratory on Stem Cell and Regenerative Medicine. Her previous works on identifying Esrrb, Nr5a2 and PRDM14 as novel factors that promote the generation of induced pluripotent stem cells (iPSCs) from mouse and human fibroblasts have been published in *Nature Cell Biology*, *Cell Stem Cell* and *Nature*. Upon joining the School, Prof. Feng and her research team have focused on the molecular mechanism that controls the pluripotency and differentiation of stem cells. In 2014, Prof. Feng's group successfully activated the pluripotency gene OCT4 in mouse and human somatic cells by employing the newly developed TALEN and CRISPR / Cas9 transcription factors. This finding has provided insightful understanding of the new techniques in the promotion of iPSC generation, as well as useful guidelines for further development of these tools in modulating gene expression (*Nucleic Acids Research*).

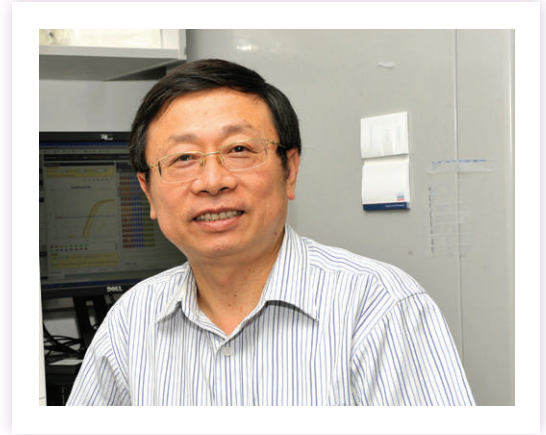
馮波教授現為本學院的助理教授、幹細胞與再生醫學主題研究組成員、及香港中文大學—中國科學院廣州生物醫藥與健康研究院幹細胞與再生醫學聯合實驗室副主任。在加盟本學院前，馮教授發現及證實了Esrrb、Nr5a2及PRDM14等轉錄因子具有細胞重編程作用，並能在小鼠和人類成纖維細胞中促進轉化形成誘導性多能幹細胞(iPSCs)。相關的科研成果分別發表在期刊 *Nature Cell Biology*、*Cell Stem Cell* 及 *Nature*。馮教授現時致力研究調控幹細胞的多功能性及分化的分子機理。2014年，馮教授及其團隊以最新的TALEN和CRISPR/Cas9技術，成功在小鼠與人類體細胞中激活了多能幹細胞(iPSCs)的關鍵基因OCT4。相關研究不但有助理解這些嶄新技術在促進iPSCs生成的長短處，還提供了有力的指引，進一步開發這些新穎技術，以應用於調控基因表達方面的研究(*Nucleic Acids Research*)。

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### PROF. HUANG YU 黃聿教授

Prof. Huang Yu is a Professor and Chief of the *Vascular and Metabolic Biology* Theme in the School. He is also the Founding Director (Basic Sciences) of the Institute of Vascular Medicine in the University. His studies focus on the elucidation of cellular and molecular events involved in the initiation and progression of endothelial dysfunction in hypertension, obesity, diabetes, estrogen deficiency and aging, the uncovering of novel relevant biomarkers for vascular dysfunction, and the development of venues to reverse vascular function and aging in animal models of cardio-metabolic diseases. The related findings have been published in SCI-indexed journals like *Nature*, *Science*, *Cell Metabolism*, *Circulation Research*, and *European Heart Journal*. Recently, Prof. Huang's team has focused the study on adipose-vascular loop and adipose tissue, an important intervention target for alleviating diabetic vasculopathy. The investigation has opened up an emerging research area on adipokines-vascular regulation as effective therapeutic targets for developing new anti-diabetic and anti-hypertensive drugs.



黃聿教授現為本院教授與血管及代謝生物學主題研究組主任，並同時兼任香港中文大學心腦血管醫學研究所創所所長（基礎研究）。他主力研究內皮細胞功能障礙在高血壓、過度肥胖症、糖尿病、雌激素缺乏和衰老等過程中的發生發展機制，同時尋找與血管病變相關的生物標誌物，從而在心臟血管代謝疾病的動物模型中，建構合適的場所去改善血管的功能與老化。相關研究成果曾發表在科學文獻引用索引期刊如 *Nature*、*Science*、*Cell Metabolism*、*Circulation Research* 及 *European Heart Journal*。黃教授及其研究團隊近年集中研究脂肪血管伴，冀證明脂肪組織是能改善糖尿病血管病變的一個重要介入靶點，藉此開啟脂肪細胞因子與血管調控能作為有效的治療靶點這一新發研究範疇，以助開發抗糖尿與抗高血壓的新藥物。



### PROF. EUGENE D. PONOMAREV 龐佑信教授

Prof. Eugene D. Ponomarev is an Assistant Professor and a member of the *Neuro-degeneration, -development and Repair* Theme of the School. Prof. Ponomarev's team focuses on inflammation in the central nervous system associated with neurodegenerative diseases such as multiple sclerosis and Alzheimer's disease. He is an author of more than 20 publications in international academic journals such as *Nature Medicine*, *Journal of Immunology*, and *Journal of Neuroscience*.

龐佑信教授現為本學院的助理教授及神經退化、發育及修復學主題研究組成員。龐教授團隊主要研究中樞神經系統內的炎症，及與其相關的神經退化疾病如多發性硬化症和阿爾茨海默氏症（認知障礙症）。他先後於國際學術期刊如 *Nature Medicine*、*Journal of Immunology* 及 *Journal of Neuroscience* 等發表了逾二十多篇學術論文。

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### CORE RESEARCH FACILITIES

#### 中心研究設施

Several core laboratories have been established by the School to offer investigators of different research groups within the School, the Faculty and the University easy access to centralized research facilities with state-of-the-art equipment, together with provision of know-how and consultation from experienced technical staff.

我們設置了數所中心實驗室，為生物醫學學院、醫學院及大學內眾多的研究團隊及個別研究人員，提供中央管理的研究設施，並安排經驗豐富的專業技術人員為使用者提供相關的協助與諮詢，好讓他們順利使用最尖端先進的器材，以配合研究所需。

### FLOW CYTOMETRY AND CELL CULTURE CORE

#### 流式細胞儀與細胞培植中心實驗室



### HISTOLOGY CORE

#### 組織學中心實驗室



# RESEARCH ACCOMPLISHMENTS

## 研究成果

### MACROMOLECULAR AND MICROARRAY CORE 大分子及基因表達中心實驗室



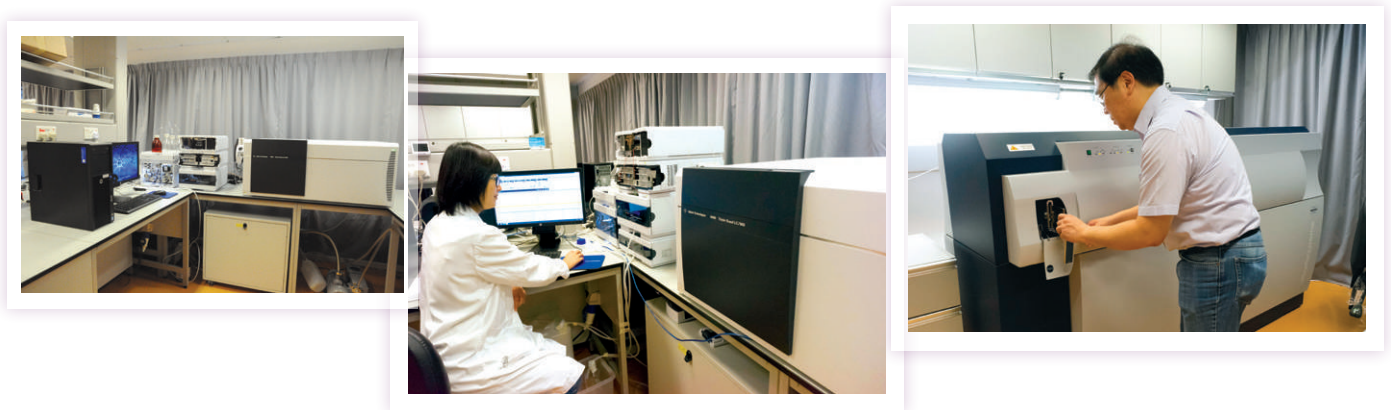
### MICROSCOPY AND IMAGING CORE 顯微及影像中心實驗室



# RESEARCH ACCOMPLISHMENTS

## 研究成果

### PROTEOMICS CORE 蛋白質學中心實驗室



### ANIMAL HOLDING CORE 實驗動物存養中心設施



### CUHK TRANSGENIC CORE SERVICE CENTRE 香港中文大學基因轉移服務中心



# RESEARCH ACCOMPLISHMENTS

## 研究成果

### SCHOLARLY RECOGNITIONS

#### 學術成就

#### AWARDS AND HONORS OBTAINED BY ACADEMIC STAFF

##### 教學人員所獲的學術獎項及榮譽



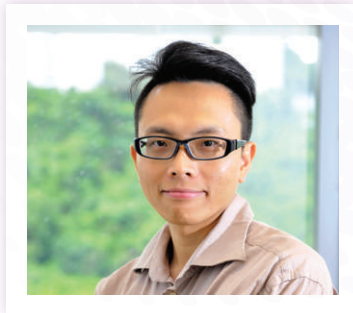
**Prof. Chen Yangchao**  
 陳揚超教授

- Young Investigator Award, American Pancreatic Association and International Association of Pancreatology  
 美國胰腺病學會與國際胰腺病學會優秀青年研究學者獎
- Young Investigator Award, International Digestive Diseases Forum  
 國際消化疾病論壇優秀青年研究學者獎



**Prof. Christopher H.K. Cheng**  
 鄭漢其教授

- Second-class Award, 2009 State Natural Science Awards (SNSA), China  
 2009年度國家自然科學獎二等獎



**Prof. Alfred S.L. Cheng**  
 鄭詩樂教授

- Oral Free Paper Prize, United European Gastroenterology  
 歐洲腸胃病學會論文獎
- Most Promising Young Researcher Award 2014, Food and Health Bureau, Hong Kong Special Administrative Region  
 香港特別行政區食物及衛生局2014年度最傑出年青研究員獎



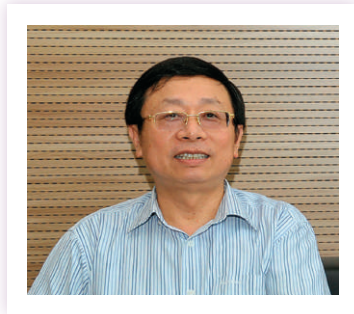
**Prof. Cho Chi-hin**  
 曹之憲教授

- Lifetime Achievement Award, the Western Returned Scholars Association Entrepreneur Alliance, Beijing, China  
 中國北京歐美同學會企業家聯誼會終身成就獎



# RESEARCH ACCOMPLISHMENTS

## 研究成果



**Prof. Huang Yu**  
黃聿教授

- Ministry of Education (MoE) Higher Education Outstanding Scientific Research Output Awards 2010 - Natural Science Second-class Award  
2010年度國家教育部高等學校科學研究優秀成果獎 - 自然科學二等獎
- Second-class Award, 2014 State Natural Science Awards (SNSA), China  
2014年度國家自然科學獎二等獎
- Croucher Senior Research Fellowships 2014-2015  
2014-2015年度裘槎優秀科研者獎



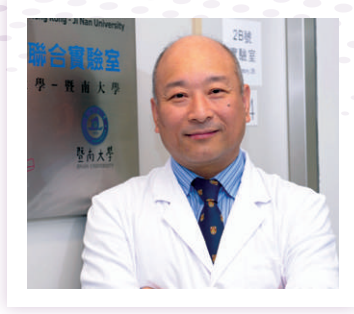
**Prof. Jiang Xiaohua**  
蔣曉華教授

- Global Partnerships Award, University of Southampton University, United Kingdom  
英國南安普頓大學全球合作伙伴獎



**Prof. Kung Hsiangfu**  
孔祥復教授

- First-class Award, the State Scientific and Technological Progress Award, State Council of the People's Republic of China  
中華人民共和國國務院國家科學技術進步獎一等獎



**Prof. Kenneth K.H. Lee**  
李嘉豪教授

- Diamond Jubilee International Visiting Fellowship, University of Southampton, United Kingdom.  
英國南安普頓大學鑽禧國際訪問學人獎

# RESEARCH ACCOMPLISHMENTS

## 研究成果



**Prof. Li Gang**  
 李剛教授

- The Best Basic Research Paper Award, Hong Kong Orthopaedic Association  
 香港骨科醫學會最佳基礎研究獎



**Prof. Lin Ge**  
 林鵠教授

- Top 10 Paper for TCM and Natural Products Research (2011-2012),  
 The Chinese Pharmaceutical Association  
 中國藥學會2011-2012年度中藥與天然藥十大優秀論文獎



**Prof. David T.W. Yew**  
 姚大衛教授

- Outstanding Contribution Prize, the 10<sup>th</sup> China Cross-Straits Technology and Projects Fair,  
 The Fujian Association for Science and Technology  
 福建省科學技術協會第十屆中國•海峽項目成果交易會突出貢獻獎
- Fellowship, the Anatomical Society, United Kingdom  
 英國解剖學會特別會員



**Prof. Yung Wing-ho**  
 容永豪教授

- Research Excellence Award 2012-2013, The Chinese University of Hong Kong  
 香港中文大學2012-2013年度傑出研究學者獎

# RESEARCH ACCOMPLISHMENTS

## 研究成果

### STUDENTS' AND ALUMNI'S ATTAINMENTS

#### 學生與畢業生成就

<p><b>Dr. Bao Lihua</b> 暴麗華博士</p>	<ul style="list-style-type: none"> <li>• Best Poster Award, the International Anatomical Sciences and Cell Biology Conference 國際解剖科學與細胞生物學研討會最佳牆報獎</li> </ul>
<p><b>Ms. Stella Chai</b> 蔡若涓小姐</p>	<ul style="list-style-type: none"> <li>• Best Presentation Award, 2011 ISSX / CSSX Workshop, Guangzhou, China 國際藥物代謝學會 (ISSX) 及中國藥物和化學異物代謝專業委員會 (CSSX) 2011廣州ISSX/CSSX學術會議最佳報告獎</li> <li>• Excellent Youth Paper Reports Winner, the International Conference of Pharmacology - The 3<sup>rd</sup> Mainland, Taiwan and Hong Kong Symposium of Pharmacology 第三屆海峽兩岸三地醫學院藥理學教學學術會議傑出青年論文報告獎</li> <li>• Outstanding Oral Presentation Award, 2010 Hong Kong-Macau Postgraduate Symposium on Chinese Medicine 2010年度港澳研究生中醫藥研討會傑出口頭報告獎</li> </ul>
<p><b>Dr. Stella S.W. Chan</b> 陳詩華博士</p>	<ul style="list-style-type: none"> <li>• Best Student Oral Communication Award, the 12<sup>th</sup> Scientific Meeting of the Hong Kong Pharmacology Society 第十二屆香港藥理學學會科學會議最佳學生口頭報告獎</li> </ul>
<p><b>Mr. Roy W.L. Chan</b> 陳穎龍先生</p>	<ul style="list-style-type: none"> <li>• Best Presentation Award, the 43<sup>rd</sup> Annual Meeting of the Japanese Society of Developmental Biologists 第四十三屆日本發育生物學學會年會最佳報告獎</li> </ul>
<p><b>Dr. Cheang Wai-san</b> 鄭慧珊博士</p>	<ul style="list-style-type: none"> <li>• Talent Development Scholarship 2013-2014, The Hong Kong Special Administrative Region Government Scholarship Fund 2013-2014年度香港特別行政區政府獎學基金才藝發展獎學金</li> <li>• First Prize for Servier Young Investigator Award Competition (Oral Presentation), the 5<sup>th</sup> Scientific Meeting of the Asian Society for Vascular Biology, Xi-an, China 亞洲血管生物學會第五屆學術會議施維亞青年科學家最佳口頭報告獎</li> <li>• Best Poster Award, the 15<sup>th</sup> Diabetes and Cardiovascular Risk Factors: East Meets West Symposium 第十五屆糖尿病與心臟病風險因素：中西結合研討會最佳牆報獎</li> <li>• First Prize for Outstanding Poster Presentation, the 17<sup>th</sup> Annual Scientific Meeting of the Institute of Cardiovascular Science and Medicine, The University of Hong Kong 香港大學心臟血管研究所第十七屆科學年會最佳牆報報告獎</li> <li>• Third Place of Young Scientist Award, the 9<sup>th</sup> Scientific Conference on Cardiovascular Sciences Across the Strait 第九屆海峽兩岸心血管科學研討會青年科學家獎三等獎</li> </ul>
<p><b>Dr. Chen Rui</b> 陳瑞博士</p>	<ul style="list-style-type: none"> <li>• Best Paper Award, the 3<sup>rd</sup> CUHK International Symposium on Stem Cell Biology and Regenerative Medicine 第三屆香港中文大學幹細胞生物學及再生醫學國際研討會最佳論文獎</li> </ul>

# RESEARCH ACCOMPLISHMENTS

## 研究成果

<p><b>Prof. Albert H.H. Cheung</b> 張凱鴻教授</p>	<ul style="list-style-type: none"> <li>Fellows Award for Research Excellence (FARE), National Institutes of Health (NIH), U.S.A. 美國國立衛生研究院優秀博士後傑出研究獎</li> <li>The American Society of Human Genetics Outstanding Trainee Research Travel Award (Semifinalist) and the Association of Chinese Geneticists in America (ACGA) Post-doctoral Research Award, the 60<sup>th</sup> Annual Meeting of the American Society of Human Genetics 第六十屆美國人類遺傳學會年會優秀學員研究旅遊獎 (半決賽) 及美國華人遺傳學家協會博士後研究獎</li> </ul>
<p><b>Dr. Cui Qiaoling</b> 崔巧玲博士</p>	<ul style="list-style-type: none"> <li>Summer Student Fellowship, Parkinson's Disease Foundation, U.S.A. 美國帕金森氏症基金暑期學生獎學金</li> </ul>
<p><b>Dr. Gu Shen</b> 顧燦博士</p>	<ul style="list-style-type: none"> <li>The Association of Chinese Geneticists in America (ACGA) Graduate Student Research Poster Award, the 60<sup>th</sup> Annual Meeting of the American Society of Human Genetics 第六十屆美國人類遺傳學會年會美國華人遺傳學家協會研究生研究論文海報獎</li> </ul>
<p><b>Dr. Guo Jing-hui</b> 郭景慧博士</p>	<ul style="list-style-type: none"> <li>Postgraduate Research Output Award 2012, The Chinese University of Hong Kong 香港中文大學2012年度研究生學術成果獎</li> </ul>
<p><b>Dr. Hu Jiabiao</b> 胡嘉彪博士</p>	<ul style="list-style-type: none"> <li>Reaching Out Award, The Hong Kong Special Administrative Region Government Scholarship Fund 香港特別行政區政府獎學基金外展體驗獎</li> </ul>
<p><b>Mr. Hu Weining</b> 胡維寧先生</p>	<ul style="list-style-type: none"> <li>Best Poster Presentation Award, 2013 Annual Scientific Meeting of the Hong Kong Society of Endocrinology, Metabolism and Reproduction 香港內分泌學、代謝學及生殖學學會2013年年會最佳牆報獎</li> </ul>
<p><b>Dr. Winnie L.T. Kan</b> 簡麗庭博士</p>	<ul style="list-style-type: none"> <li>Outstanding Oral Presentation Award, 2010 Hong Kong-Macau Postgraduate Symposium on Chinese Medicine 第六屆港澳研究生中醫藥研討會傑出口頭報告獎</li> <li>Best Student Oral Communication Award, the 12<sup>th</sup> Scientific Meeting of the Hong Kong Pharmacology Society 第十二屆香港藥理學學會科學會議最佳學生口頭報告獎</li> </ul>
<p><b>Dr. Eva O.C. Lau</b> 劉安齊博士</p>	<ul style="list-style-type: none"> <li>Best Poster Award, the 11<sup>th</sup> Workshop of the Association of East Asia Research Universities (AEARU) on Molecular Biology and Biotechnology 第十一屆東亞研究型大學分子生物學與生物科技會議最佳牆報獎</li> </ul>
<p><b>Dr. Leo M.Y. Lee</b> 李文淵博士</p>	<ul style="list-style-type: none"> <li>JSDB Travel Fellowship, the Japanese Society of Developmental Biologists 日本發育生物學學會旅學金</li> </ul>
<p><b>Dr. Samson C.H. Li</b> 李其翰博士</p>	<ul style="list-style-type: none"> <li>Outstanding Poster Award, The 7<sup>th</sup> Chinese Conference on Oncology 第七屆中國腫瘤學術大會傑出牆報獎</li> </ul>
<p><b>Dr. Li Qian</b> 李茜博士</p>	<ul style="list-style-type: none"> <li>Postgraduate Research Output Award 2013, The Chinese University of Hong Kong 香港中文大學2013年度研究生學術成果獎</li> <li>Second Prize, Hsiang-Tung Chang Foundation Best Neuroscience Dissertation, The Chinese Neuroscience Society / Hsiang-Tung Chang Foundation 中國神經科學學會 / 張香桐基金會張香桐神經科學優秀研究生論文獎二等獎</li> <li>The Hong Kong Association of University Women Annual Scholarship 2011-2012 香港大學婦女協會2011-2012年度傑出研究生獎學金</li> </ul>

# RESEARCH ACCOMPLISHMENTS

## 研究成果

<b>Dr. Liang Wei-cheng</b> 梁偉鉞博士	<ul style="list-style-type: none"> <li>The Global Scholarship Programme for Research Excellence-CNOOC Grants 中國海洋石油總公司助學金 – 全球卓越研究獎學金計劃</li> </ul>
<b>Dr. Wan Lin</b> 萬琳博士	<ul style="list-style-type: none"> <li>First Prize, Postgraduate Research Symposium on Regenerative Medicine, Guangdong Provincial Academic Forum for Graduate Students 2013 2013年度廣東省研究生學術論壇 – 再生醫學分論壇一等獎</li> </ul>
<b>Dr. Liu Jian</b> 劉健博士	<ul style="list-style-type: none"> <li>Podium Presentation Award, 2013 American Association of Pharmaceutical Scientists Symposium 美國藥學科學家協會2013研討會優秀大會報告獎</li> </ul>
<b>Ms. Sophie S.S. Liu</b> 劉思斯小姐	<ul style="list-style-type: none"> <li>Endocrine Society Outstanding Abstract Award in Conjunction with ICE / ENDO 2014 2014年度國際內分泌學會 (ICE) 和美國內分泌學會 (ENDO) 聯合會議優秀論文摘要獎</li> <li>Merit Prize, Professor Charles K. Kao Student Creativity Award 2013 2013年度高錕教授學生創意獎優異獎</li> <li>Graduate Student Research Award, the 9<sup>th</sup> NIH Graduate Student Symposium, National Institutes of Health (NIH), U.S.A. 第九屆美國國立衛生研究院研究生會議研究獎</li> </ul>
<b>Dr. Liu Wen-jing</b> 劉文靜博士	<ul style="list-style-type: none"> <li>Excellent Poster Award, The Chinese Society of Renal Physiology 中國生理學會腎臟生理專業委員會優秀牆報獎</li> <li>Third Best Oral Presentation Award, Postgraduate Research Symposium on Regenerative Medicine, Guangdong Provincial Academic Forum for Graduate Students 2013 2013年度廣東省研究生學術論壇 – 再生醫學分論壇研究報告三等獎</li> </ul>
<b>Mr. Lo Lok-man</b> 盧樂文先生	<ul style="list-style-type: none"> <li>First Runner-up Prize, FameLab Hong Kong 2014, The British Council 英國文化協會2014科學一叮香港區比賽亞軍</li> </ul>
<b>Dr. Lu Zengbing</b> 陸增兵博士	<ul style="list-style-type: none"> <li>Third Prize, Young Investigator Award, The Chinese Pharmacological Society 中國藥理學會優秀青年英文報告三等獎</li> </ul>
<b>Dr. Ma Bin</b> 馬彬博士	<ul style="list-style-type: none"> <li>Best Presentation Award, 2011 ISSX / CSSX Workshop, Guangzhou, China 國際藥物代謝學會 (ISSX) 及中國藥物和化學異物代謝專業委員會 (CSSX) 2011廣州ISSX/ CSSX學術會議最佳報告獎</li> <li>First Presentation Award, 2010 Shanghai ISSX/CSSX Workshop 國際藥物代謝學會 (ISSX) 及中國藥物和化學異物代謝專業委員會 (CSSX) 2010上海ISSX/ CSSX學術會議一等報告獎</li> </ul>
<b>Dr. Ma Yan</b> 馬妍博士	<ul style="list-style-type: none"> <li>Second Prize in Poster Presentation, the 4<sup>th</sup> Scientific Meeting of Asian Society of Vascular Biology 第四屆亞洲血管生物學會研討會牆報展示二等獎</li> </ul>
<b>Mr. Miu Kai-kei</b> 繆啟基先生	<ul style="list-style-type: none"> <li>Outstanding Oral Presentation Award, Hong Kong Pharmacology Society 香港藥理學會最佳口頭報告獎</li> <li>Third Class Prize, CNPHARS / HKPS Young Investigator Award, 2013 Joint Meeting of Chinese Pharmacology Society and Hong Kong Pharmacology Society, Shanghai 2013年度中國藥理學會 – 香港藥理學會雙邊學術交流會議中國藥理學會優秀青年藥理學工作者獎第三名</li> <li>Outstanding Poster Presentation Award, the 12<sup>th</sup> Meeting of the Asia Pacific Federation of Pharmacologists 第十二屆亞洲太平洋地區藥理學家聯盟會議優秀青年英文報告獎</li> </ul>

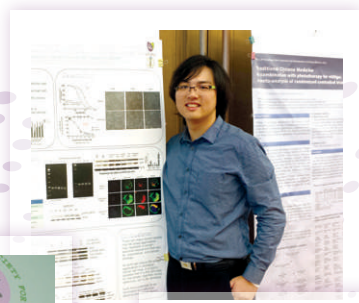
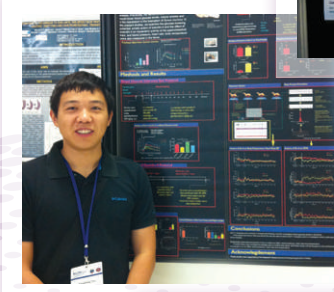
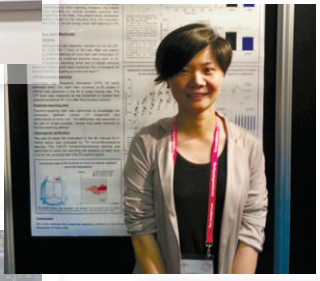
# RESEARCH ACCOMPLISHMENTS

## 研究成果

<b>Miss Qu Dan</b> <b>曲丹小姐</b>	<ul style="list-style-type: none"> <li>Talent Development Scholarship 2013-2014, The Hong Kong Special Administrative Region Government Scholarship Fund 2013-2014年度香港特別行政區政府獎學基金才藝發展獎學金</li> <li>Second Prize for Young Investigator Award Competition, the 9<sup>th</sup> Scientific Conference on Cardiovascular Sciences Across the Strait 第九屆海峽兩岸心血管科學研討會青年科學家獎二等獎</li> </ul>
<b>Dr. Natalie S.X. Ren</b> <b>任順翔博士</b>	<ul style="list-style-type: none"> <li>Certificate of Merit, The Best Poster, the 7<sup>th</sup> Annual Conference of the Organization for Oncology and Translational Research 第七屆腫瘤和轉化研究組織年度會議最佳科研壁報選舉優異獎</li> </ul>
<b>Dr. Ruan Jian-qing</b> <b>阮建清博士</b>	<ul style="list-style-type: none"> <li>First Presentation Award, the 4<sup>th</sup> ISSX / CSSX Joint Workshop 2013, Kaifung, China 第四屆國際藥物代謝學會 (ISSX) 及中國藥物和化學異物代謝專業委員會 (CSSX) 2013開封學術會議最佳報告獎</li> <li>Presentation Award, 2011 ISSX / CSSX Joint Workshop, Guangzhou, China 國際藥物代謝學會 (ISSX) 及中國藥物和化學異物代謝專業委員會 (CSSX) 2011廣州ISSX/ CSSX學術會議報告獎</li> </ul>
<b>Miss Shu Yinglan</b> <b>舒影嵐小姐</b>	<ul style="list-style-type: none"> <li>First Prize, the 3<sup>rd</sup> CUHK International Symposium on Stem Cell Biology and Regenerative Medicine 第三屆香港中文大學幹細胞生物學及再生醫學國際研討會一等獎</li> </ul>
<b>Dr. Sun Xiaoyun</b> <b>孫曉云博士</b>	<ul style="list-style-type: none"> <li>First Prize in Poster Presentation, Postgraduate Research Symposium on Regenerative Medicine, Guangdong Provincial Academic Forum for Graduate Students 2013 2013年度廣東省研究生學術論壇 – 再生醫學分論壇牆報一等獎</li> </ul>
<b>Mr. Walfred Tang</b> <b>鄧渙聰先生</b>	<ul style="list-style-type: none"> <li>Croucher Cambridge International Scholarship, Croucher Foundation and Cambridge Overseas Trust 裘槎基金會及劍橋海外信託之裘槎劍橋國際獎學金</li> </ul>
<b>Dr. Tian Xiaoyu</b> <b>田小雨博士</b>	<ul style="list-style-type: none"> <li>Postgraduate Research Output Award 2011, The Chinese University of Hong Kong 香港中文大學2011年度研究生學術成果獎</li> </ul>
<b>Dr. Tse Kai-hei</b> <b>謝啟熹博士</b>	<ul style="list-style-type: none"> <li>Young Investigator (Best Poster) Award, the Hong Kong Society for Immunology 香港免疫學會青年研究學者 (最佳牆報) 獎</li> </ul>
<b>Dr. Christine S.L. Wong</b> <b>黃少玲博士</b>	<ul style="list-style-type: none"> <li>Postgraduate Research Output Award 2009, The Chinese University of Hong Kong 香港中文大學2009年度研究生學術成果獎</li> </ul>
<b>Dr. Zhang Yang</b> <b>張揚博士</b>	<ul style="list-style-type: none"> <li>First Prize of Outstanding Oral Presentation, Young Investigator Award, Physiology Symposium 2014 cum Joint Scientific Conference of the Hong Kong Society of Neuroscience &amp; the Biophysical Society of Hong Kong 2014生理學研討會暨香港神經科學學會與香港生物物理學學會聯席科學會議 優秀青年研究員獎傑出口頭報告一等獎</li> </ul>

# RESEARCH ACCOMPLISHMENTS

## 研究成果





NURTURING TALENTS  
專才培育



# NURTURING TALENTS

## 專才培育

Over the past years, the School of Biomedical Sciences has continued to place strong emphasis on all-rounded development and training of our postgraduate and undergraduate students, in the hope of fostering the next generation of scientists and physicians equipped with solid professional knowledge and advanced research skills.

過去數年，生物醫學學院一直十分注重研究生與本科生的全面發展及培訓，藉此培育新一代兼備紮實專業知識與先進科研技術的科學家及醫生。

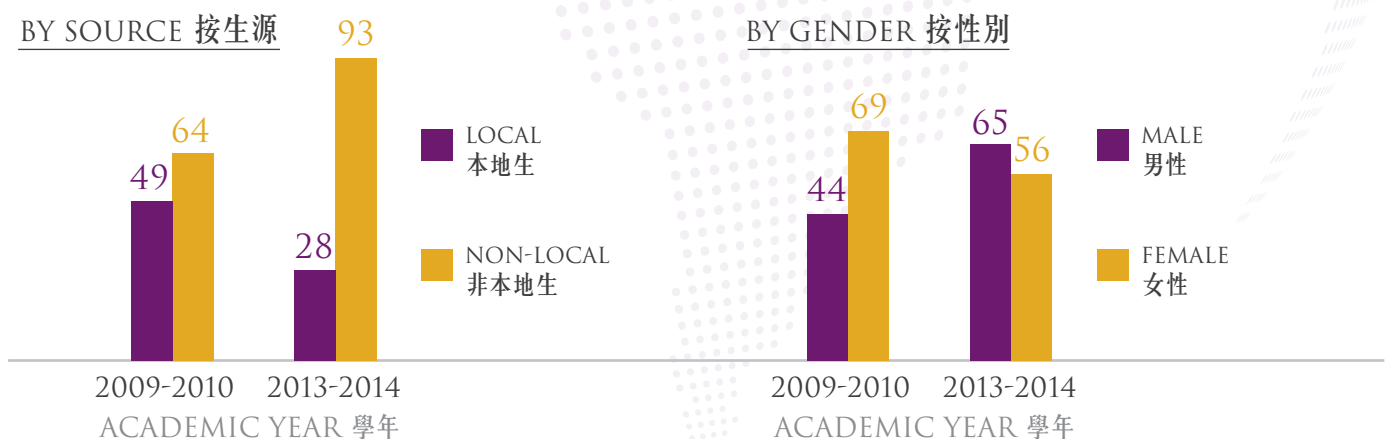
### NUMBER OF POSTGRADUATE STUDENTS ADMITTED AND GRADUATED BETWEEN 2009-2010 AND 2013-2014

#### 2009-2010至2013-2014年度研究生入學與畢業人數



### DISTRIBUTION OF CURRENT POSTGRADUATE STUDENTS IN 2009-2010 AND 2013-2014

#### 2009-2010及2013-2014年度在學研究生人數分佈



# NURTURING TALENTS

## 專才培育

### DIVERSITY TRAINING

#### 多元化培訓

Since its launch in 2010-2011, postgraduate students admitted to the articulated M.Phil.-Ph.D. Programme in Biomedical Sciences have been given a variety of training opportunities to equip themselves with in-depth theoretical knowledge and cutting-edge research techniques. These have been achieved through the organization of the annual Graduate Seminar Series and the annual SBS Postgraduate Research Days, the implementation of the laboratory rotation scheme, the CUHK-National Institutes of Health (NIH) Graduate Partnerships Programme, provision of Postgraduate Student Conference Grants for attending international conferences, as well as the formation of the SBS Postgraduate Student Association and the organization of the different academic and recreational activities.

自2010-2011學年開始，學院均為入讀生物醫學碩士—博士銜接課程的研究生，提供了多元性的訓練機會，包括籌辦年度研究生研討會系列與年度生物醫學學院研究生日、推行實驗室輪轉學習計劃、香港中文大學—美國國立衛生研究院研究生聯合培養計劃、為研究生提供參與國際會議資助、成立生物醫學學院研究生會及其下所舉辦的不同學術與康樂活動等，藉此培育他們成為精通理論基礎、並能掌握高端科研技術的生物醫學專家。

### GRADUATE SEMINAR SERIES AND SBS POSTGRADUATE RESEARCH DAYS

#### 研究生研討會系列及生物醫學學院研究生日



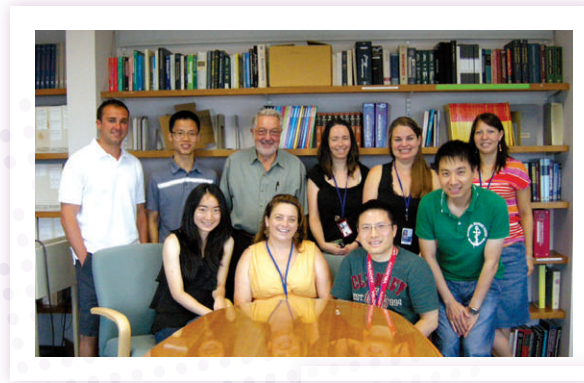
# NURTURING TALENTS

## 專才培育

### LABORATORY ROTATION SCHEME 實驗室輪轉學習計劃



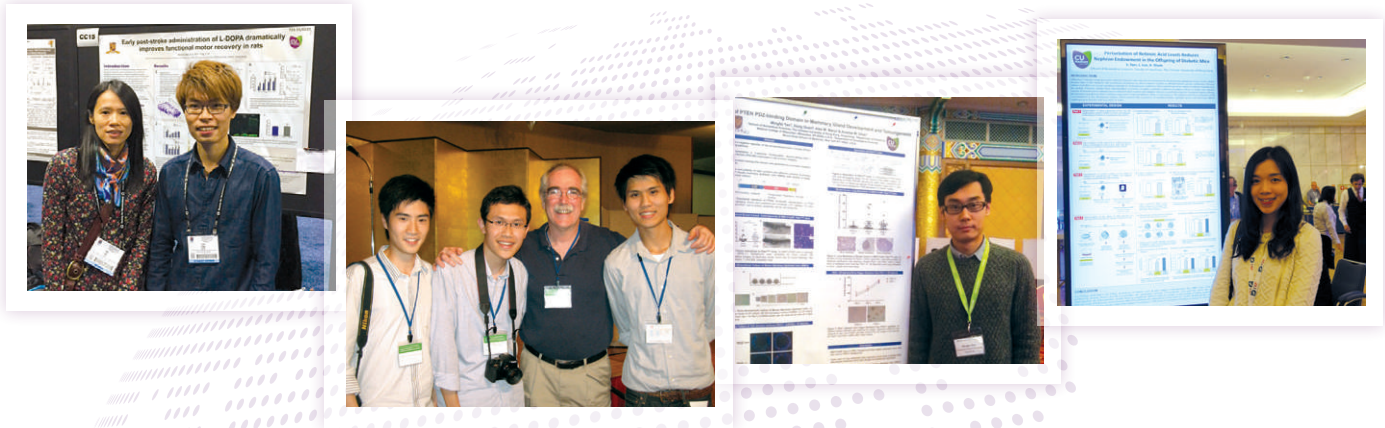
### CUHK-NIH GRADUATE PARTNERSHIPS PROGRAMME 香港中文大學—美國國立衛生研究院研究生聯合培養計劃



# NURTURING TALENTS

## 專才培育

### POSTGRADUATE STUDENT CONFERENCE GRANTS 研究生國際會議資助



### SBS POSTGRADUATE STUDENT ASSOCIATION AND VARIOUS ACTIVITIES 生物醫學學院研究生會及各類活動



# NURTURING TALENTS

## 專才培育



# NURTURING TALENTS

## 專才培育

### STUDENTS' AND GRADUATES' VOICE

#### 學生與畢業生心聲



**Dr. Gu Shen, Ph.D. graduate in 2013 and Chair of the 1<sup>st</sup> Executive Committee of SBS Postgraduate Student Association**

**2013年哲學博士畢業生及第一屆生物醫學學院研究生會執行委員會主席顧燊博士**

"With lots of firsts, lots of memories and lots of joy, the past five years of growing up with the School of Biomedical Sciences has been the most fruitful time in my academic life. Through the well-structured Ph.D. training programme, I have gained not only professional knowledge, but also independent thinking ability and problem solving skills for overcoming the future challenges. Happy 5<sup>th</sup> birthday to SBS!"

「我在生物醫學學院度過學習生涯中最充實的五年，那五年充滿了很多的第一次、難忘的回憶與快樂的時光。透過修研學院精心設計的哲學博士課程，我不僅獲得知識的增長，更培育出獨立思考與解決困難的能力，有助自己面對未來的挑戰。在此，由衷祝賀生物醫學學院五周年生日快樂！」

**Mr. Alfred C.S. Luk, Year 3 Ph.D. candidate and Chair of the 2<sup>nd</sup> Executive Committee of SBS Postgraduate Student Association**

**三年級哲學博士生及第二屆生物醫學學院研究生會執行委員會主席陸春瑞先生**

"Researchers in our School work days and nights in the pursuit of new discoveries in biomedical sciences. Whenever looking over the round-about in front of the School building, I have a feeling that our thirst for scientific breakthroughs is very similar to the ancient generals and soldiers who bravely fought to expand the territories for their home country and people."

「我院各研究人員日以繼夜，為探索生物醫學的新發現而努力不懈。每當凝視學院大樓外的迴旋處，我總不禁聯想到他們在追求科學上的突破的決心，與古時開疆闢土的驍勇將士並無二致，因為他們都是為了國家和人民的光榮與福祉而奮戰。」



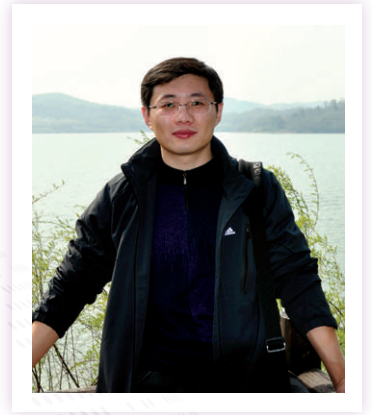
# NURTURING TALENTS

## 專才培育

### Mr. Wang Yubing, Year 2 Ph.D. candidate and Chair of the 3<sup>rd</sup> Executive Committee of SBS Postgraduate Student Association 二年級哲學博士生及第三屆生物醫學學院研究生會執行委員會主席王玉冰先生

"I am really honored and proud to be a member of the School of Biomedical Sciences. The excellent learning and research atmosphere here has enabled me to have a deeper understanding of not only my own research area, but also other aspects of biomedical sciences. The knowledge, research experience and exposure that I have gained during my Ph.D. study here will be an important asset to build my future career."

「我非常榮幸能夠成為生物醫學學院的一員。這裡濃厚的學術和科研氛圍，不僅讓我在自己所選擇的研究領域上有更深入的認識，同時亦增進了我對其他生物醫學學科的了解。於我而言，在這裡修讀哲學博士學位時所習得的知識和研究經驗，是我的寶貴資產，它為我未來的學術道路奠定了良好的基礎。」



### Mr. Kelvin K.K. Miu, Year 4 Ph.D. candidate 四年級哲學博士生繆啟基先生

"Being a member of the SBS family, I love the cordial and pleasant atmosphere here. With the complete devotion and expert guidance of our professors, all my learning moments have been enjoyable, unforgettable and rewarding. I am grateful for making lifelong friends in the School where we work together, laugh together and grow together. Thank you SBS, and happy 5<sup>th</sup> birthday!"

「身為生物醫學學院這個大家庭的成員，我非常喜歡這裡友善與良好的氛圍。教授們循循善誘、孜孜不倦的教導，使我在學院的所有習研時刻，都變得美好、難忘及可貴。我十分感激能在這個家結識到一眾共同學習工作、一起分享喜樂與成長的良朋摯友。謝謝生物醫學學院，並祝五周年生日快樂！」

### Miss Sophie S.S. Liu, Year 4 Ph.D. candidate currently participating in the CUHK - NIH Graduate Partnerships Programme 現正參與香港中文大學—美國國立衛生研究院研究生聯合培養計劃的四年級哲學博士生劉思斯小姐

"I am really grateful to the School of Biomedical Sciences for the chance to participate in the CUHK-NIH Graduate Partnerships Programme. The School provided me a unique independent research environment and opportunity to build up my network with researchers all over the world. With the help of our School, I am able to collaborate with senior scientists and know the academic society better and deeper."

「誠摯感謝生物醫學學院，讓我得以參加香港中文大學—美國國立衛生研究院研究生聯合培養計劃。這裡提供了獨特的獨立研究環境，以及與來自世界各地的研究人員交流學習的機會。學院的幫助使我可以與世界各地的頂尖科學家共事研究，藉此加深對學術界的了解與共鳴。」



# NURTURING TALENTS

## 專才培育



**Mrs. Roma Nerina Sommerville, M.Phil. graduate in 2014**  
**2014年哲學碩士畢業生 Roma Nerina Sommerville 女士**

"My interests in research and laboratory science lead me to pursue further studies within the biomedical field. As an international student with veterinary experience, I have been welcomed by the School and supported in many different ways - ranging from direct guidance through senior colleagues and peers within our laboratory to technical and academic support through other laboratories. The knowledge and confidence I have gained through this process will indeed place me in good stead for the future."

「我對研究及化驗科學抱有濃厚的興趣，因此決定於生物醫學領域深造。作為一個擁有從事獸醫經驗的國際生，生物醫學學院在各方面都為我作出適切的支援 — 這些包括由我所身處的實驗室資深同工及同學們提供直接的指導，又或是由其他實驗室所提供的技術上及學術上的幫助。我從這個學習過程中獲得的知識與自信，將有利於我未來的發展。」

**Prof. Peng Lihua, Ph.D. graduate in 2009**  
**2009年哲學博士畢業生彭麗華教授**

"I am grateful for the different training opportunities provided by the School of Biomedical Sciences which allowed me to gain precious study experience in my life. The well-structured curriculum, numerous seminars and workshops, as well as the chances to visit the National Institutes of Health and other universities in the U.S.A. have not only aroused my interest in research and enhanced my skills, but also broadened my global vision."

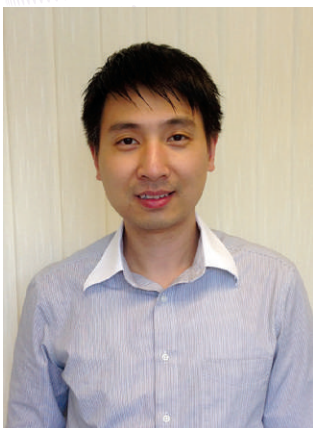
「感謝生物醫學學院對我的栽培，讓我獲得人生中寶貴的學習經歷。學院規劃完善的課程、豐富的講座和研討會，以及提供參觀美國國立衛生研究院與美國各著名大學的機會，都幫助我提升對科研的興趣，讓我建立穩紮的技能，並開闊了我的國際視野。」



**Prof. Albert H.H. Cheung, Ph.D. graduate in 2010**  
**2010年哲學博士畢業生張凱鴻教授**

"I received my postdoctoral research training at the National Institutes of Health in the U.S.A. and focused on stem cell research after graduating from the School in 2010. In early 2014, I joined the School of Biomedical Sciences as Research Assistant Professor. For me, The School is not only a place for work, but also a nurturing home for many young investigators to grow up and develop their strengths."

「我2010年於生物醫學學院畢業後，在美國國立衛生研究院從事博士後研究工作，主要研究幹細胞。2014年年初，我重返學院並成為研究助理教授。於我而言，生物醫學學院不只是一個工作的地方，也是一個培育年輕研究員、並讓他們成長和發展專長的家。」





# NURTURING TALENTS

## 專才培育

### OUTSTANDING TEACHING AWARD

#### 傑出教師獎

Our teachers' outstanding performance in teaching has been well recognized by the Faculty of Medicine and the University. The teaching awards they received in the past five years are listed below:

本學院成員屢獲大學及醫學院頒發傑出教學獎項，以表揚他們對教學的熱誠與成就。過去五年所獲得的殊榮概列如下：

#### CUHK VICE-CHANCELLOR'S EXEMPLARY TEACHING AWARD

##### 香港中文大學校長年度模範教學獎

2011

**Prof. Hector S.O. Chan**  
陳新安教授

2012

**Prof. Simon C.L. Au**  
歐澤樑教授

2013

**Prof. Christopher H.K. Cheng**  
鄭漢其教授

#### CUHK FACULTY OF MEDICINE MASTER TEACHER (2010-2011)

##### 香港中文大學醫學院最傑出教師獎 (2010-2011)

**Prof. Eric Y.P. Cho**  
左雨鵬教授

#### TEACHERS OF THE YEAR AWARD, CUHK FACULTY OF MEDICINE

##### 香港中文大學醫學院年度傑出教師獎

2009-2010

**Prof. Simon C.L. Au** 歐澤樑教授; **Prof. Hector S.O. Chan** 陳新安教授  
**Prof. Kwong Wing-hang** 鄺詠衡教授; **Dr. Rebecca K.Y. Lee** 李潔瑩博士  
**Prof. Alisa S.W. Shum** 沈秀媛教授; **Prof. David T.W. Yew** 姚大衛教授

2010-2011

**Prof. Simon C.L. Au** 歐澤樑教授; **Prof. Hector S.O. Chan** 陳新安教授  
**Prof. Eric Y.P. Cho** 左雨鵬教授; **Prof. Ng Tzi-bun** 吳子斌教授  
**Prof. Alisa S.W. Shum** 沈秀媛教授; **Prof. David T.W. Yew** 姚大衛教授

2011-2012

**Prof. Simon C.L. Au** 歐澤樑教授; **Prof. Kwong Wing-hang** 鄺詠衡教授  
**Prof. Leung Po-sing** 梁寶成教授; **Prof. Alisa S.W. Shum** 沈秀媛教授  
**Prof. Yung Wing-ho** 容永豪教授

2012-2013

**Prof. Simon C.L. Au** 歐澤樑教授; **Prof. Hector S.O. Chan** 陳新安教授  
**Prof. Kwong Wing-hang** 鄺詠衡教授 (EDUCATION AWARD 教學獎)

2013-2014

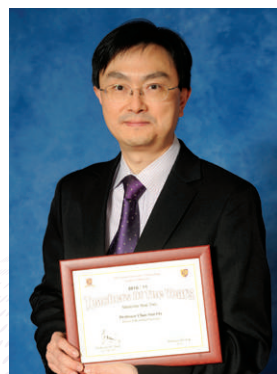
**Prof. Simon C.L. Au** 歐澤樑教授; **Dr. Rebecca K.Y. Lee** 李潔瑩博士  
**Prof. Yung Wing-ho** 容永豪教授

# NURTURING TALENTS

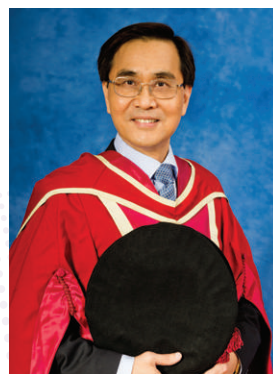
## 專才培育



**Prof. Simon C.L. Au**  
歐澤樑教授



**Prof. Hector S.O. Chan**  
陳新安教授



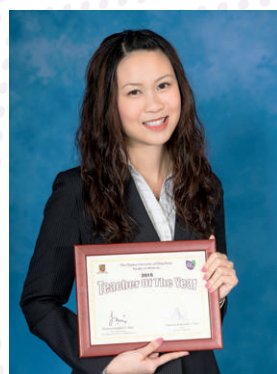
**Prof. Christopher H.K. Cheng**  
鄭漢其教授



**Prof. Eric Y.P. Cho**  
左雨鵬教授



**Prof. Kwong Wing-hang**  
鄺詠衡教授



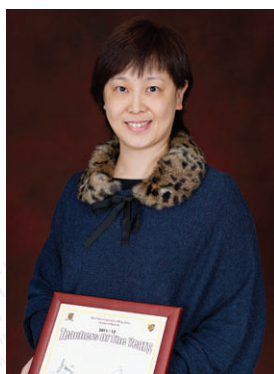
**Dr. Rebecca K.Y. Lee**  
李潔瑩博士



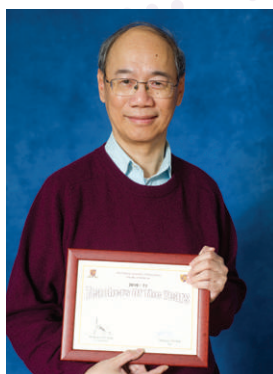
**Prof. Leung Po-sing**  
梁寶成教授



**Prof. Ng Tzi-bun**  
吳子斌教授



**Prof. Alisa S.W. Shum**  
沈秀媛教授



**Prof. David T.W. Yew**  
姚大衛教授



**Prof. Yung Wing-ho**  
容永豪教授

# NURTURING TALENTS

## 專才培育

### PEDAGOGICAL INNOVATION

#### 創新教學

The Teaching and Learning Unit members have been actively engaged in developing different pedagogical innovation projects. The different coursewares developed so far are summarized below:

本院教與學單位一直致力參與開發不同的創新電子教材。迄今所開發的項目如下：

<b>SBS and non-SBS member(s)</b> (*Project Leader) 學院及非學院成員 (*項目負責人)	<b>Project Title</b> 項目名稱
<b>2009-2010</b>	
Dr. Isabel S.S. Hwang*, Dr. W.S. Chan, Prof. Paul L.C. Lam and Mr. Ray M.F. Lee 黃水珊博士*、陳永成博士、藍澧銓教授及李謀豐先生	Renal Physiology 腎臟生理學
<b>2010-2011</b>	
Prof. Simon C.L. Au*, Dr. Josephine W.S. Lau and Dr. Sam H.K. Poon 歐澤樑教授*、劉詠思博士及潘匡杰博士	Web-based Courseware for the teaching and self-assessment study of electrocardiogram (ECG) in the medical physiology course (Fig.1) 具自我學習評估功能的醫學生理學心電圖 (ECG) 網上電子教材 (圖1)
Dr. Ann S.N. Lau*, Dr. Rebecca K.Y. Lee and Prof. Paul L.C. Lam 劉善雅博士*、李潔瑩博士及藍澧銓教授	Animated courseware for Biochemistry and University General Education courses with students of heterogeneous background (Fig.2a-b) 為修讀生物化學及大學通識科、學習背景參差的學生而設的生物化學動畫教材 (圖2a-b)
<b>2011-2012</b>	
Dr. Isabel S.S. Hwang* 黃水珊博士*	Web & Mobile-Supported Courseware (PhysioApp) in Integrative Human Physiology - a professional version for CUHK students (Fig.3) 網上及流動通訊系統支援的綜合人體生理學電子應用程式 (PhysioApp) 中大學生專業版 (圖3)
Dr. Josephine W.S. Lau*, Dr. Sam H.K. Poon and Dr. Maria S.M. Wai 劉詠思博士*、潘匡杰博士及衛善敏博士	CU eLearning System-supported Courseware for Teaching Anatomy of the Digestive System (Fig.4a-b) 中文大學新網上學習平台支援的消化系統解剖學電子教材 (圖4a-b)
Dr. Sam H.K. Poon*, Prof. Franky L. Chan, Prof. P.H. Chow, Prof. David T.W. Yew, Dr. Maria S.M. Wai, Dr. Josephine W.S. Lau, Dr. Joyce S.Y. Lam and Dr. Wong Wai-kai 潘匡杰博士*、陳良教授、周白茵教授、姚大衛教授、 衛善敏博士、劉詠思博士、林思盈博士及黃偉佳博士	eDissecting Guide of Human Structure (Fig.5a-b) 人體結構解剖電子指南 (圖5a-b)
Dr. Isabel S.S. Hwang*, Dr. Ann S.N. Lau and Dr. W.S. Chan 黃水珊博士*、劉善雅博士及陳永成博士	Implementation of e-learning Activities via Student Response System (Clickers) in Health Science Foundation Course for Year Zero Students 電子學習活動的實踐 — 學生回饋系統 (表決器) 於新基礎醫療科學課程的 運用

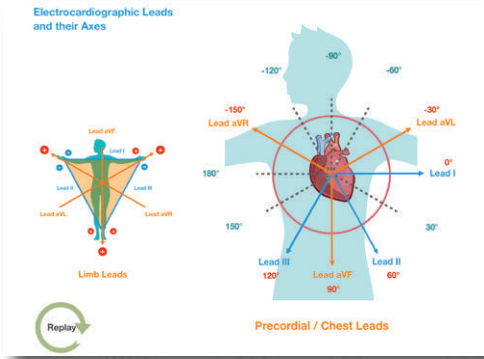
# NURTURING TALENTS

## 專才培育

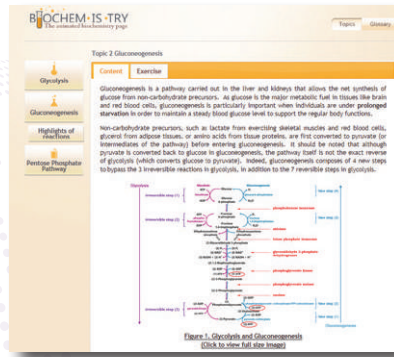
<b>SBS and non-SBS member(s)</b> (*Project Leader) 學院及非學院成員 (*項目負責人)	<b>Project Title</b> 項目名稱
<b>2012-2013</b>	
Dr. Isabel S.S. Hwang*, Dr. W.S. Chan, Prof. Paul L.C. Lam and Mr. Ray M.F. Lee 黃水珊博士*、陳永成博士、藍澧銓教授及李謀豐先生	A Course-Oriented Mobile Learning Application (HSApp: HS(a) App & HS(b)App) for Health Science Education in Medical Faculty Package 以基礎醫學科學課程為本的流動學習電子應用程式 (HSApp: HS(a)App & HS(b)App)
Dr. Rebecca K.Y. Lee*, Dr. Ann S.N. Lau and Prof. Paul L.C. Lam 李潔瑩博士*、劉善雅博士及藍澧銓教授	Development of an Interactive Web-based & Mobile-based Courseware for Effective Learning 促進有效學習並支援網上及流動通訊系統的互動教材
<b>2013-2014</b>	
Dr. Isabel S.S. Hwang*, Dr. Florence M.K. Tang, Prof. Michael S.C. Tam, Prof. Yao Xiaoqiang, Dr. Jin Yan, Mr. Ray M.F. Lee and Mr. Edman Chan 黃水珊博士*、鄧美娟博士、譚兆祥教授、姚曉強教授、 金燕醫生、李謀豐先生及陳穩持先生	Advanced Virtual 3D Leap-Motioned Lung for Understanding Human Lung Function 虛擬三維肺部模型
Dr. Florence M.K. Tang*, Prof. Kenneth K.H. Lee, Dr. Isabel S.S. Hwang, Prof. Paul L.C. Lam, Mr. Ray M.F. Lee and Ms. Maggie W.C. Wong 鄧美娟博士*、李嘉豪教授、黃水珊博士、 藍澧銓教授、李謀豐先生及黃惠芝小姐	Development of a Mobile App for Studying Histology: Blended Learning in Faculty of Medicine (Hi-Med App) 發展以流動通訊系統支援學習組織學：於醫學院內應用的混合式學習
Dr. Rebecca K.Y. Lee* 李潔瑩博士*	Development of an electronic book (e-Book) "Foundation Studies Cell Biology" for cell biology teaching (PFOS) 《基礎細胞學》電子書的開發 (應用於醫科「基礎課程」(PFOS) 中的細胞學教學)

# NURTURING TALENTS

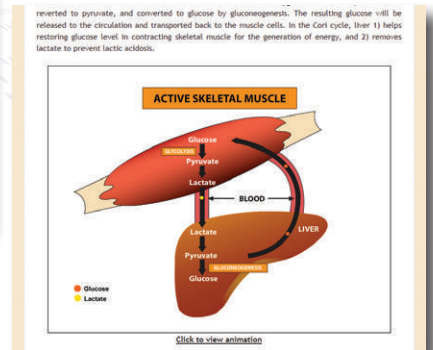
## 專才培育



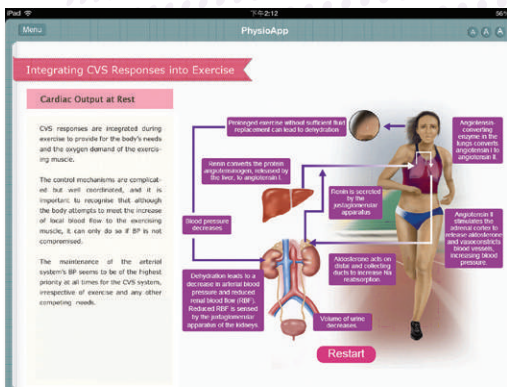
(Fig.1 圖1)



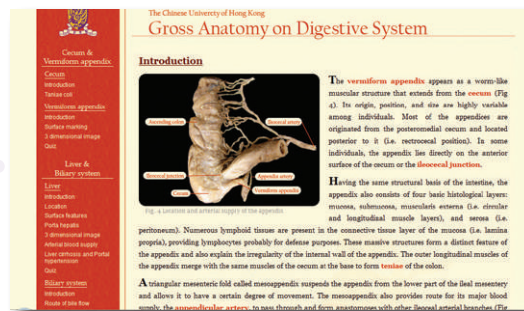
(Fig.2a 圖2a)



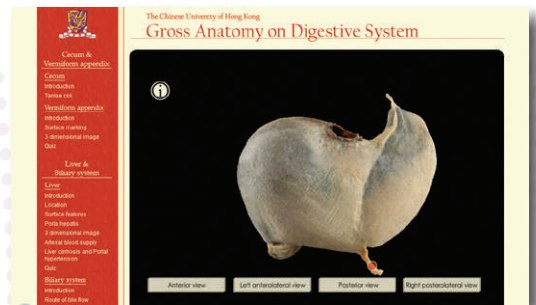
(Fig.2b 圖2b)



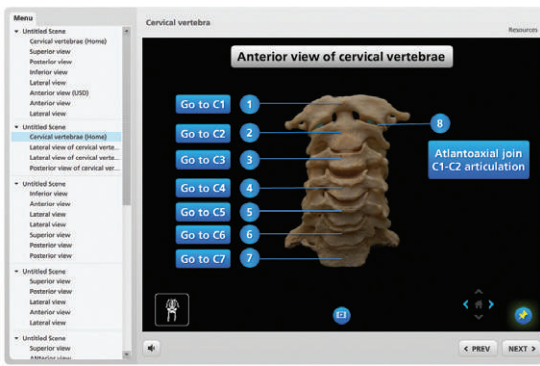
(Fig.3 圖3)



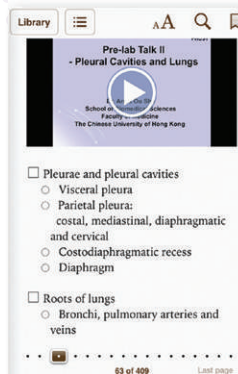
(Fig.4a 圖4a)



(Fig.4b 圖4b)



(Fig.5a 圖5a)



(Fig.5b 圖5b)

# NURTURING TALENTS

## 專才培育

### SUMMER RESEARCH INTERNSHIP SCHEME FOR MEDICAL STUDENTS

#### 醫科學生暑期研究實習計劃

Starting from 2010-2011, a “Summer Research Internship Scheme” has been set up to provide medical undergraduate students opportunities to work on different research projects under the supervision of our School academic staff. Through this scheme, participating students can identify and develop their interests in research, or be better prepared to embark upon the MSc in Research Medicine Programme or to pursue our School’s articulated M.Phil.-Ph.D. Programme in Biomedical Sciences upon graduation.

自2010-2011年度開始，學院設立了「醫科學生暑期研究實習計劃」，讓在學醫科學生在本院教授們的指導下參與研究工作。計劃旨在讓醫科學生認識自己的研究興趣，甚至幫助他們準備在修業期中報讀醫學院醫學科學研究碩士課程，或於畢業後選讀本院的生物醫學哲學碩士—博士銜接課程。



# NURTURING TALENTS

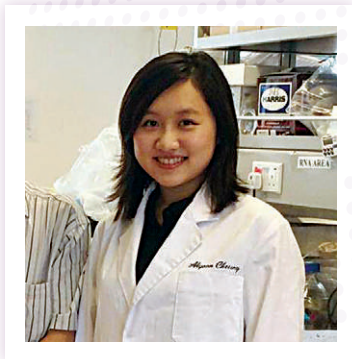
## 專才培育



**Mr. Jason S.H. Wong, Medicine Year 2 student (5-year Curriculum)**  
**二年級醫科學生 (五年制課程) 黃兆亨先生**

“In the internship, I was given an invaluable opportunity to design and perform a scientific investigation. The professor was very resourceful and the laboratory staff treated me as one of them. Not only have I acquired essential lab skills, I have gained a deeper insight in how research is run nowadays. I have also come to appreciate the attitudes and values demonstrated by biomedical science researchers.”

「這個暑期研究實習計劃給予我寶貴的機會去獨立開展一個科學探究。知識豐富的教授不但在實驗技巧上指導我，實驗室的同伴亦把我視為他們其中一員。經過這次實習後，我不僅掌握了一些基本實驗技巧，更增進了對科研運作的認識。此外，我更了解到從事生物醫學科研的業者應有的價值觀和態度。」



**Miss Alyson L.Y. Cheung, Medicine Year 3 student (6-year Curriculum)**  
**三年級醫科學生 (六年制課程) 張洛頤小姐**

“I worked on prostate cancer in Prof. Franky Chan’s lab for two consecutive summers. The Faculty has given me maximum freedom and support to delve into my research interests. During those five memorable months of experiential learning, I witnessed and was inspired by the ardor and dedication of the scientists in the School of Biomedical Sciences.”

「我於過去兩個暑假在陳良教授的實驗室參與有關前列腺癌的研究。我很感謝醫學院給了我極大的自由度和支持，讓我能鑽研我感興趣的癌症領域研究。這五個月的體驗式學習讓我見證了科學家的熱誠和堅毅，點燃了我對求知的熱忱，使我畢生難忘。」



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# OUTREACH ENDEAVORS 對外拓展



# OUTREACH ENDEAVORS

## 對外拓展

In the pursuit of academic and educational excellence, the School of Biomedical Sciences has also attached great importance to scholarly outreach. This has been realized through the development of collaborative agreements in the form of Memoranda of Understanding and establishment of joint laboratories (centres) with mainland and overseas partner institutions, arrangement of academic visits, as well as organization of joint scientific meetings and participation in academic activities hosted by our partner institutions. Some salient examples are shown below:

透過簽定合作備忘錄、建立聯合實驗室（聯合研究中心）、安排學術訪問、合辦科學會議、及參與其他學術活動等，學院一直與國內及海外夥伴院校緊密聯繫，藉此在追求卓越學術與教學的過程中，能同時加強學術拓展工作。過往五年一些重要的相關例子概述如下：

### MEMORANDA OF UNDERSTANDING 合作備忘錄



ASIA - International Biomedical Science Consortium  
亞洲國際生物醫學科學聯盟



Center for Cellular and Molecular Engineering and Department of Orthopaedic Surgery, School of Medicine, University of Pittsburgh, U.S.A.  
美國匹茲堡大學醫學院細胞及分子工程中心和矯形外科學系



Guangzhou Institutes of Biomedicine and Health, Chinese Academy of Sciences, China  
中國科學院廣州生物醫藥與健康研究院



Hospital of Reproductive Medicine, Shandong University, China  
山東大學附屬生殖醫院

# OUTREACH ENDEAVORS

## 對外拓展



Institute of Materia Medica,  
 Chinese Academy of Medical Sciences and  
 Peking Union Medical College, China  
 中國醫學科學院暨北京協和醫學院藥物研究所



Kunming Institute of Zoology,  
 Chinese Academy of Sciences, China  
 中國科學院昆明動物研究所



School of Basic Medical Sciences,  
 Zhejiang University, China  
 中國浙江大學基礎醫學系



Shanghai Institute of Materia Medica,  
 Chinese Academy of Sciences, China  
 中國科學院上海藥物研究所



State Key Laboratory of Molecular Oncology,  
 Chinese Academy of Medical Sciences, China  
 中國醫學科學院分子腫瘤學國家重點實驗室

# OUTREACH ENDEAVORS

## 對外拓展

### JOINT LABORATORIES / JOINT RESEARCH CENTRES

#### 聯合實驗室 / 聯合研究中心



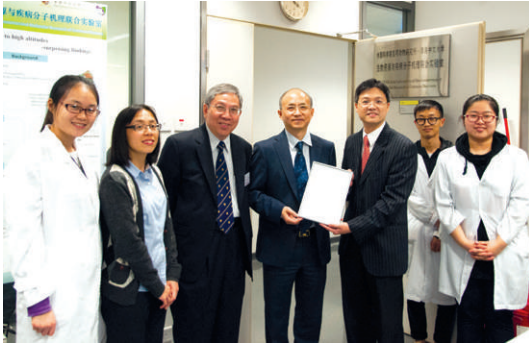
CUHK - BGI Innovation Institute of Trans-omics  
香港中文大學 — 華大基因跨組學創新研究院



CUHK - Guangzhou Institutes of Biomedicines and Health, Chinese Academy of Sciences  
Joint Research Laboratory on Stem Cell and Regenerative Medicine  
香港中文大學 — 中國科學院廣州生物醫藥與健康研究院幹細胞與再生醫學聯合實驗室

# OUTREACH ENDEAVORS

## 對外拓展



CUHK - Kunming Institute of Zoology, Chinese Academy of Sciences Joint Laboratory of Bioresources and Molecular Research in Common Diseases

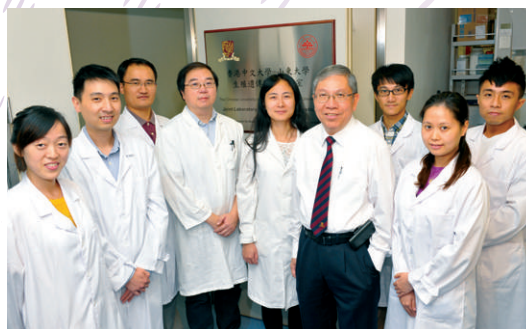
香港中文大學 — 中國科學院昆明動物研究所生物資源與疾病分子機理聯合實驗室



CUHK - Shanghai Jiao Tong University Joint Research Center for Human Reproduction and Related Diseases  
 香港中文大學 — 上海交通大學人類生殖及相關疾病聯合研究中心



CUHK - Shandong University Joint Laboratory on Reproductive Genetics  
 香港中文大學 — 山東大學生殖遺傳聯合實驗室



# OUTREACH ENDEAVORS

## 對外拓展



Ministry of Education (MoE) Key Laboratory for Regenerative Medicine (CUHK - Jinan University)  
香港中文大學 — 暨南大學國家教育部再生醫學重點實驗室



Genetic Core under the CUHK - Utrecht University Joint Centre for Language, Mind and Brain  
香港中文大學 — 荷蘭烏得勒支大學語言、認知及大腦聯合研究中心轄下的遺傳學中心實驗室

# OUTREACH ENDEAVORS

## 對外拓展

### ACADEMIC VISITS

#### 學術訪問



Round-up meeting of "2010 Academic Symposium on Developmental Studies in Health and Diseases" (21 October 2010)  
 「2010發育過程中健康與疾病的研究學術研討會」會後訪問 (2010年10月21日)



Visit of Chinese Academy of Engineering Academicians (16 December 2010)  
 中國工程院院士來訪 (2010年12月16日)



Visit of Shanghai Medical College of Fudan University, China (15 March 2011)  
 上海復旦大學醫學院來訪 (2011年3月15日)

Visit of the National Natural Science Foundation of China (NSFC) (23 May 2011)  
 國家自然科學基金委員會來訪  
 (2011年5月23日)

# OUTREACH ENDEAVORS

## 對外拓展



Visit of Robert Gordon University,  
United Kingdom (21 November 2011)  
英國羅伯特戈登大學代表來訪 (2011年11月21日)



CUHK Delegation Visit to Guangzhou  
Institutes of Biomedicine and Health,  
Chinese Academy of Sciences, China  
(28 November 2011)  
香港中文大學代表團出訪中國科學院廣州生物醫藥  
與健康研究院 (2011年11月28日)



Visit of the Karolinska Institutet, Sweden (1 March 2012)  
瑞典卡羅琳斯卡學院代表團來訪 (2012年3月1日)



Visit of the Chinese Academy of Sciences  
(5 March 2012)  
中國科學院代表團來訪 (2012年3月5日)



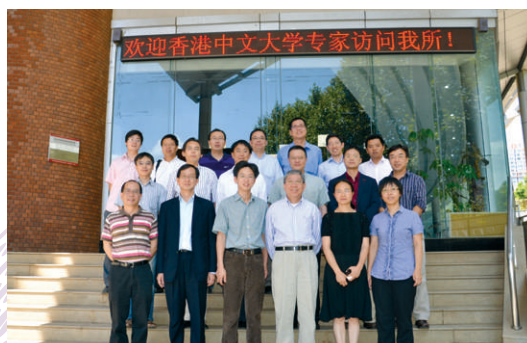
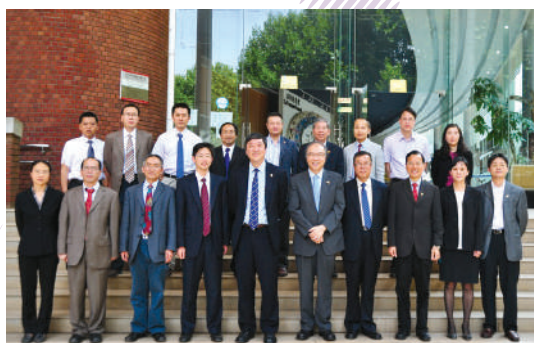
Visit of the Institute of Materia Medica,  
Chinese Academy of Medical Sciences &  
Peking Union Medical College, China  
(26 April 2012)  
中國醫學科學院暨北京協和醫學院藥物研究所來訪  
(2012年4月26日)

# OUTREACH ENDEAVORS

## 對外拓展



Visit of Khon Kaen University, Thailand (29 May 2012)  
 泰國孔敬大學代表團來訪 (2012年5月29日)



CUHK Delegation visits to Kunming Institute of Zoology, Chinese Academy of Sciences, China  
 (4-5 June 2012 and 16-17 August 2012)  
 香港中文大學代表團出訪中國科學院昆明動物研究所 (2012年6月4至5日及2012年8月16至17日)



Visit to Shandong University, China (18-22 September 2012) and  
 Return Visit of Shandong University, China (19 December 2012)  
 生物醫學學院代表團出訪中國山東大學 (2012年9月18至22日) 及  
 中國山東大學回訪 (2012年12月19日)

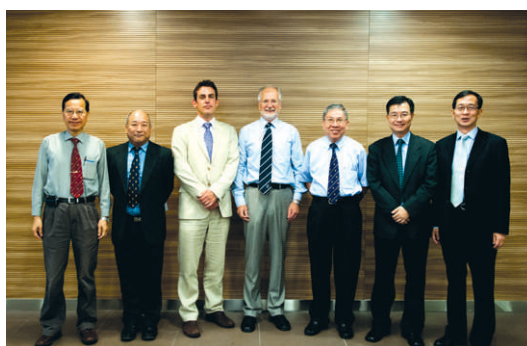


# OUTREACH ENDEAVORS

## 對外拓展



Visit of University of Southampton, United Kingdom (26 April 2013)  
英國南安普頓大學代表團來訪 (2013年4月26日)



Visit of University of Sussex, United Kingdom (25 June 2013)  
英國薩塞克斯大學來訪 (2013年6月25日)

# OUTREACH ENDEAVORS

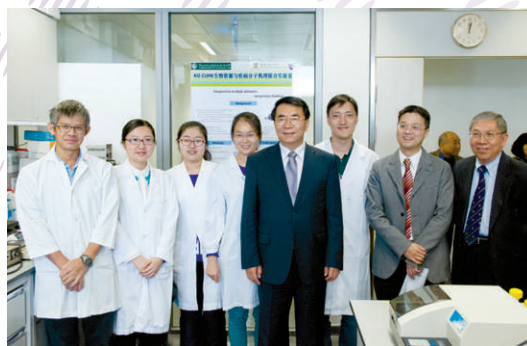
## 對外拓展



CUHK - Jinan University Joint Delegation Visit to Ministry of Education (MoE), China (27 September 2013)  
 香港中文大學與暨南大學聯合代表團訪問中國國家教育部 (2013年9月27日)



Visit of Utrecht University, the Netherlands (3 December 2013)  
 荷蘭烏德勒支大學代表團來訪 (2013年12月3日)



Visit of the President of the Chinese Academy of Sciences (5 December 2013)  
 中國科學院院長來訪 (2013年12月5日)

# OUTREACH ENDEAVORS 對外拓展



Visit of Republic Polytechnic, Singapore (26 March 2014)  
新加坡共和理工學院來訪 (2014年3月26日)



Visit of the Chinese Academy of Sciences (1 April 2014)  
中國科學院代表團來訪 (2014年4月1日)



# OUTREACH ENDEAVORS

## 對外拓展

### JOINT SCIENTIFIC MEETINGS

#### 聯合科學會議



2010 Academic Symposium on  
 Developmental Studies in Health and  
 Diseases (19 - 20 October 2010)

2010發育過程中健康與疾病的研究學術研討會  
 (2010年10月19至20日)



2010 Ministry of Education (MoE) Key CUHK - Jinan University Joint  
 Laboratories for Regenerative Medicine Conference  
 (14 December 2010)

2010再生醫學教育部重點實驗室(暨南大學—香港中文大學)學術會議  
 (2010年12月14日)



CUHK - GIBH Stem Cell and Regeneration Symposium (24 August 2012)

香港中文大學—廣州生物醫藥與健康研究院幹細胞與再生醫學聯合研討會(2012年8月24日)



The Third Military Medical University and CUHK School of Biomedical Sciences Joint Symposium on Cancer cum  
 the 5<sup>th</sup> International Forum on Cancer Research and Drug Discovery (2 November 2012)

第三軍醫大學和香港中文大學癌症生物醫學聯合學術會議暨第五屆國際腫瘤基礎與新藥研究前沿論壇(2012年11月2日)



# OUTREACH ENDEAVORS

## 對外拓展



1<sup>st</sup> and 2<sup>nd</sup> Joint Symposium on Biomedical Research across the Continents – Insight and Innovation  
(7 - 8 March 2013 in Hong Kong and 10 - 11 April 2014 in Beijing)

第一及第二屆「跨地域生物醫學研究：新知與創見」聯合研討會（2013年3月7至8日於香港舉行及2014年4月10至11日於北京舉行）



Joint Southampton University and CUHK School of Biomedical Sciences Seminar on Stem Cell and Developmental Biology (3 June 2013)

英國南安普頓大學 — 香港中文大學生物醫學學院幹細胞與發育生物學聯合研討會（2013年6月3日）



1<sup>st</sup> and 2<sup>nd</sup> International Symposium on Reproductive Genetics

(20 December 2013 in Hong Kong and 17 - 18 May 2014 in Shandong)

第一及第二屆「生殖遺傳研究國際學術研討會」（2013年12月20日於香港舉行及2014年5月17至18日於山東舉行）

# OUTREACH ENDEAVORS

## 對外拓展

### PARTICIPATION IN OTHER ACADEMIC ACTIVITIES

#### 參與其他學術活動



Chinese Academy of Sciences Biodiversity and Disease Animal Model Academic Conference (24 - 26 July 2010)

中國科學院生物資源多樣性與疾病動物模型學術研討會 (2010年7月24至26日)



The 2<sup>nd</sup> China-US Forum on Frontiers of Cancer Research: Cancer Prevention & Therapy (15 - 17 August 2010)

第二屆中美雙邊國際研討會：癌症預防與治療 (2010年8月15至17日)



The 1<sup>st</sup> China-Hong Kong Academic Forum on Cancer and Microenvironment (11 -12 April 2011)

第一屆中港學術論壇——腫瘤與微環境 (2011年4月11至12日)



The 4<sup>th</sup> Guangzhou International Conference on Stem Cell and Regenerative Medicine (17 - 19 December 2011)

第四屆廣州國際幹細胞及再生醫學論壇 (2011年12月17至19日)



The 3<sup>rd</sup> Annual Conference on Chinese Stem Cell Research and the 5<sup>th</sup> Guangzhou International Conference on Stem Cell and Regenerative Medicine (16 - 18 December 2012)

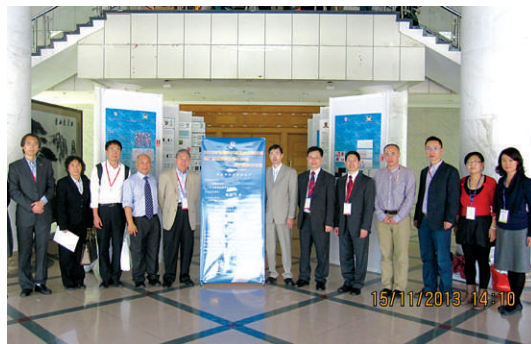
第三屆中國幹細胞研究年會暨第五屆廣州國際幹細胞與再生醫學論壇 (2012年12月16至18日)

# OUTREACH ENDEAVORS

## 對外拓展



Postgraduate Research Day 2013, Kunming Institute of Zoology,  
Chinese Academy of Sciences (7 - 10 August 2013)  
中國科學院昆明動物研究所2013年研究生年會 (2013年8月7至10日)



Postgraduate Research Symposium on Regenerative Medicine 2013 (15 - 16 November 2013)  
2013年廣東省研究生學術論壇 — 再生醫學分論壇 (2013年11月15至16日)



The 3<sup>rd</sup> Academic Festival on Life Sciences across the Straits (26 - 28 June 2014)  
2014年第三屆兩岸三地生命科學文化節 (2014年6月26至28日)

# OUTREACH ENDEAVORS

## 對外拓展

Apart from overseas outreach, our School has also been committed to community engagement through reception of different organizations and media interviews, with a view to sharing with the public our expertise and knowledge of biomedical research and education. Representative examples are summarized below:

除了海外學術拓展工作，生物醫學學院亦一直有接待不同組織團體及接受各媒體訪問，藉此投入社群與普羅大眾分享我們與生物醫學研究和教育方面的專業知識及經驗，以回饋社會。以下為一些具代表性的例子：

### RECEPTION OF ORGANIZATIONS

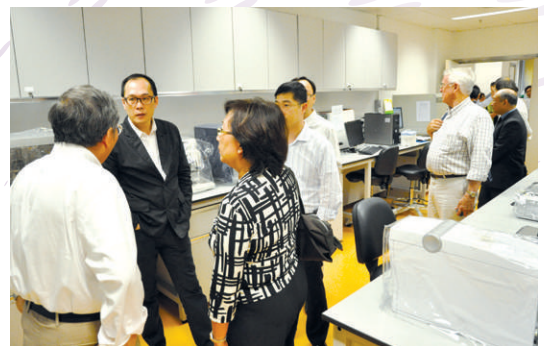
#### 組織團體接待



Research Grants Council (17 June 2010)  
 研究資助局 (2010年6月17日)



Working Group from the Hospital Authority (16 and 30 April 2012)  
 醫院管理局工作小組 (2012年4月16及30日)





# OUTREACH ENDEAVORS

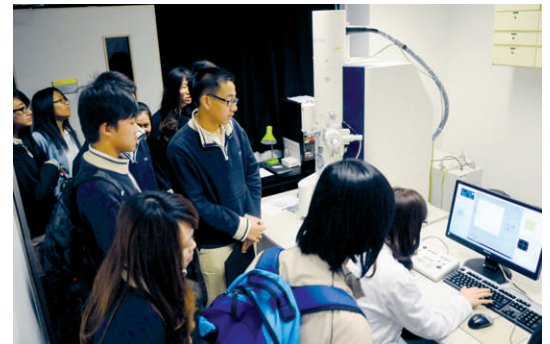
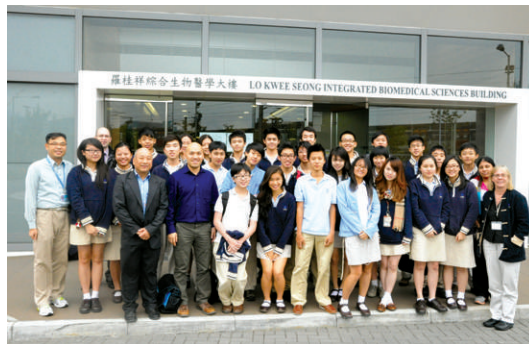
## 對外拓展



University Grants Committee (6 November 2012)  
大學教育資助委員會 (2012年11月6日)



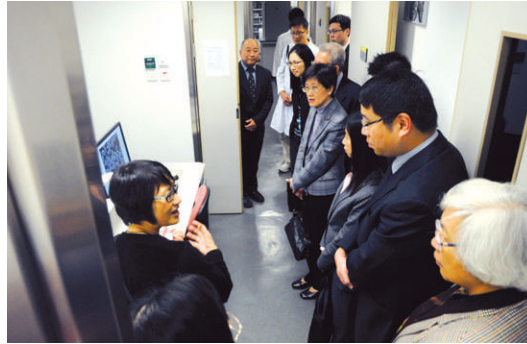
Japanese International School (29 November 2012)  
香港日本人學校 (2012年11月29日)



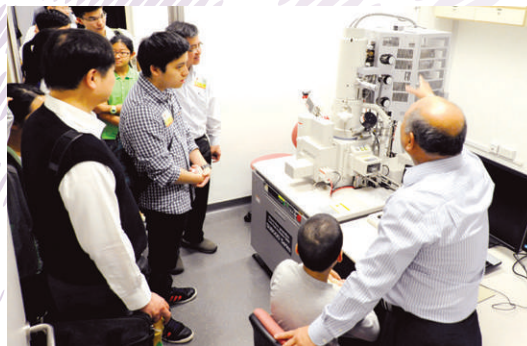
Independent Schools Foundation Academy (11 December 2012)  
弘立書院 (2012年12月11日)

# OUTREACH ENDEAVORS

## 對外拓展



Department of Health (11 March 2013)  
 衛生署代表團 (2013年3月11日)



CUHK Medical Alumni (11 May 2013)  
 香港中文大學醫學院校友 (2013年5月11日)

# OUTREACH ENDEAVORS

## 對外拓展

### MEDIA INTERVIEWS

#### 媒體訪問

The collage features several prominent articles:

- 中大研究專攻政治心臟病** (CUHK research focuses on political heart disease) - An article discussing the impact of political stress on heart health, mentioning research by Professor Michael Wong.
- 新療法無法律監管** (New therapy lacks legal supervision) - A piece about experimental medical treatments that bypass regulatory oversight.
- 港產生殖病權威 破解陰陽人** (Local reproductive medicine authority solves intersex cases) - A report on a specialist's work in diagnosing and treating intersex conditions.
- 男童早熟症 易患睪丸癌** (Early puberty in boys increases testicular cancer risk) - A study linking early onset of puberty to a higher incidence of testicular cancer.
- 地貧多遺傳 婚前應檢驗** (Sickle cell anemia is hereditary, genetic testing before marriage) - An advertisement for genetic testing services, highlighting the importance of identifying carriers of sickle cell anemia.
- 提早驗基因 預防未來病** (Genetic testing early to prevent future disease) - A detailed article explaining how genetic testing can identify risks for various diseases before symptoms appear.
- 年60童性早熟 勿亂吃保健品** (60 children with early puberty, don't take supplements) - A warning about the dangers of unregulated health supplements for children.
- 港產生殖病權威 破解陰陽人** - A detailed profile of a leading expert in reproductive medicine.
- 港產生殖病權威 破解陰陽人** - Another article related to the reproductive medicine expert.
- 港產生殖病權威 破解陰陽人** - A third article in the series about the reproductive medicine expert.

# OUTREACH ENDEAVORS 對外拓展



# OUTREACH ENDEAVORS

## 對外拓展





OUR PEOPLE  
學院成員

# OUR PEOPLE

## 學院成員

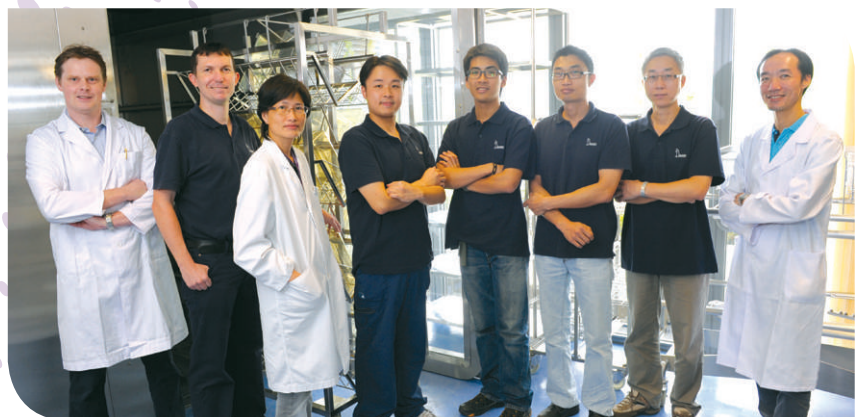
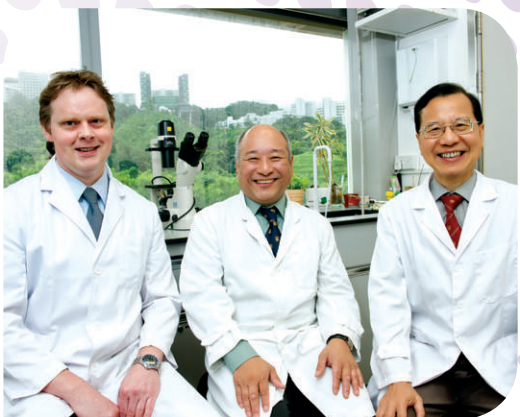
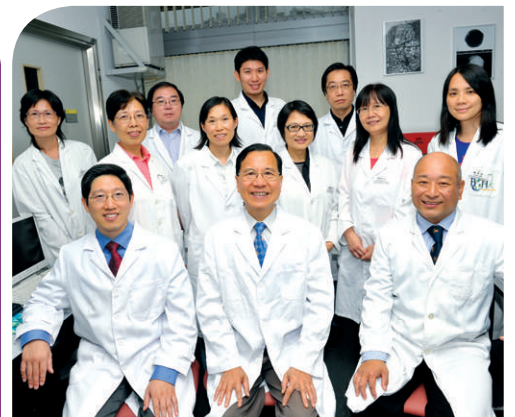


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GENERAL OFFICE  
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RESEARCH  
ADMINISTRATION  
TEAM  
研究事務團隊



CORE LABORATORIES  
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HOLDING CORE TEAM  
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存養中心設施團隊



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SAFETY & BUILDINGS  
 MANAGEMENT TEAM  
 安全與樓宇管理團隊



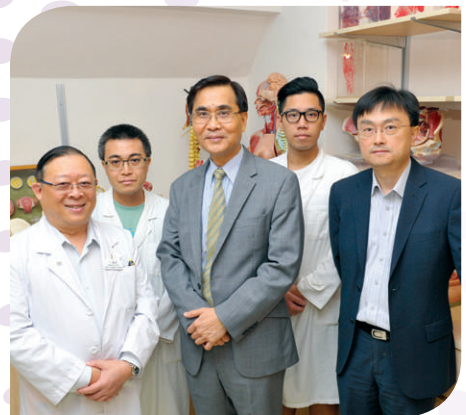
GRADUATE EDUCATION  
 TEAM  
 研究生教育團隊



UNDERGRADUATE  
 EDUCATION TEAM  
 本科生教育團隊



TEACHING AND  
 LEARNING UNIT  
 教與學單位



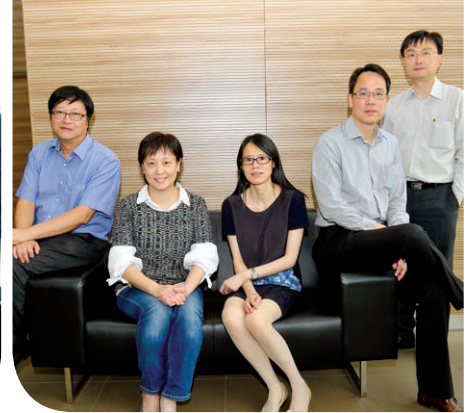
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 LABORATORY TEAM  
 解剖學實驗室團隊



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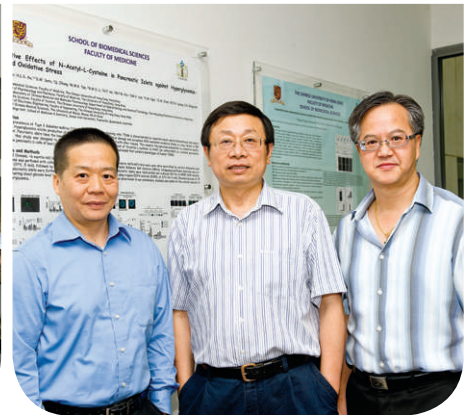
## 學院成員

### THEMATIC RESEARCH PROGRAMS 主題研究組



### CANCER AND INFLAMMATION 癌症與炎症

### NEURO- DEGENERATION, -DEVELOPMENT AND REPAIR 神經退化、發育及修復學



### REPRODUCTION, DEVELOPMENT AND ENDOCRINOLOGY 生殖、發育及內分泌學

### STEM CELL AND REGENERATION 幹細胞與再生醫學

### VASCULAR AND METABOLIC BIOLOGY 血管及代謝生物學

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POSTGRADUATE STUDENT ASSOCIATION  
 研究生會

(2011-2012, 2012-2013, 2013-2014)



# OUR PEOPLE

## 學院成員



### GRADUATES 研究生畢業生

(2011-2012, 2012-2013, 2013-2014)



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# MEMORABLE MOMENTS

## 難忘時刻



# MEMORABLE MOMENTS

## 難忘時刻

### INAUGURATION DINNER 學院成立晚宴



# MEMORABLE MOMENTS

## 難忘時刻



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LUNCH  
GATHERING  
學院喬遷午餐聚會

# MEMORABLE MOMENTS

## 難忘時刻



ANNUAL  
CHRISTMAS  
PARTIES  
年度聖誕聯歡



# MEMORABLE MOMENTS

## 難忘時刻



RETREATS  
集思會





# MEMORABLE MOMENTS

## 難忘時刻



ANNUAL RESEARCH  
DAYS AND  
POSTGRADUATE  
RESEARCH DAYS  
年度生物醫學學院  
研究日及研究生日



# MEMORABLE MOMENTS

## 難忘時刻



VISITS OF  
SCIENTIFIC  
ADVISORY  
COMMITTEE  
科學顧問委員會來訪



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## 難忘時刻

ACTIVITIES  
ORGANIZED BY THE  
POSTGRADUATE  
STUDENT  
ASSOCIATION  
生物醫學學院研究生會  
所舉辦的各項活動





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Reminiscences  
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