

# NEWSLETTER

## School of Veterinary Medicine City University of Hong Kong

香港城市大學動物醫學院 通訊

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香港城市大學  
City University of Hong Kong  
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Cornell University  
College of Veterinary Medicine

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獸醫·突破界限



## 'Li Dak Sum & Yip Yio Chin Development Fund for Veterinary Medicine' establishes milestone for veterinary medicine at CityU

A \$100 million donation from **Dr Li Dak-sum**, an acclaimed business leader, will enable City University of Hong Kong (CityU) to establish the "Li Dak Sum and Yip Yio Chin Development Fund for Veterinary Medicine", to support the long-term development of the School of Veterinary Medicine (SVM), which has been set up in collaboration with the College of Veterinary Medicine, Cornell University. CityU hosted the Donation & Establishment Ceremony for the "Li Dak Sum & Yip Yio Chin Development Fund for Veterinary Medicine" on 14 March in gratitude for the donation made by Dr Li Dak-sum.

Guests attending the ceremony included **The Hon Leung Chun-ying**, Chief Executive of HKSAR and Chancellor of CityU; Dr Li and his wife **Ms Yip Yio-chin**; **Dr Norman Leung Nai-pang**, Pro-Chancellor; **Mr Herman Hu Shao-ming**, Council Chairman; **Professor Way Kuo**, President; and **Professor Michael Kotlikoff**, Dean of Veterinary Medicine, Cornell University.

Dr Li, a successful entrepreneur and highly respected philanthropist, is Chairman of Roxy Property Investment Co. Ltd, Corporate Advisor of Sharp-Roxy (HK) Ltd, and Chairman of the Singapore Carlton Hotel Group.

Dr Li believes research is an integral activity for the success of universities, and he strongly supports CityU's plan to develop its SVM. "When we were young, our generation had a difficult life as we were born in China during WWII. I overcame many difficulties to complete my education after graduating from the Department of Accountancy at Fudan University," said Dr Li at the ceremony. "I understand that education is the key to a strong China. It's my pleasure to do something for education and to make contributions to the community and country."

Mr Leung praised Dr Li's donations in support of CityU's efforts in research and education of veterinary medicine.

"Why do we need a vet school in Hong Kong? The answer goes well beyond the welfare of pets. We need it for public health and food safety reasons. We need it also because the new generation of students can now pursue studies and research on world-class programmes in a totally new area, and pursue new career opportunities in Hong Kong, the Mainland of China and elsewhere in Asia," Mr Leung said.



Dr Li donates HKD\$100 million to CityU to support the development of School of Veterinary of Medicine  
李達三博士向城大捐款一億元支持動物醫學院發展



The Hon Leung Chun Ying, Chief Executive of HKSAR and Chancellor of CityU  
行政長官兼大學監督梁振英先生



Mr Herman Hu Shao-ming, CityU's Council Chairman  
城大校董會主席胡曉明先生



Professor Way Kuo, CityU's President  
城大校長郭位教授



Professor Michael Kotlikoff, Dean of Veterinary Medicine, Cornell University  
康奈爾大學動物醫學院院長Michael Kotlikoff教授

In his welcoming address, Mr Hu thanked Dr Li and his family for their support of CityU. "The great support of Dr Li affirms the School's vision in pursuing excellence in professional education and research in veterinary medicine and life sciences, which can contribute to the development of Hong Kong into an international hub for veterinary education," he said.

Professor Kuo said the support from Dr Li would pave the way for achieving SVM's mission. "We will continue to work hard to make sure that SVM, in collaboration with the College of Veterinary Medicine, Cornell University will develop into a leader of world standing in veterinary education and research," he said.

In his address, Professor Kotlikoff said the ambition for SVM was to train the next generation of clinicians and scientists who will help address the challenges of animal health and welfare in Asia. "Hong Kong is a perfect place to achieve this goal, a bridge between East and West. City University, a dynamic and progressive University, is the ideal partner to build Life Sciences around a world-class veterinary college," he added.

SVM will promote Public Health, Food Safety, Aquaculture and Animal welfare for the benefit of society and provide learning opportunities in the region for students to study in critical areas of biomedical sciences.

## 城大成立「李達三葉耀珍動物醫學發展基金」 動物醫學院踏上發展新里程

香港城市大學（城大）獲商界知名人士李達三博士捐贈一億港元，設立「李達三葉耀珍動物醫學發展基金」，以支持新近成立的動物醫學院的長遠發展。

城大在3月14日舉行「李達三葉耀珍動物醫學發展基金」捐款暨成立儀式，感謝商界知名人士李達三博士的慷慨捐贈。主禮嘉賓包括：香港特別行政區行政長官兼大學監督梁振英先生、李博士及夫人葉耀珍女士、大學副監督梁乃鵬博士、校董會主席胡曉明先生，校長郭位教授，以及康奈爾大學動物醫學院院長Michael Kotlikoff教授。

李博士是成功的企業家，也是備受尊崇的慈善家。他身兼樂聲物業投資有限公司董事會主席、聲寶-樂聲（香港有限公司董事會顧問、新加坡卡爾登酒店集團董事會主席。）

李博士深信科學研究是今日大學成功的必要一環，也十分贊同城大創立動物醫學院。李博士在典禮上致詞時說：「我們這一輩人，年輕時經歷戰亂，生活艱苦，求學不易。我好不容易才得到上學的機會，在復旦大學會計系畢業。我深深體會到，發展教育是令國家強大的關鍵，因此我很樂意為教育做點事，回饋社會，貢獻國家。」

梁先生讚揚李博士深具遠見，捐款支持城大在動物醫學教學和研究的努力。梁先生致詞時說：「為什麼香港需要一所動物醫學院？這不僅關乎動物福利。我們需要它以應對公共衛生及食物安全問題，也需要它為新一代的學生提供機會，在全新的領域上透過世界級的課程學習和研究，並在香港、中國內地及亞洲其他地方獲得新的就業機會。」

胡先生感謝李博士及其家人的支持和遠見，更重要的是對城大的支持。他說：「李博士的大力支持，再次鼓勵城大追求實現其使命，令城大的專業教育精益求精，尤其是在動物醫學及生物醫學研究領域取得卓越成就，並對香港發展成一個國際動物醫學教育樞紐，作出重大貢獻。」

郭教授認為，李博士的慷慨捐助，將有助於動物醫學院達成其使命。他說：「我們將繼續努力，務使城大的動物醫學院，在與美國康奈爾大學動物醫學院的緊密合作基礎上，發展成為動物醫學教育及研究領域的世界一流院校。」



The guests tour the exhibition panels  
嘉賓參觀展版。

Kotlikoff教授期望新成立的學院培訓出新一代的獸醫及動物醫學專家，以應付亞洲區對動物醫學服務的需求。他說：「香港應當是聯接東西雙方的橋樑，也是將這願付諸實行的最佳場所。城大是一所充滿活力的先進大學，是建立世界一流動物醫學院的理想合作夥伴。」

城大動物醫學院將致力促進亞太區內的公共衛生、水產養殖業、動物福利，並促進食物安全，以造福社會。同時，學院也將使學生有更多學習機會，得以修讀更多有關生物醫學的重要課程。



Dean of Veterinary Medicine, Cornell University, Professor Michael Kotlikoff (left) and Professor Michael Reichel, Acting Dean of School of Veterinary Medicine  
康奈爾大學動物醫學院院長Michael Kotlikoff 教授(左)和動物醫學院署理院長 Michael Reichel教授。

## Introducing... Professor Michael P. Reichel, Acting Dean

### 1. Your qualification

I originally qualified from a veterinary school in Germany, but that now seems like a long time ago. Since then, I have spent my professional life in a variety of countries, mostly in the Southern Hemisphere. I was initially working in New Zealand, in various aspects of Food and Meat Safety and its research and obtained two post-graduate qualifications from Massey University (a Diploma in Veterinary Public Health and Master of Veterinary Science).

While in New Zealand, I spent 18 months at the Meat Industry Research Institute in Hamilton, working on the growth of specific cold-tolerant bacteria that might grow on meats stored refrigerated for long periods of time, and developed the first computer growth model for E.coli in a "Hot" boning plant. I spent a lot of time collecting temperature data loggers from freezers. It was pretty cold and I am glad that this work and its outcomes are still the industry standard today.

I then worked as a Government Veterinary Officer in the Falkland Islands, in clinical practice and government service – pretty much a sole charge position. There was no Internet in those days, and nobody to ask for a second opinion. We eradicated *Brucella ovis* from the island's sheep population, the only place in the world ever to have done so, and made major inroads into our understanding of the epidemiology of hydatid disease, a tapeworm that can seriously affect the human population. That work also formed the basis of my first doctoral thesis through the University of Veterinary Medicine in Hanover, Germany.

I returned to Germany to complete a post-graduate degree in Tropical Veterinary Medicine, then eventually returning to New Zealand to work in the Central Animal Health Laboratory as a Section Leader in Serology/Immunology for four years. Just in time for the 2000 Olympic Games, I arrived in Sydney and proceeded to work for a multi-national Animal Health Pharmaceutical company, during that time completing both, a PhD and an MBA.

I also completed the Fellowship examination in Veterinary Public Health in Australia and am a Diplomate of the European College of Veterinary Public Health, hence recognized as a veterinary specialist in Australia, New Zealand and Europe.

### 2. Why did you choose to work in SVM?

Hong Kong is such a vibrant place and right at the heart of Asia – the opportunity to set up a veterinary school here, one that is focused on local needs and desires, is a huge opportunity, as well as a challenge.

### 3. Which areas are you responsible for in SVM?

As the Dean of the School of Veterinary Medicine, I am not only responsible for the general strategic direction, in particular for the academic programs, but also the planning and building of

resources for teaching and research. I am also responsible for the relationship with our partner, the College of Veterinary Medicine, Cornell University.

### 4. How will you apply your expertise in SVM and any targets you want to achieve in the near future?

I have recently been involved in setting up and gaining accreditation for the seventh veterinary school in Australia, in Adelaide. Thus I have a number of years of experience in planning, setting up and completing a veterinary school. I thus have a fair idea of what is required to accomplish the task, and hopefully have been able to learn from past mistakes.

### 5. Why is the study on infectious diseases important in veterinary medicine?

As we can see from the recent outbreaks of Ebola in Africa and MERS in the Middle East and South Korea, respectively, some infectious diseases are what we call "Zoonoses", diseases that are naturally transmissible from animals to humans (we are not completely sure how this works with MERS, but there are strong epidemiological suggestions that animals, such as camels, are involved).

These diseases seem to be becoming increasingly important as the natural balance of eco-systems are being disrupted, so we can expect more of these events to occur in the future. The study of these diseases will hopefully lead to a better understanding of these diseases and the spillover events, and to a better understanding of how we can restore the balance (or prevent those spillovers from happening in the future).

### 6. Any memorable working experiences you can share with readers, such as helping to tackle serious infectious diseases?

While I was working in Uganda, East Africa, we studied diseases of cattle and were the first group to describe a very high level of Brucellosis – this disease not only impacts cattle significantly, causing abortions and thus losses to the farmers, but is also a zoonosis that can make people seriously sick. When we presented our findings at a workshop, the local doctors present told us that they didn't have any available diagnostic facility for Brucellosis – this in a country that was rife with malaria; in humans, Brucellosis causes similar symptoms to malaria (eg. recurrent fevers), so matters between the two diseases could get easily mixed up, and effective treatment be delayed.

This emphasized to me not only the importance of what we can do as veterinarians and our contribution to human health, but also the need for all of us to work together, sharing our knowledge and experiences; what we now call the "One Health" approach.

## 動物醫學院重要人物 – 署理院長 Michael P. Reichel 教授

### 1. 請談談你的學習和工作經歷。

我在德國的動物醫學院畢業，那是很久以前的事了。之後我到過不同的國家工作，主要是南半球的國家。

最初我在新西蘭與食物及肉類安全有關的不同範疇工作，並在當地的梅西大學取得兩項研究院資格(動物公共衛生文憑和動物醫學碩士學位)。其後轉至漢密頓的肉類工業研究所工作了18個月，研究肉類在長時間儲存後，某些耐冷細菌的生長情況，以及研發首個電腦模式，以了解「高溫」肉類去骨工場中大腸桿菌的生長情況。當時，我需要長時間在冷得只有攝氏零下30度的冷藏庫工作，令我甚感欣慰，所做的成果，現時仍然是業界的作業標準。

後來，我在福克蘭群島政府擔任動物醫學主任，除了政府的工作外，亦有診症治病。那時候沒有互聯網可用，也沒有人可問，我幾乎要獨力籌劃一切。我們史無前例地根治了島上羊群的羊布氏桿菌，也為進一步了解包蟲囊傳染病奠下重要的基礎，而包蟲囊是一種對人類健康有極大傷害的寄生蟲。有關工作更成為我在德國漢諾威動物醫學大學博士學位的論文藍本。

我在德國完成熱帶動物醫學研究學位，又再返回新西蘭中央動物衛生實驗室血清學/免疫學組，擔任主管。四年後，剛好趕上2000年奧運會，我移居悉尼並在一家跨國動物健康藥劑公司工作，同時完成了博士學位和工商管理碩士學位。

我通過澳洲的動物公共衛生院士考試，並持有歐洲動物公共衛生證書，為澳洲、新西蘭和歐洲的認可專科獸醫。

### 2. 為何選擇加入城大動物醫學院？

香港位處亞洲中心，又是個充滿活力的城市。在香港成立切合社會的需求和渴望動物醫學院，不但可以為社會創造大量機遇，工作亦充滿挑戰性。

### 3. 在動物醫學院的職責。

作為動物醫學院院長，我負責訂定策略發展方向，特別是學術課程規劃，同時計劃和籌設教學研究的設施，並與策略合作夥伴康奈爾大學動物醫學院，保持緊密聯繫。

### 4. 如何將專長應用於動物醫學院？有何短期目標？

過去數年，我在澳洲阿德萊德參與澳洲第七所動物醫學院的籌建及申請認可資格的工作，因此有成立動物醫學院的經驗。從過去的錯誤中汲取教訓，我相當了解該如何籌建動物醫學院。



Professor Michael P. Reichel  
Michael P. Reichel教授



Professor Reichel explores collaboration opportunities proactively.  
Reichel教授積極開拓不同合作機遇。

## 5. 從動物醫學研究傳染病有何重要？

非洲爆發伊波拉病毒，而中東及南韓亦出現中東呼吸綜合症案例。雖然我們目前還未能完全了解中東呼吸綜合症的成因，但不少流行病證據顯示駱駝等動物很可能與此有關。(由動物傳播至人類的傳染病，我們稱為「人畜共患傳染病」)

由於生態系統與大自然的平衡日漸受到破壞，預計未來將有更多人畜共患傳染病出現。相關研究將有助深入了解這類疾病，並進一步明白如何重拾平衡點，以及阻止疫情擴散。

## 6. 有甚麼難忘的工作經歷？例如，醫治嚴重傳染病的經驗？

在東非烏干達工作時，我與同事研究牛隻疾病，更是第一批獸醫發現牛隻附有布魯氏桿菌病。這種疾病不但影響牛隻健康，令牠們流產，農民利益受損，更是可以傳染至人類的嚴重病症。

我和同事在當地一個工作坊講解相關研究發現時，參與的醫生表示當地沒有可用作診斷布魯氏桿菌病的設施；還有瘧疾是烏干達普遍傳染病之一，而人類感染布魯氏桿菌病後，所出現的病徵又與瘧疾很相似(例如不斷發燒)，增加治療難度。

這令我深體會獸醫工作的重要性，以及對人類健康可作的貢獻，也體會到我們應共同努力，分享經驗與知識，方可以實踐「健康一體」的理念。



Professor Reichel involves in the planning and building of teaching and research resources at SVM. Reichel教授參與動物醫學院教研設施的規劃及籌建。

# Where do emerging diseases come from? 新興疾病的由來?

There is considerable concern about the threats posed by new and emerging diseases, recently highlighted by the re-emergence of Ebola virus in Africa and the spread of MERS-CoV from the Middle East to South Korea, to name just a few examples.

To address and further discuss this issue, SVM and the Department of Biomedical Sciences (BMS) at CityU invited Professor Joe Brownlie, CBE, from the Royal Veterinary College in London, to give a lecture entitled "Where do emerging diseases come from?" on the 31st of March 2015.

In his lecture, Professor Brownlie introduced the participants to a history of infectious diseases, such as brucellosis, influenza, Nipah viruses and SARS. He also discussed the importance and challenges of the "One health" concept.

Prof Brownlie said that it had become apparent that a new human disease arose approximately every 8 months and the majority of these diseases came from animals. On top of this, most of the diseases originating from animals readily transferred to humans and can do so with fatal consequences.

In the light of this trend, veterinarians now play a significant role in fighting those new diseases, particularly in areas such as ongoing surveillance, detection and response to animal disease outbreaks. Professor Brownlie said that the so-called zoonotic diseases should remind us that animal and human diseases are a continuum and should be considered in their entirety – thus relevant to the 'One Health' concept.

In addition, Professor Brownlie added that it was clearly evident that outbreaks of disease can move very rapidly and spread across a region or country and, in some cases, become global threats (here again he quoted the recent example of the arrival of MERS-CoV in South Korea). Therefore, people need to be fully prepared and equipped to deal with a new, unexpected disease, as they might quickly become a global concern.

During the Question and Answer session, participants raised a number of questions about emerging diseases and this was followed by a useful discussion with the speaker.



Professor Joe Brownlie  
Joe Brownlie教授

社會高度關注新興疾病的威脅，特別是最近伊波拉病毒重臨非洲，中東呼吸綜合症亦從中東傳播至南韓，城大動物醫學院和生物醫學系特別為此，於3月31日邀請皇家動物醫學院的Joe Brownlie教授，以「新興疾病的由來?」為題，主持講座。

在講座中，Joe Brownlie教授向參與者介紹各項傳染疾病的應對過程，例如布魯氏桿菌病、流行性感冒、立百病毒和沙土等。他亦討論了促進「健康一體」理念的重要性及挑戰性。

Joe Brownlie教授指出，現時每八個月便新增一種疾病，而且大部分源頭來自動物；重要的是，那些疾病雖源自動物，但可以傳染至人類，並帶來致命的後果。

鑑於疾病的發展趨勢，獸醫在應對新興疾病扮演著重要的角色，尤其是持續的監控、偵測及動物疫症爆發時的跟進工作。Joe Brownlie教授指出，人畜共患病提醒我們動物和人類疾病幾乎是一體的，所以必須以「同一健康」的理念去應對。

他補充說，現時有足夠的證據指出一旦疫症爆發，傳播的速度甚快，而且可以橫跨整個國家、區域，部分疾病甚至可擴散至全球，尤如最近韓國爆發的中東呼吸綜合症；所以人類應該不分國界，並作最好作準備及裝備去面對全新及無法預計的疾病。

在答問環節中，參加者就有關新興疾病作踴躍發問，並與講者進行有意義的討論。

Professor Joe Brownlie, Emeritus Professor of Veterinary Pathology at the Royal Veterinary College in London, is widely considered to be one of the most authoritative experts on emerging disease threats in the UK. He has published over 150 research papers, presented internationally at over 320 meetings, and supervised over 30 PhD students.

In 2005, Professor Brownlie was appointed the veterinary expert member of a co-ordination team of the Foresight Programme on the 'Detection and Identification of Infectious Diseases.'

Joe Brownlie教授是皇家動物醫學院的動物病理學榮休教授，一直被視為英國應付新興疾病威脅的最權威專家之一。他曾發表超過150篇研究論文，並在320個國際會議上解說，並指導超過30名博士研究生。

在2005年，一個名為「偵測及鑒定傳染病」的前瞻性計劃中，他獲委任協調小組的獸醫學專家。

## CityU explores more collaboration opportunities in mainland China

To enhance the treatment skills of local and mainland veterinarians, the School of Veterinary Medicine (SVM), a collaboration between City University of Hong Kong (CityU) and Cornell University held emergency critical care workshops from 1 to 5 June in Hong Kong and Guangzhou. In addition, senior management of CityU and South China Agricultural University (SCAU) had fruitful discussion and agreed to explore more collaboration opportunities.

Nearly 150 practicing veterinarians and students took part in the courses held at CityU and SCAU and learned about the latest treatment methods and new trends in veterinary science.

The workshops hosted by **Dr Gretchen Lee Schoeffler**, Section Chief of Emergency and Critical Care Education and Training at Cornell University Companion Animal Hospital, introduced the latest technologies and discussed actual cases that helped participants acquire practical skills.

The workshops covered essential topics in emergency and critical care for dogs and cats, such as oxygenation assessment, traumatic brain injury and venous blood gas analysis. In addition, Dr Schoeffler explained symptom assessment, clinical diagnosis, medical equipment usage, prescriptions and follow-up treatment.

**Dr Howard Wong Kai-hay**, Executive Director of Professional Veterinary Education and Development in the SVM, said CityU not only offered continuing education programmes for local veterinarians but also invited overseas specialists to teach courses in the mainland China. The objective was to help boost the professional knowledge and treatment skills of veterinarians in the mainland China to international standards.

He stressed that CityU's SVM would provide timely and appropriate professional training to suit the needs of local and mainland veterinarians for an overall upgrade in professional standards in the industry.



Dr Gretchen Lee Schoeffler  
Gretchen Lee Schoeffler 獸醫

**Professor Liang Zisen**, Secretary of the Party Committee of the College of Veterinary Medicine, SCAU, added that this was a rare opportunity for students to learn about the latest technology from an international expert. He encouraged students to cherish the programme because it would broaden their vision and upgrade their treatment skills.

Importantly, discussions between senior management at CityU's SVM and SCAU proved to be a good starting point for collaboration between the two universities. **Professor Liu Yahong**, Vice-President of SCAU, and **Professor Michael Reichel**, Acting Dean of SVM, agreed to explore collaborations in areas, such as enhancement of food safety standards and promotion of aquaculture in Hong Kong, Guangzhou and other cities in mainland China.

"CityU is one of the top universities in Hong Kong; it has a solid foundation in research and internationalisation. In addition, zoonotic diseases, food safety, aquaculture and animal welfare are four strategic themes in the SVM. From our discussion, we know that SCAU plays an active role in promoting aquaculture and tackling zoonotic diseases, and it puts lots of effort into enhancing internationalisation. With their geographic advantage and similar vision, SVM and SCAU definitely have many collaboration opportunities," Professor Reichel said.

Dr Schoeffler received her Bachelor of Science (Honours) in Veterinary Science from Texas A&M University and completed residency in Emergency and Critical Care Medicine at Tufts University. Prior to joining Cornell University, she headed the Veterinary Referral and Emergency Center at the University of Connecticut and supervised interns.

As a specialist in emergency and critical care, Dr Schoeffler has extensive experience in treating critical cases, including those with severe multisystemic trauma, respiratory distress, acute renal and liver failure, coagulopathy and sepsis. Her specific interests include hematologic diseases, such as immune-mediated hemolytic anemia, thrombocytopenia and complete blood counts.

Schoeffler 獸醫在美國德克薩斯州農工大學取得動物醫學學士學位，又在塔夫斯大學急救及深切治療部完成實習，加入康奈爾大學前，在美國康涅狄格大學的動物轉介及急症中心擔任主管，並負責指導實習醫生。作為資深急救及深切治療的專科獸醫，Schoeffler 獸醫曾經處理多宗極度危重的病症，包括多種器官嚴重創傷、呼吸衰竭、嚴重腎臟及肝臟衰竭、凝血病及敗血症等，具備豐富經驗。她的研究興趣及專長為血液疾病，包括免疫性溶血性貧血、血小板過低及血流細胞數計，並曾發表多篇相關的研究文章。

## 城大開拓中國內地合作機遇

香港城市大學（城大）動物醫學院於6月1日至6月5日，舉辦動物急救及深切治療工作坊，提升本地及中國內地的獸醫相關治療水平。

美國康奈爾大學動物醫學院急救及深切治療部主管 **Gretchen Lee Schoeffler** 獸醫主講工作坊，除了介紹最新技術外，亦分享真實病例，讓學員充分掌握實踐的竅門。工作坊內容涵蓋急救及深切治療學的重要部分，包括貓科及犬類的急救醫學、氧氣水平評估、嚴重腦創傷及靜脈血液氧氣分析等，又詳細講解如何評估病徵、臨床診斷，使用醫學儀器、藥物處方及跟進治療。

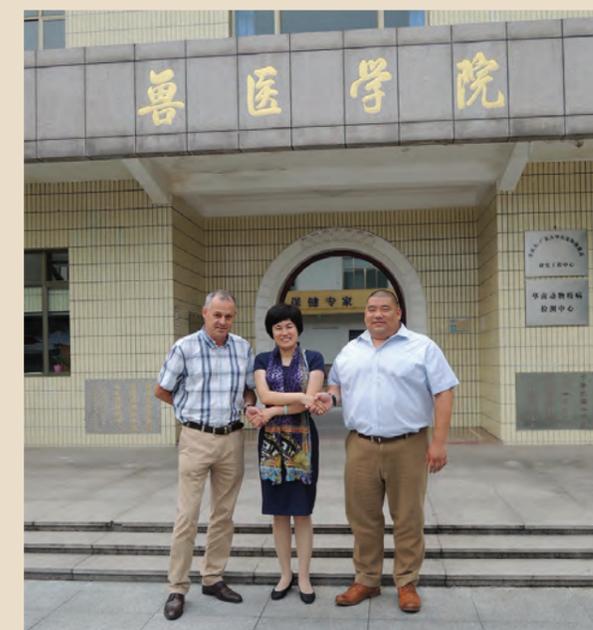
接近150名執業獸醫及學生，參與分別在香港城市大學及廣州華南農業大學舉辦的課程，學習應用最新的治療知識及了解領域發展新趨勢。

與世界頂尖的美國康奈爾大學動物醫學院合作的城大動物醫學院，一直積極與中國內地各省市及研究機構交流，拓展廣泛的合作機會。城大動物醫學院專業教育及發展總監 **王啟熙** 獸醫表示，除了在本埠開辦持續專業訓練外，城大邀請海外權威專家到內地提供最新的課程，期望可協助中國內地增進執業獸醫的專業知識水平及治療技術，與國際標準接軌。

他強調，學院未來會根據香港及中國內地動物醫學界的需要，適時及適當地引入專業培訓，旨在全面提升業界水準。華南農業大學獸醫學院黨委書記 **梁梓森** 教授表示，今次課程是難能可貴的機會，讓學生從國際級專家學習最新技術。他勉勵學生珍惜學習機會，以開拓視野及提升專業水平。

另外，城大動物醫學院與華南農業大學管理層作富有成效的討論，為探討未來合作機會奠定良好基礎。華南農業大學副校長 **劉雅紅** 教授及城大動物醫學院署理院長 **Michael Reichel** 教授認同，雙方可以在不同領域合作，包括協助香港、廣州及其他中國內地省市，提升食品安全水平、推動水產養殖業發展。

Reichel教授表示：「城大是香港頂尖大學之一，具備牢固的研究及國際化的基礎。城大動物醫學院有四大策略發展主題，包括人畜共患及新興疾病、食物安全、水產養殖業及動物福利。透過交流，我們了解華南農業大學對推動水產養殖業，應付人畜共患病及推動國際化等，投放大量心力。基於地利及有共同發展願望，我們深信雙方未來將會有許多合作機會。」



CityU and South China Agricultural University agreed to explore collaboration opportunities in research and teaching. 城大動物醫學院與華南農業大學同意探討未來合作機會。



Nearly 150 veterinarians and students took part in the courses and learned about the latest treatment methods. 接近150名執業獸醫及學生參與工作坊學習應用最新的治療知識。

## How to release work pressure 怎樣釋放工作壓力

Hong Kong can be a stressful place to work in and the veterinary industry here is no exception to this. Heavy workloads, poor work-life balance, occasional difficult relationships with clients and the need to perform euthanasia are all stressors that can affect the mental well-being of veterinarians.

City University's School of Veterinary Medicine (SVM), in collaboration with the College of Veterinary Medicine, Cornell University, hopes to play a part in mentoring and provide assistance to the veterinary profession on issues related to mental health.

As part of that goal, SVM invited Dr. Brian Mc Erlean to come to Hong Kong and give talks to local vets. Dr. Mc Erlean has been in private practice for over 30 years. He retired in 2011 and since then, has spent much of his time working on and speaking about mental health in veterinarians, often in conjunction with the Australian Veterinary Association Western Australia "One Life" initiative.

In his talks, Dr. Mc Erlean spoke about setting priorities in your life, such as friends and family, as well as the importance of not becoming obsessed with work or spending all your time at work (very much a Hong Kong problem!). Dr. Mc Erlean gave some very useful tips which may be used to attain a less stressful and happier existence, such as:

- Provision of mentoring during the first two years after graduation by a senior veterinarian.
- Staying healthy and fit, eating a balanced diet and doing lots of exercise
- Reasonable working hours, low student debt (local vet school!)
- Seeking help early from friends and family and also professional help bodies
- Avoiding things like alcohol which can precipitate more complications
- Writing up cases more thoroughly so that you are able to defend yourself if necessary
- Avoiding chronic unrelieved stress
- Changing profession if it really becomes too much

About thirty local practitioners attended the talks and the overall feedback was very positive. It is generally acknowledged that mental health is not an attractive subject to consider for CPE events, compared to, for example, a cardiology lecture. However, its importance in this age of multiple stressors is clear. SVM aims to offer local vets the opportunity to attend more such lectures on mental health and practical programmes to aim for life-work balance. It hopes the profession will begin to accept that mental health is an issue that should be dealt with, rather than be denied.

在香港工作的壓力很大，獸醫專業亦沒有例外。無論獸醫選擇從事哪項專科，面對繁重的工作量、工作與生活失衡、難以處理的客戶關係，甚或有時候要為動物進行安樂死，均影響獸醫的心理健康。

城大與美國康奈爾大學合作成立的動物醫學院亦希望為獸醫提供相關的協助和輔導。

為此，動物醫學院邀請Brian Mc Erlean獸醫來港舉行講座。Mc Erlean獸醫私人執業逾30年，2011年退休後專注推動獸醫的心理康復工作，包括與澳洲獸醫學會的西澳洲生命行動等合作。

Mc Erlean獸醫建議，同儕訂立處理事項的緩急輕重次序，例如以家人朋友為先，不要過度沉迷工作，以及把全部時間花在工作上。(這是香港的一大問題！)

以下是Mc Erlean獸醫對減輕壓力、生活得較愉快的一些建議

- 由資深的獸醫輔導剛畢業的年青獸醫
- 保持身體健康，飲食均衡，多做運動
- 安排合理的工作時間，減少學費借貸
- 盡早向家人朋友及專業團體尋求協助
- 避免酗酒等不良習慣，以免引發更多問題
- 保存詳盡紀錄，以便有需要時可保障自己
- 避免長期壓抑壓力
- 假如壓力太大，應考慮轉行。

出席講座的30位本地執業獸醫，均讚賞講座的內容。雖然有指獸醫心理健康的持續專業課程不如心臟病講題的吸引，但在現今工作壓力重重的年代，有關講題實在應該關注。

城大動物醫學院致力舉辦更多心理健康講座及課程，讓本地獸醫有更多機會參與，並期望業界不要否認問題的存在，及意識有關問題必須面對。



Dr. Brian Mc Erlean  
Brian Mc Erlean 獸醫

## Cracking the genetic codes of socioeconomically important parasites 解構寄生蟲基因組群

Innovative methods that integrate genomics, transcriptomics and proteomics for the analysis of the biological structure of parasites can provide unprecedented prospects for the diagnosis and treatment of diseases, according to Professor Robin B. Gasser, a renowned international parasitology expert and Director of the Parasite Genomics and Genetics Program at The University of Melbourne, Australia.

In the talk organised by CityU's School of Veterinary Medicine on 22 May 2015, Professor Gasser described the importance of the 17 neglected tropical diseases, particularly those caused by parasites, which have a major adverse impacts on human and animal health. However, it has been difficult to control these diseases due to a limited knowledge of the biology of the causative agents and the way they cause disease.

New and innovative high throughput sequencing and informatics technologies are providing powerful tools to explore and fight these diseases, as they are helping to find new diagnostics, treatments and vaccines, Professor Gasser said.

Professor Gasser illustrated how technology can be applied to analyse the biological characteristics of a wide range of pathogens, including liver flukes of people, and how they live in a host and cause diseases. "These liver flukes cause chronic infections which can lead to cancer. After studying a large volume of data, my team is able to understand the molecular biology and biochemistry of liver flukes. Through extensive study of these liver flukes, we hope to find new treatments of bile duct cancer," he said.



Professor Robin B. Gasser explains how an innovative methods that integrate genomics, transcriptomics and proteomics for analysis of the biological structure.

Robin B. Gasser 教授介紹如何結合寄生蟲基因組學、細胞轉錄學等嶄新方法，分析寄生蟲的生物結構。

國際權威寄生蟲學家、澳洲墨爾本大學動物醫學院病原體基因學及遺傳學課程主任Robin B. Gasser教授指出，利用創新的方法結合寄生蟲基因組學、細胞轉錄學、蛋白質組學知識，分析寄生蟲的生物結構，為探索治療及診斷方法，開拓無可估量的機遇。

城大動物醫學院於5月22日舉辦有關講座。現時17種被忽視熱帶疾病，特別是寄生蟲病，對人類及動物健康，構成重大威脅，但醫學界對疾病機理及其衍生影響認識有限，難以作有限監控。Gasser教授表示，嶄新的高通量測序技術及超級電腦等科技，有助研究新的診斷、治療方法，以及製作疫苗，成為探索及應對有關疾病的有力工具。

Gasser教授說明如何應用科技去分析一系列病原體的生物特徵，例如人體內的肝吸蟲，它如何在宿體存活，又引發病症的機理。他說：「肝吸蟲可以導致慢性感染，並引致癌症。分析大量數據後，我的研究團隊能夠了解肝吸蟲的分子生物及生物化學特徵。透過全面的研究，我們可以為膽管癌，尋找新的治療方法。」

Professor Robin B. Gasser (BVet Med Bern; Dr med vet Zurich; Dr med vet hc Bern; PhD Melb; DVSc Melb; Dip EVPC; FASM; FASP) is Director of the Pathogen Genomics and Genetics Program at The University of Melbourne. He has published more than 490 peer-reviewed works, and has received a number of awards and prizes, including a Fulbright Senior Scholarship, International WAAVP-Bayer Award for Research Excellence and an Alexander von Humboldt Professorial Research Prize. He is Fellow of the Australian Society for Microbiology and of the Australian Society for Parasitology (ASP), and is presently the President of ASP. Robin is the editor and editorial board member of a number of key international scientific journals.

Robin B. Gasser教授是墨爾本大學動物醫病原體基因組學及遺傳學中心主任。他曾發表約490篇同行評議論文，並獲頒多個重要獎項，包括富布賴特高級研究獎項、德國貝爾基金會科學研究獎及Alexander von Humboldt專業科研獎等。



## Veterinarians join CityU's course on equine fracture management 城大舉辦獸醫課程講授馬匹骨折治療技術

Nearly 40 veterinarians learned about new developments in equine orthopaedic surgery in a clinical course organised at City University of Hong Kong (CityU) School of Veterinary Medicine from 24 to 27 March 2015.

The course titled "Advanced Techniques in Equine Fracture Management" was co-organised by the School of Veterinary Medicine (SVM), The Hong Kong Jockey Club and AOVET, a global network for veterinarians.

Well-known experts in equine orthopaedics and traumatology, Professor Jorg Auer, Professor Alan Nixon, Professor Dean Richardson and Dr. Alan Ruggles shared their experience in fracture treatment in lectures, discussions, and hands-on laboratory sessions over the period of four days.

The participants, mainly veterinarians from Australia, India, Japan, Taiwan and mainland China, amongst others, studied current and state-of-the-art concepts in fracture treatment and management, including the use of different plates and internal fixators, the diagnosis and management of physal and metaphyseal fractures, the use of interlocking nails in upper long bone fracture treatment, and the use of computer-assisted surgery. The group case discussions and hands-on practical exercises deepened the overall learning experience.

Dr Christopher Riggs, Co-Chairperson of the course and Adjunct Professor at SVM, said that the course had opened pathways for veterinarians in the Asia-Pacific region to take on challenging surgical cases. It had also inspired people to keep looking for new developments in veterinary science. This workshop was a valuable opportunity to bring together a group of professionals from various countries to inspire, influence and encourage each other to improve the profession, Dr Riggs said.



Well-known experts in equine orthopaedics and traumatology shared their experience in fracture treatment. 執教者是世界一流的馬匹骨科外科學及創傷學專家，為學員傳授治療技術和自己的經驗。

香港城市大學（城大）3月24至27日舉行臨床課程，各地近40名獸醫前來參加，學習馬匹骨科外科手術。

課程名為「高階馬匹骨折治療技術」，由城大動物醫學院、香港賽馬會、國際獸醫網絡AOVET合辦。

為期四天的課程包含講座、討論、實習等內容，執教者是世界一流的馬匹骨科外科學及創傷學專家，包括Jorg Auer教授、Alan Nixon教授、Dean Richardson教授及 Alan Ruggles獸醫，為學員傳授治療技術和自己的經驗。

參與課程的獸醫來自澳洲、印度、日本、台灣及中國內地等地，他們學習馬匹骨折的通行療法，並了解最新的技術，包括各種夾板和體內固定器的使用法、骨斷骨折及幹骺端骨折的診斷和治療、使用帶鎖髓內釘治療前腿長骨折，以及採用電腦輔助手術等先進方法。課程的教學法是將小組病例討論與實習相結合，以加深學員掌握的知識。

動物醫學院的特約教授李恪誠獸醫兼任該課程的聯席主席。他說，這項課程為亞太區執業獸醫介紹的手術病例很有啟發性，可幫助他們開拓視野，以提升獸醫治療水平，例如改進植入式骨折固定器的使用技術等。

李恪誠獸醫認為，該課程是各地專業人士的一個寶貴學習機會，他們得以互相啟發、交流，有助提升獸醫界的整體水平。



Nearly 40 veterinarians took part in the course titled "Advanced Techniques in Equine Fracture Management". 近40名獸醫參加「高階馬匹骨折治療技術」課程。

## Veterinarians - Beyond Boundaries 獸醫-突破界限

"Veterinarians can solve many different problems successfully, particularly when they cooperate with people possessing different talents," said Dr Richard Brown, Associate Director (Professional Animal Programmes) of the School of Veterinary Medicine (SVM), CityU.

SVM is turning the skeleton of an 11-metre Omura's whale into a scientific specimen, expected to become one of the largest animal specimen in Hong Kong.

The project has attracted significant public attention. The Hong Kong Science Museum sought SVM's expertise to examine a dolphin skeleton, which had been displayed for many years in the museum. "Over time, it is not surprising that the skeleton had deteriorated. Therefore, they wanted us to check the skeleton to see whether it was complete and in good shape", Dr Brown recalled.

After the site visit, the SVM team found that there were several problems with the skeleton. "The left shoulder and neck were dislocated and not correctly positioned. In addition, two ribs of the skeleton were missing. Staff of the museum had once done something temporarily to fix the problem with the neck," Dr Brown said. "The restoration job was not hard but tricky and needed substantial team work. Fortunately, we had a good team." The team, comprising a veterinarian, technology officer and the museum's technician adjusted the shoulder and neck and repositioned them correctly with a special glue. The team then removed a rib similar to the two missing ones, and, using 3D scanning and printing technology re-produced the two missing ribs. These were then positioned correctly and glued in place.

A knowledge of Veterinary Anatomy was invaluable in the skeleton's repair. "I have constructed skeletons of mammals on my own, such as those of cats, but I have never re-constructed a dolphin skeleton. However, all mammals have a common design structure and these principles were used successfully in this project," Dr Brown added. He also said that this was a good opportunity to have a close look at an aquatic mammal skeleton and see how the ribs attach to the spine. This would be useful for future studies.

Dr Brown believes this was a valuable opportunity to show that veterinarians can bring benefits to different sectors of the community and how SVM was ready to contribute significantly to society.



The restoration job needed a lot of team work. 修復的工作需與不同專業的人員合作。

「獸醫其實能夠解決很多不同的問題，倘若他們與其他專才合作，就更能發揮作用。」城大動物醫學院（專業課程）副總監彭偉澤獸醫表示。

動物醫學院現正為長達11公尺的角島鯨全副骨骼製作成科學標本，這將是香港其中一個最大型的動物標本。

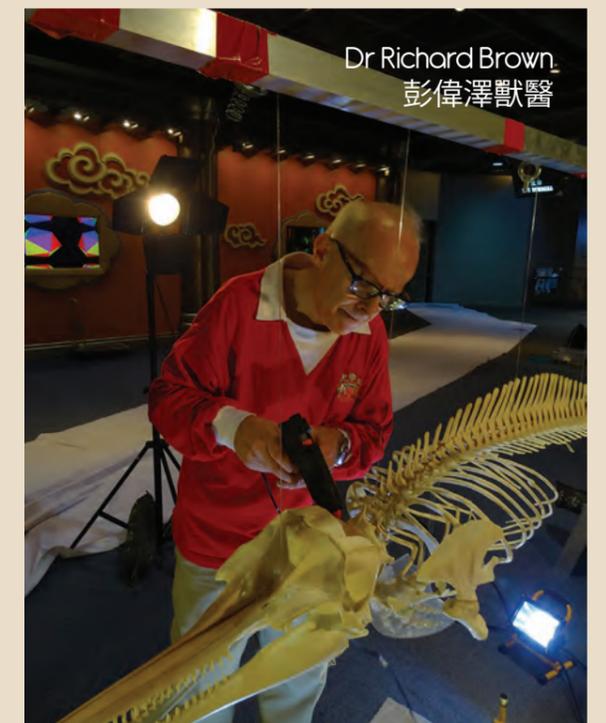
上述計劃不但吸引了公眾的注意，香港科學館亦希望借助動物醫學院的專業知識，代為檢查該館一副已展覽多年的海豚骨骼標本。「該副標本擺放了多年，難免有破損。因此，科學館希望我們檢查一下骨骼是否完整無缺。」

動物醫學院的一組工作人員在科學館實地視察後，發覺該標本有數個問題。「左肩和頸項移位了，位置也不對。還有，骨骼裡的兩條肋骨不見了。科學館的職員使用的方法，只能暫時解決頸項位置的問題。」他說。

「修復的工作不難，但需巧妙地處理，還要與不同專業的人員合作。幸好，我們有一支很好的團隊。」團隊成員包括一名獸醫、技術員及科學館的模型製作技師。他們調整已妥善接駁的海豚肩頸骨骼，再用特定的膠水作固定。隨後，團隊按照丟失的兩條肋骨形狀，在骨骼中找出一條類似的肋骨，再利用3D掃描和打印技術進行複製。

這次骨骼修復工作，充分應用了動物醫學的知識。「雖然我從未製作過海豚骨骼標本，但我曾製作貓等哺乳類動物的。所有哺乳類動物的骨骼結構相似，這次修復工作正好用上有關的理論。」彭偉澤獸醫說。他指出，這次修復工作讓他有機會更仔細地研究動物，例如肋骨與脊椎如何連接等；有關知識有助他將來作進一步的研究。

他認為，這是一次難得的機會，反映獸醫能夠造福各界，而城大動物醫學院亦已準備好為社會作出更大的貢獻。



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