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#7

CRITTER'S

all Critters Great & Small

SUMMER 2018

$500 million to boost OneHealth

Dr Alan Taylor from Jet Navigator to Anaesthetist

"Mouth to Snout" Cornell's Dan Fletcher teaches CPR

CityU 香港城市大學 City University of Hong Kong

Cornell University

Jockey Club College of Veterinary Medicine and Life Sciences

in collaboration with Cornell University

DEAN'S MESSAGE
院長的話

It has barely been a year, but our BVM students have certainly made their mark – they are presently enjoying animal husbandry experiences with our partners at Cornell's College of Veterinary Medicine, mucking in with what goes on on farms, and also mucking out (the stables). The timing has been perfect for them, lambs are being born, foals are on the ground and they have watched a calf being born and the weather has been kind.

The students have now completed the first year of the studies at CityU and excelled – more than half of the class are on the Dean's list, a sign of them doing exceedingly well academically. A new cohort for start in 2018 has now also been selected, and we are looking forward to meeting them in September for the start of the academic year.

Our facilities' development is keeping pace with the roll-out of the programme – the Veterinary Diagnostic Laboratory is now providing a full service to veterinary clinics in Hong Kong and further afield, actively participating in research and preparing to engage in teaching of our BVM.

Renovations at our brand new clinic in Sham Shui Po are nearing the end, with a move of the CityU-owned clinic from the old site at Liberty Avenue to new quarters to be expected before the end of the year.

Planning of our dairy farm is advancing, with plans already completed and regulatory approvals now being sought.

In the meantime, we have been busy recruiting more wonderful faculty from around the world, some of whom you'll meet in the current issue of our newsletter.

Enjoy the reading, and join us at one of our many educational events.

Professor Michael P. Reichel
Dean

短短一年之間，我們的獸醫學學士（BVM）課程學生碩果累累，現正於跟我們結盟的美國康奈爾大學動物醫學院享受畜牧生活，在農場群策群力，將馬廄打掃乾淨。這是他們的美好時光：羊兒呱呱落地，小馬剛學走路，還在風光明媚的天氣下看著小牛誕生。

這班學生剛於城大完成一年級課程，成績令人喜出望外——超過一半同學獲得列入院長嘉許名單，證明他們的學術表現出類拔萃。我們期待 2018 年 9 月新學年開始時，迎接剛獲錄取的新一屆學生。

這邊廂我們的課程陸續展開，那邊廂學院設施也發展得如火如荼：動物醫療檢驗中心已為香港及鄰近地區的獸醫診所提供全面服務，並積極參與我們的獸醫學學士課程的教學與研究。

我們位於深水埗的全新診所裝修工程完成在即，因此位於自由道的城大自資診所有望於今年年底遷往新址。

我們的奶牛場項目也如期推行，規劃工作已經完成，並正申請監管部門的批准。

與此同時，我們忙於從世界各地招聘頂尖的教職員，今期通訊會為大家介紹其中幾位。

希望您享受今期通訊，也會參與我們形形色色的教育活動。

院長
禮哲教授

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Donation of **$500 million**

from Hong Kong Jockey Club Charities Trust to boost One Health at CityU

A $500-million donation from the Hong Kong Jockey Club Charities Trust (the Trust) to City University of Hong Kong (CityU) will be used to build a top-notch facility for One Health in Hong Kong. It is the largest single donation received by the University in its 33-year history and the Jockey Club One Health Tower will house Hong Kong's first College of Veterinary Medicine and Life Sciences. One Health is also a core focus of the interdisciplinary research identified in CityU's 2015–2020 Strategic Plan.

The College will also be named ***The Jockey Club College of Veterinary Medicine and Life Sciences***, a strategic initiative of CityU developed in collaboration with Cornell University, our long-term academic partner. The aim is to create a world-class institution that will enhance CityU's research capabilities, train high-level veterinary professionals, and address critical public health issues under the One Health paradigm.

Officiating at the ceremony was Chief Secretary for Administration of the HKSAR Government, the Honourable Mr. Mathew Cheung kin-chung, who commented that "the global scientific community has to gear up for the challenges ahead by adopting a more holistic approach in health risk management which can be achieved by further developing the 'One Health' concept. The establishment of the One Health Tower is therefore a timely and wise move. The government recognises that expenditure on education is the most meaningful investment for our future and we will continue to give full support to the researchers and students of local universities."

The planned Hong Kong Jockey Club One Health Tower
構想中的「賽馬會健康一體化大樓」

Dr Simon S O Ip, the Chairman of the Hong Kong Jockey Club, told the gathered audience that education had been a major focus for the Club. "The Jockey Club One Health Tower is important. Not only because it will provide additional and much-needed space for CityU, but because it will provide a home to the new Jockey Club College of Veterinary Medicine and Life Sciences," he said. "This College represents an innovation in Hong Kong medicine. Under the banner of 'One Health' it brings together veterinary medicine and biomedical sciences in one institution. As such it embodies the important insight that the health of human beings is intimately connected with the health of animals and with the environment in which they co-exist."

President of CityU, Professor Kuo, added that the Chief Executive of the HKSAR had expressed concerns in her 2017 Policy Speech about public health challenges presented by antimicrobial resistance and the sustainable development of local farms and fisheries in Hong Kong.

"In response to these local and global challenges, the Trust's donation to CityU will have a transformational impact on boosting research, education and innovation in veterinary medicine and life sciences at CityU through working with the Government, NGOs and community partners," the President said.

> *"This College represents an innovation in Hong Kong medicine.*
>
> *Dr Simon S O Ip, the Chairman of the Hong Kong Jockey Club*

Cornell University's Dean of College of Veterinary Medicine, Professor Lorin D. Warnick, who could not join the ceremony, sent his congratulatory message to the Trust, Professor Kuo and CityU.

"Cornell University's College of Veterinary Medicine is looking forward to working with all of you to train generations of veterinary students and scientists to provide these critical services to the people of Hong Kong and mainland China, and to set the standard for excellence in veterinary medicine and One Health science throughout Asia." Professor Warnick said.

The 12-storey Tower, with a floor area of approximately 16,500 square metres, will add extra space for learning and research, an elegant 1,500 seat-auditorium for international conferences and cultural performances, and an enhanced sports hall for training. The Tower is planned for completion in the last quarter of 2022.

學院充分展現了香港醫療的創新發展。

香港賽馬會主席葉錫安博士

馬會捐贈 5 億元　推動健康一體化

香港城市大學（城大）獲香港賽馬會慈善信託基金（基金）5 億元捐款，興建一幢配備一流設施的大樓，以促進香港健康一體化發展。這是城大建校 33 年以來最大的單一筆捐款。香港首家動物醫學及生命科學院（學院）將設於這幢「賽馬會健康一體化大樓」內。健康一體化也是城大《2015—2020 年策略性發展計劃》中跨學科研究的重要主題。

這座將命名為「賽馬會動物醫學及生命科學院」的學院，是城大重要的發展策略，與長期學術夥伴美國康奈爾大學共同創建，旨在建立一所世界級的動物醫學及生命科學院，以加強城大的科研實力，培育一流動物醫學專業人才，以回應有關健康一體化的重大公共衛生議題。

作為主禮嘉賓的香港特別行政區政務司司長張建宗先生表示：「全球科學界須作好準備，應對未來挑戰，通過進一步發展『健康一體化』的概念，以更為整全的方式處理公共衛生危機。因此興建健康一體化大樓，是適時及明智之舉。政府的教育開支是對未來最具意義的投資，我們將繼續全力支持本地大學的研究人員及學生。」

香港賽馬會主席葉錫安博士表示，馬會一直十分重視香港的教育發展。他說：「興建『賽馬會健康一體化大樓』十分重要，因為它不但為城大提供額外及急需的教學空間，亦是『賽馬會動物醫學及生命科學院』的基地。應用『健康一體化』的概念，學院糅合動物醫學及生物醫學，充分展現香港醫療發展的創新意念，亦體現了人類健康與動物健康、共存的環境息息相關。」

城大校長郭位教授指出，特區行政長官 2017 年的《施政報告》十分關注抗菌素耐藥性對公共衛生帶來的挑戰，以及本港漁農業可持續發展等議題。

郭校長說：「基金對城大的捐款將帶來重大影響，促進城大與政府、非政府機構和社區合作夥伴的交流，推動城大在動物醫學及生命科學範疇的研究、教育與創新，以回應本地以至全球的挑戰。」

美國康奈爾大學動物醫學院院長 Lorin D. Warnick 教授未能出席典禮，他祝賀基金、郭校長及城大：「康奈爾大學動物醫學院期待與各位合作，培訓新世代的獸醫學學生及科學家，為香港及中國內地人民提供至關重要的服務，並為亞洲區內動物醫學及健康一體化科學訂立卓越標準。」

賽馬會健康一體化大樓樓高 12 層，總面積達 16,500 平方米，除了為教學與研究提供大量空間，更將設有一個具備 1,500 座位的演奏廳，設計典雅，可舉辦國際會議及文化表演，以及一個鋪設全天候室內跑道的先進運動中心。大樓預計在 2022 年第四季完工。

About the Hong Kong Jockey Club Charities Trust

Founded in 1884, The Hong Kong Jockey Club is a world-class racing club that acts continuously for the betterment of our society. The Club has a unique integrated business model, comprising racing and racecourse entertainment, a membership club, responsible sports wagering and lottery, and charities and community contribution. Through this model, the Club generates economic and social value for the community and supports the Government in combatting illegal gambling. It is Hong Kong's largest single taxpayer, one of the city's major employers and one of the world's top ten charity donors.

Working with Government, non-governmental organisations and community partners, the Club is committed to improving the quality of life of Hong Kong people through its Charities Trust donations, and providing immediate relief to those most in need. The Trust also proactively seeks out the root causes of social issues and brings multiple and cross-sectoral parties together to tackle them, pioneering innovative approaches that transcend disciplines and skills. While the Trust continues to fund a wide range of projects, it is placing special emphasis on four areas of strategic focus:

Youth
啟發青年
Empowering youth for a hopeful future
迸發無限可能，創尋有夢未來

Elderly
長者安老
Building an age-friendly Hong Kong
構建年齡友善城市，推動長者身心健樂頤年

Sports
普及體育
Promoting active participation and sportsmanship, making sports fun and accessible to all
注入創新元素，鼓勵全城起動，推廣體育精神

Arts, Culture & Heritage
藝文共享
Building a culturally vibrant Hong Kong, enriching lives and promoting social inclusion
為香港注入藝術文化活力，豐富生活，推動創意共融

香港賽馬會慈善信託基金簡介

香港賽馬會（「馬會」）成立於 1884 年，是致力建設更美好社會的世界級賽馬機構。馬會透過其結合賽馬及馬場娛樂、會員會所、有節制體育博彩及獎券，以及慈善及社區貢獻的獨特綜合營運模式，創造經濟及社會價值，並協助政府打擊非法賭博。馬會是全港最大的單一納稅機構，也是香港主要僱主之一，同時位列全球十大慈善捐助機構。

馬會透過其慈善信託基金，致力與政府、非政府組織及社區機構攜手改善香港人生活質素，同時為有需要人士得到適切的支援，以及主動深入了解社會問題的根源，與不同界別機構合作開展慈善計劃，共謀創新的解決方案。香港賽馬會慈善信託基金除持續捐助各類型慈善項目外，亦策略性地推動四大範疇的工作，以促進社會的長遠持續發展：

One Down…Five to Go!

After a year of introduction to the wonders of veterinary medicine, students prepare for new challenges ahead…

A collective sigh of relief can virtually be heard from the first batch of 12 Bachelor of Veterinary Medicine (BVM) students as their first academic year comes to a close. During that time - packed with courses ranging from One Health, Animal Ethics, Welfare and Law to Pre-EMs and Husbandry EMS, to name a few - these students have expanded their knowledge about animals and animal care by leaps and bounds.

"We knew something about animals before we became vet students, but what we knew then was like a grain in the universe," says Toby Chu Ka-to.

"Being in the BVM programme, we had to learn a lot about livestock farming - something I had never been exposed to before. It was really intriguing to see how, for example, in reindeer and goat farms, wisdom and science are utilised to care for the animals. These are very interesting things I never knew before."

Joey Lam Chun-hei, says the first year taught her how to behave around large animals. "I remember I was a bit nervous when I first approached a horse and feral cattle in Hong Kong. Since they are large animals, I knew they could be dangerous if we approached them too quickly or created too much noise around them."

She recalls an "eye-opening" field trip to the Agriculture, Fisheries and Conservation Department's Ta Ku Ling Cattle Management Centre. It was there she and her campus mates learnt how to handle equipment like cattle crushes and head bails, how to gauge the age of cattle by looking at their teeth and where to draw blood samples from the animal. She also discovered that cattle are naturally curious and liked sniffing people's clothes and bags. "This field trip was truly fruitful and a real eye-opener for me," Joey says.

Tse Ming-yi's most memorable field trip so far has been to Chong Hing Feral Cattle during a class on Extensive Livestock farming. The trip was basically to teach students how to inspect and determine the condition of the cattle. She says she found the lessons both intriguing and rewarding. "The field trip allowed us to have a small taste of what it would be like working as a government vet."

Tse says she cannot wait to learn more about animal biology and behaviour in the next academic year. "I think Year Two will prove to be a challenging, yet fruitful year as we learn more about animals and equip ourselves with more knowledge that we'll be needing as future veterinarians."

Toby is also looking forward to Year Two. "I am excited we are getting more science courses. I like animals and I enjoy the logic of science. Actually, I would also like to do more extra-mural studies (EMS) because I am really enjoying it now."

He says lectures can be fun but practical lessons are even more enjoyable. Skills picked during hands-on experiences tend to stick in his mind better and "this is a much more entertaining and efficacious way of learning," he adds.

Joey says she too would like to have more hands-on experiences in the next academic year and is excited about an upcoming course on Animal Behaviour.
She wants to learn how to correctly restrain animals for physical examinations, make diagnoses and prognoses and determine suitable treatments for the patients, as well as communicating with different stakeholders.

However, it is Aquaculture - which is being offered in Year Two - that has greatly piqued her interest. "Aquaculture is a quickly expanding industry and it plays an important role in global food supply. I would like to learn more about sustainable aquaculture practises, animal handling skills related to fish welfare and food safety issues relevant to this industry."

For Rachel Lau - who also would like more hands-on experiences - having more vet-related courses in the new academic year excites her. She adds: "I personally think it would be great if we could, in the near future, also have the chance to study exotic animals such as lizards and monkeys apart from the common ones like dogs, cats and horses. This may allow us to explore more possibilities other taking up mainstream roles of small animal or equine vets, or working for the government."

Aside from studies, the students have also formed close bonds among themselves According to Joey, the bond definitely helped her with her studies, often revising for exams or discussing projects and essays together with her course mates. "This is super useful for me as it encourages me to look at an issue in a different perspective."

Rachel says having good friends around helps keep her motivated. There were times she felt frustrated because of the heavy workload but she keeps reminding herself why she had made the decision to become a vet. "I would also remind myself of how happy I was when I first got into this programme. That happiness and determination have motivated me to carry on.

“Knowing that I have my good friends studying alongside me has also been part of the reason why I have never felt too stressed and lonely, since we can support each other and make studying less boring and isolated.”

Toby admits that before CityU Vet College, he had not had the opportunity of meeting foreign students. Now, with a mix of local and foreign campus mates, he realises that, “as a Hongkonger”, he has to make the effort to befriend everyone. “I took the first step, and I think I’m getting along well with them,” he says.

Tse likes it that the first batch is small. “Being in a small group, I always felt more willing to share my thoughts and opinions during class. This is exceptionally true in classes that require critical-thinking. In such settings, since everyone is actively participating in class, there is rapid exchange of ideas between students and teachers, which I believe is highly beneficial to students.”

What about the teaching staff at CityU Vet College? Well, the students have given the thumbs up, describing their teachers as “knowledgeable, kind and understanding”, with some going the extra-mile to help students with additional tutorial classes and exercises. Tse sums it up: “After grasping our learning pace and interests, I could really see the professors adjusting their teaching pace accordingly.”

These 12 students - Hong Kong’s first ever students to take up veterinary medicine at City University - have also earned high praise from their teachers.

“Overall, our students did very well both academically and socially,” says Professor Sophie St-Hilaire, Professor of Aquatic Animal Health. “The veterinary curriculum is rigorous so students have to work hard. It was also the first year of university for most of our veterinary students so they had the additional challenge of coping with this change.”

Professor St-Hilaire says teaching vet students in North America and CityU is very similar. Students here are just as eager and enthusiastic to learn as their counterparts overseas, she adds.

Dr. Barbara Padalino, Assistant Professor in Animal Behaviour and Welfare, agrees that the vet curriculum is quite intense and demanding but the students, being very smart, have coped well. “They passed the exams with good marks,” she says.

Dr. Padalino has had experience teaching in Europe and Australia, but it is her first time working in Asia. “I find the students here very polite, but a bit shy. However, I have been able to create a very good relationship with them and we were able to have very interactive lectures and tutorials.”

The first cohort of 12 students are said to have performed exceedingly well, with seven of them making the Dean’s List.

The second intake of students for the BVM programme in September 2018 is expected to number 20.

回首豐盛一年 迎接精彩五載

學生過去一年探索動物醫學奧秘，對未來的挑戰躍躍欲試。

第一個學年接近尾聲，12 位獸醫學學士課程（BVM）學生都鬆一口氣。這一年來，他們埋首修讀多個課程，涉獵的題目包括健康一體化、動物道德、福利和法律，以及「校內動物畜牧預備課程」和「動物畜牧校外課程」，對動物和獸醫學的認識與日俱增。

朱加韜說：「我們修讀獸醫學前，以為自己很了解動物，其實所知的只是一鱗半爪。」

「因為修讀了獸醫學學士課程（BVM），我們更了解以前不懂的禽蓄養殖，原來馴鹿和山羊農場為了照顧動物，會善用智慧和科學，真是別開生面。這是我以前不知道的趣事。」

林雋希在過去一年學懂跟大型動物相處之道，「我記得初次在香港接觸馬和野牛時，心情有點緊張，牠們體型如此龐大，我若走得太急或太嘈，可能會造成危險。」

她在漁農自然護理署「打鼓嶺牛隻管理中心」完成了眼界大開的實地考察，跟同學學懂使用牛固定架、用牛的牙齒推測年齡，以及為動物抽血。她還發現牛天性好奇，喜歡嗅人類的衣物，她說：「這次考察收穫豐富，令我大開眼界。」

而謝明懿最難忘的實地考察是在「廣泛家蓄養殖課」參觀「財創興野牛」。這次考察主要讓學生學懂檢查及判斷牛隻狀況，她認為內容有趣又意義重大，「這次考察也讓我們初嘗當政府獸醫的滋味。」

二年級課程包括動物生物學和動物行為，謝明懿已為此摩拳擦掌，「我想下學年會更艱辛又更豐富，我們會對動物加深了解，為將來當獸醫作好準備。」

朱加韜也對升讀二年級躊躇滿志，「我很想多上科學課，我喜歡動物，也愛科學邏輯。其實我也很享受校外課程，希望可以多修幾個。」

他說理論課趣味盎然，但自己更愛實踐課，由親身體驗學到的技巧令他印象更深刻，他說：「這是更有趣又更有效的學習方法。」

林雋希也想下學年多點親身體驗，對可以修讀動物行為十分雀躍。她也期望學會控制動物身體，為牠們做身體檢查、診斷和處方，並跟不同持份者溝通。

不過，最令她興致勃勃的是二年級會教授的水產養殖，「水產養殖這行業發展蓬勃，對全球食物供應十分重要，我希望了解可持續水產養殖方法，跟魚類福利有關的處理方法，以及與業界有關的食物安全問題。」

劉穎嫻也期望有多點親身體驗，對下學年的更多獸醫課程躍躍欲試，「我認為除了貓、狗和馬等普通動物外，如果將來可以研究如蜥蜴、猴子等奇特的動物就好了，這令我們不單可從事小型動物獸醫、馬匹獸醫或政府獸醫等主流工作，在事業上有更多可能性。」

學生除了埋首學習，也彼此建立友誼，對林雋希的學業幫了一把。她常跟同學一同溫習以應付考試、討論報告和研究論文，「讓我學懂以不同觀點思考，對我十分有用。」

劉穎嫻說身邊好友令她更專心學習，要是有時因為功課繁重而沮喪，便回想修讀獸醫學的初衷，「我會想起當初獲得錄取時多麼興奮，這份喜悅和決心推動我繼續前行。」

「我從不感到孤單無助，其中一個原因身邊有好友陪伴我讀書，我們互相支持，令學習不致沉悶孤獨。」

朱加韜承認，入讀城大動物醫學及生命科學院前很少接觸外國學生，現在校園雲集世界各地的莘莘學子，他覺得身

為香港人更應有待客之道，說：「我會主動認識他們，大家相處得很好。」

謝明懿喜歡第一屆學生人數不多，「我在小組分享所思所想時更加自如，這種氣氛對講究批判思考的課堂特別重要，大家會更積極投入，師生之間踴躍交流意見，我相信這對學生十分有益。」

這班學生對城大動物醫學及生命科學院的教學又有何評價呢？他們都舉起拇指，形容教師「知識豐富、友善包容」，有些教師甚至增加導修課和練習，以協助學生提升水平。謝明懿總結說：「這些教授掌握我們的學習進度和興趣後，會按個別情況調節自己的教學節奏。」

這 12 位香港首屆城大獸醫學學士學生也令他們的教師讚不絕口。

水產動物健康福利沈藹莉教授說：「整體而言，我們的學生在學術上和社交上都表現出色。獸醫課程要求嚴格，他們要十分努力，而且這是大部分人的第一年大學生涯，更要努力適應改變。」

沈藹莉教授認為，在北美和城大教授獸醫學十分相似，本地學生跟外國學生都積極追求知識。

動物行為及福利助理教授 Barbara Padalino 同意獸醫課程緊湊嚴格，樂見這班聰明的學生應付自如，她說：「他們都以好成績通過考試。」

Padalino 教授曾於歐洲和澳洲教學，這是她初次在亞洲工作，「我覺得這兒的學生很有禮貌，有點害羞。不過我們建立了良好的關係後，大家在課堂和導修課都積極參與。」

第一屆 12 位學生的表現出色，其中 7 位獲列入院長嘉許名單。

獸醫學學士課程第二屆學生將於 2018 年 9 月入學，預計錄取 20 人。

QUICK FACTS ON BVM PROGRAMME

- √ 1st Cohort : 2017-2018
  第一屆獸醫學學士課程 :2017-2018
- √ 6 Year Full-time
  六年全日制課程
- √ First Asian veterinary school successfully engaged in an international accreditation pathway
  亞洲首個成功逐步進行國際認可的獸醫學課程
- √ Core Themes: One Health and Emerging Infectious Diseases, Food Safety, Animal Welfare and Aquatic Animal Health
  核心主題：健康一體化及新興傳染病、食物安全、動物福利、水產動物健康
- √ 7 out of 12 first year BVM students on Dean's list (GPA >3.7)
  第一屆 12 位學生的表現出色，其中 7 位獲列院長嘉許名單。(平均分 >3.7)
- √ Provisional Accreditation granted by Australasian Veterinary Boards Council
  獲澳新獸醫管理局頒暫準認證

CityU's Centre for Animal Welfare is delighted to be a key party in the organisation of this Universities Federation for Animal Welfare (UFAW) supported Animal Welfare Conference attended by delegates from around the world, together with the Ministry of Primary Industries of the New Zealand Government. This Conference brings together professionals, academics, researchers and students from different animal sectors, industries and disciplines, ranging from livestock production, zoo and wildlife management, relationships between people and animals, and animal welfare education.

This conference not only provides an excellent and much needed intellectual exchange in the Asia region but also exchange across cultures and building of long-lasting partnerships and friendships.

The two-day meeting endeavours to increase our knowledge of the different ways that animal welfare is understood and addressed around the world.

The aim is to develop ideas for local animal welfare initiatives, supported by local science projects, in order to progress animal welfare at a global level, while taking cultural and environmental differences and constraints into consideration.

CENTRE FOR ANIMAL WELFARE
香港城市大學動物福利中心
College of Veterinary Medicine and Life Sciences
in collaboration with Cornell University

城大動物福利中心有幸成為今屆動物福利大學聯盟（UFAW）的動物福利會議主辦者之一。世界各地代表及新西蘭主要產業部應邀參加了這次會議。

會議人才濟濟，包括來自動物產品、動物園和野生動物管理、人與動物關係及動物福利教育等等範疇的動物專家、學者、研究員和學生。

是次會議不僅是亞洲區一次難得的學術和文化交流機會，並讓與會者建立長遠夥伴關係和友誼。為期兩天的會議也令大家對世界各地如何推廣和實踐動物福利加深認識。

舉辦這項會議，旨在透過本地的科學活動協助推行動物福利措施，從而在兼顧文化和環境的差異及局限之下，於全球層面改善動物福利。

Welfare of the animal comes first and last

A Day in the Life of a Veterinary Anaesthetist....

Many years ago, on a farm in the UK, a seven-year-old boy watched in awe as a lamb was born, aided by a veterinarian. The little boy decided then and there that he too would become a vet when he grew up. That little boy - Dr Alan Taylor - has since achieved his dream and is now working as a vet, specialising in anaesthesiology, at CityU PAVC in Mongkok.

It is a fact that many do not know what anaesthetists really do. They hardly ever come face-to-face with the clients, but in the operating theatre, out of public view, they are responsible for ensuring that all the vital organs of the patient are working soundly as the surgeon performs the surgery. An anaesthetist is also practically the last person the patient sees before falling unconscious and the first face the patient sees when it wakes up after a medical procedure. Anaesthetists can certainly be described as “unsung heroes” - and Dr Taylor is that “unsung hero”.

Dr Taylor’s working day begins at 9 am but he is usually at the hospital by 8:30 with a hot cup of coffee. “I have to have a cup of coffee every morning,” he laughs. He then gets changed into his working clothes and has a quick check on patients from the day before. Around 9 am, he does rounds and attends a meeting with the surgeons and their assistants, where every operated patient on the checklist is looked at. “We discuss how they’re doing - both clinically and subjectively - and then decide whether or not they’re good enough to be discharged.”

Next, they turn their attention to patients that are coming in on that day. The surgeons decide which needs surgery and a plan is formulated for it.

“I will decide what drugs the patient will have,” Dr Taylor explains. “Usually, a mild sedative is given to relax the patient and an analgesia (pain killer) is given at the same time. Then we render the animal unconscious so that intubation can start.” Intubation is the process of inserting a tube through the mouth and then into the airway so that a patient can be attached to an anaesthetic machine to provide oxygen and anaesthetic gas and be assisted with breathing during the surgery if needed.

Dr Taylor will also check the mucous membrane colour of the patient’s mouth as well as the jaw tone. “For instance, if the jaw is tight, it means the patient is not relaxed enough so it may need a little bit more anaesthetic or pain killer,” he explains.

All the preparations are done outside the theatre. Once Dr Taylor is satisfied, the patient will be wheeled into the theatre, plugged to the machines and tubes and only then will the surgeon be called in. But his job does not end there.

Throughout the surgery, Dr Taylor will monitor the patient like a hawk in case pre-emptive moves are called for. “It’s really important for me to understand what the surgeon is doing. If it seems the procedure is going to be causing the patient more pain, then I have to give more analgesia. Or, if there’s a major blood loss, it’s my job to make sure that I give more blood and fluids to make sure that we don’t lose the patient.”

He will also keep a close watch on the patient's body temperature, heart activity and blood saturation. He uses a capnograph to monitor the patient's breathing pattern. "If the patient is breathing out carbon dioxide, then the heart is obviously pumping blood to the lungs. If you see very low carbon dioxide, then something is not quite right."

There have been some memorable, albeit tense, moments in the theatre. At one time, he had to perform a mass blood transfusion - something he had never done before - on a dog undergoing surgery to have a cancerous tumour near his kidneys removed. It was bleeding profusely. "It would normally take about four hours for a blood transfusion. However, when you are pushing two bags of blood in 20 minutes as opposed to two bags of blood in eight hours, that's a very big difference and there are potential complications. It was scary," he recalls. The op was a success.

In another challenging case, Dr Taylor had to ensure the lungs of a cat did not collapse during a major operation in which the surgeon had to cut open its chest to get to the horrific abscesses in the lungs. The cat almost arrested on the table but they managed to get it back. The cat had to undergo another operation a few days later but thankfully, it survived. Dr Taylor says it is "fulfilling" whenever patients leave the hospital to go home.

Dr Taylor has not always been an anaesthetist. In fact, he was in the air force for nearly two decades. "I had always wanted to be a vet but I didn't have the grades to go to vet school. So I decided to do a biology degree to start with."

Whilst an undergraduate, he joined the Parachute Regiment of the Territorial Army to help get through his degree. After his stint ended, he had the opportunity to either go to vet school or join the forces. Being one of eight children in the family, he couldn't afford the tuition fees so he elected to join the military. However, his yearning to become a vet never diminished. Whilst serving as a fast jet navigator with the Royal Air Force for 17 years, he undertook an Open University degree in Natural Sciences with Chemistry and graduated with Upper Second Class Honours - enough to get him into vet school. In 2006, he graduated with a Bachelor of Veterinary Science, with Distinction, from the University of Bristol.

Becoming an anaesthetist happened by "semi-accident", Dr Taylor says. During his internship in Equine Studies at the Royal Veterinary College in London he anaesthetised about 100 horses and found that he really enjoyed it because…"it was the one occasion where the intern got to make decisions." He was eventually asked to stay on as a Staff Clinician in Anaesthesia.

The switch from being navigator to anaesthetist was easy, he says. "Bizarrely, both jobs are very similar. Most of the time, things are going along very nicely but occasionally, it can get chaotic and you have to rescue it and then it goes nicely again."

Dr Taylor laughs off the "unsung hero" tag, insisting it is all team effort. "The surgeon repairs the problem, the anaesthetist basically allows the surgeon to repair the problem."

His parting shot to vet students interested in Anaesthesiology: "Don't expect to be up there with lots of recognition. The fact is you are doing a very important job supporting and you have to be comfortable supporting someone else. It's all about team work…but you will find the job truly rewarding."

無名英雄

麻醉科獸醫

許多年前，在英國一個農場裡，一頭羊嬰在獸醫照料下呱呱落地，旁邊一個七歲男孩一臉敬畏地在觀看。就在那個時候，他立志長大了也要成為獸醫，後來他夢想成真——那位男孩正是目前在旺角的城大太平道寵物診所工作的麻醉科獸醫 Alan Taylor。

很多人不了解麻醉科獸醫的工作，因為麻醉師不用跟病人面對面，而是在大家看不到的手術室默默工作，確保病人所有重要器官在手術期間如常運作。病人昏迷前最後看見的是麻醉師，手術後醒來首先看見的也是麻醉師。他們堪稱無名英雄，Taylor 獸醫自然配得上這個稱譽。

Taylor 獸醫的工作從早上 9 時開始，但他總會在 8 時半前先在診所享受一杯咖啡，他笑說：「我每天早上一定要先喝杯咖啡。」然後他會披上醫生袍，首先檢查留院的動物。大約 9 時，他跟其他獸醫及獸醫助手開會，研究名單上每隻剛做手術的動物，「我們會討論牠們的臨床和實際進展，再決定牠們是否適合出院。」

然後，大家忙於照顧當天來求診的動物，當外科醫生決定哪些動物要做手術後，診所便要制訂工作計劃。

Taylor 獸醫解釋：「我決定病人應該用甚麼藥，通常用輕微的鎮靜劑和止痛劑令動物放鬆，直到牠們昏迷後才開始插喉。」方法是把管道從動物的口中接駁至氣道，讓牠們連接提供氧氣和麻醉氣體的麻醉機，必要時能夠在手術過程中呼吸。

他還會檢查動物口腔的粘膜顏色和顎骨情況，他解釋：「舉個例說，如果某隻動物的下顎繃緊，證明牠不夠放鬆，我便可能要多用一點麻醉劑或止痛藥。」

Taylor 獸醫在手術室外完成這些準備工夫，把動物送到手術室，為牠們接駁好機器和喉管後，萬事俱備後才召喚外科醫生施行手術，但 Taylor 獸醫的工作仍未完結。

手術期間，Taylor 獸醫全神戒備，有需要就會介入。他說：「我要對外科醫生的一舉一動瞭如指掌，如果某個程序可能弄痛動物，我便要多給牠麻醉藥。如果動物大量出血，我便要輸入更多血液和液體，確保牠安然無恙。」

他也要密切留意動物的體溫、心臟活動和血液飽和度，用二氧化碳圖儀監測動物的呼吸規律，「如果牠呼出二氧化碳，代表血液能從心臟泵入肺部；如果二氧化碳量很低，代表事不尋常。」

手術室內總是爭分奪秒，又令人難忘。有一次，一隻狗要切除腎臟周圍的癌性腫瘤，但在手術期間大量出血，Taylor 獸醫要為牠輸送大量血液，他憶述：「平時輸一包血要四小時，那次手術要輸兩包血，理應花上八小時，但我們要在二十分鐘內完成，簡直是千鈞一髮，而且如履薄冰，我們都很緊張。」最後手術順利完成。

還有另一次驚險手術，當時外科醫生要為一隻貓施行大手術，為牠剖胸取出肺內的膿腫，Taylor 獸醫負責確保貓肺不會塌陷。在手術桌上命懸一線的小貓最後化險為夷，幾天後再接受另一個手術，結果安然無恙。Taylor 獸醫說，每當動物病癒出院，他都感到心滿意足。

他並非一開始已當麻醉科獸醫，而是曾投身空軍近 20 年，「我一直很想當獸醫，卻又考不上獸醫學院，因此決定先完成生物學學位。」

在大學期間，他為幫補開支加入領土軍隊降落傘兵團。服役期滿後，他要麼升讀獸醫學院，要麼正式參軍，但由於家裡還有七兄弟姊妹，難以負擔他的學費開支，因此他選擇了參軍，但當獸醫的決心絲毫未減。他擔任皇家空軍噴射機機師的 17 年間，獲得公開大學自然科學化學二等榮譽學位，足以考上獸醫學院。2006 年，他在布里斯托爾大學以傑出成績獲得獸醫學學士學位。

Taylor 獸醫說自己當上麻醉師一半是因緣際會。他在倫敦皇家獸醫學院馬匹研究部實習時，曾為約 100 匹馬施行麻醉，他十分享受這份工作，「到某個時刻，實習生都要作出決定。」最終他決定做麻醉科的臨床獸醫。

從機師搖身變成麻醉科獸醫這個過程對他而言易如反掌，「說來奇怪，兩份工作十分相似，大部分時間一帆風順，但偶爾會驚險萬分，但你迎刃而解之後又會順順利利。」

Taylor 獸醫對「無名英雄」的稱譽一笑置之，堅持這是團隊的合作成果，「外科醫生解決問題，麻醉科獸醫則負責讓他們安心解決問題。」

他對有志修讀麻醉科的獸醫學生有如此忠告：「不要期望贏來很多掌聲，事實上你在做很重要的支援工作，你要樂於支援別人。這是團隊工作，但你會感到工作很有價值。」

Over **2500** *sq. metres of floor space*
佔地逾 2,500 平方米

Serves **400** *staff/students*
供 400 位師生使用

BMS Laboratory Facilities

The Biomedical Sciences Laboratories occupy over 2500 sq. meter of floor space. The majority of our research laboratories, teaching laboratories, functional rooms, core facilities and equipment core are located were launched in September 2015. They now serve over 220 research staff/students and 180 undergraduate students.

生物醫學系實驗室設施

生物醫學系實驗室佔地逾 2,500 平方米，大部分研究實驗室、教學實驗室、功能室、核心設施已於 2015 年 9 月啟用，目前供 220 位研究師生及 180 位本科生使用。

1 **Research laboratories** for faculty members. Our research mainly focuses on the relationships between human health, organisms, and diseases, covering specific areas of life sciences such as molecular and cell biology, genetics and genomics, physiology and systems biology, pharmacology and medicinal chemistry, microbiology and immunology, and epidemiology and public health. Particular research disciplines include: neuroscience, cancer Biology, regenerative medicine, biotherapy and nanomedicine, bioinformatics, one Heath and infectious Diseases.

為教學人員而設的**研究實驗室**：我們的研究主要集中在人類健康、生物和疾病之間的關係，涵蓋分子和細胞生物學、遺傳和基因組學、生理學和系統生物學、藥理學和藥物化學、微生物學和免疫學，以及流行病學和公共衛生等生命科學範疇。特定研究科目包括：神經科學、癌症生物學、再生醫學、生物治療和納米醫學、生物信息學、健康一體化和傳染疾病。

2 **Teaching laboratories** for BSc. in Biomedical Sciences and BSc. in Biological Sciences. The teaching laboratories are designed to accommodate 45 students and equipped with state-of-the-art medical analyzers and equipment in four major fields of haematology, clinical chemistry, microbiology and histopathology.

為理學士（生物醫學）和理學士（生物科學）學生而設的**教學實驗室**：該實驗室可容納 45 位學生，配備先進的血液學、臨床化學、微生物學和組織病理學等四大領域的醫療分析儀和設備。

3 **Functional rooms** include tissue culture rooms, pathogen lab. (Class II), walk-in cold room, autoclave room and washing room which support both teaching and research activities.

功能室包括組織培養室、病原體實驗室（二級）、巨型冷藏室、高壓滅菌室和洗滌室，可兼作教學和研究用途。

Core facilities and equipment 核心設施

4.1 Clinical Diagnostic Instrument Core

Our Clinical Diagnostic Instrument Core is purposely equipped with updated and advanced instrumentation used by commercial clinical laboratories and hospitals to allow our students to familiarise themselves with the operation of these instrument in the university before they enter the commercial sector.

臨床診斷儀器核心
我們的臨床診斷儀器核心配備商業臨床實驗室和醫院使用的新穎先進儀器儀表，讓學生在踏入商界前，可先在大學掌握怎樣運用這些儀器。

4.2 Molecular and Genomic Core

Molecular and Genomic Core provides resources to support research needs for high throughput genomics, including real-time PCR systems and Next Generation Sequencers. The Illumina NextSeq 500 Sequencer allows genome-wide experiments to be performed for a wide range of bioinformatics studies.

分子和基因組核心
分子和基因組核心提供資源，支援高通量基因組學的研究需求，包括實時聚合酶連鎖反應和下一代測序儀。NextSeq 500 測序系統可為各範疇的生物信息學進行基因組實驗。

4.3 Imaging Core

There are various types of microscopes in the Imaging Core, enabling live cell imaging, single cell dissection and confocal laser scanning microscopy.

成像核心
成像核心中有多種顯微鏡，可進行活細胞成像、單細胞分離和共聚焦激光掃描顯微鏡觀測。

4.4 Flow Cytometry Core

This core facility supports the use of wide range of flow cytometry techniques, enabling simultaneous and rapid analysis of complex cell population. The high speed cell sorter also enables cell sorting application of different sizes as well as isolation of target cell types out of the population.

流式細胞儀核心
該核心設施支援廣泛的流式細胞儀技術，可同時快速分析複雜的細胞群分析。高速細胞分選儀亦能進行不同體積的細胞分選應用及從群體中分離靶細胞類型。

4.5 Centrifuge Core

The centrifuge core is equipped with different types of centrifuges from bench top to floor standard ultra-speed centrifuges (up to 504000 g-force). Fitted with various types of rotors of different volume, most of the biological samples can be separated by our centrifuges as small as cells, organelles and vesicles.

離心機核心
離心機核心配備從高掛式到座地超速（高達 504000 克力）的各種離心機，裝置不同體積的各類轉子，大部分生物樣本均可藉我們的離心機分離成細胞、細胞器和囊泡。

4.6 High Performance Liquid Chromatography Core

We have two HPLC systems to facilitate the separation of molecules with various chromatography techniques.

高效能液體色譜法核心
我們置有兩個高效能液體色譜法核心系統，以各種色譜法技術進行分子分離。

Pre-EMS .... a crucial element for honing practical vet skills

As students of veterinary medicine, it is just not enough to pore over books. One must also get one's hands dirty very early on, so to speak. That is where extra-mural studies, or EMS, comes in. Hands-on practice with animals while still in college makes up an important component that will not only give them the opportunity to gain real-life work experience, but also considerably improve their university-based studies.

The structure of the EMS programme of CityU's Bachelor of Veterinary Medicine programme (BVM) is based on that of UK's Royal College of Veterinary Surgeons and follows the prescribed requirements as set out by the Australian Veterinary Boards Council. Students must complete a prescribed number of weeks of EMS during the 6-year programme. The EMS structure is composed of 12 weeks of Animal Husbandry placements in the first two ('pre-clinical') years of the programme and 26 weeks of clinical placement during years three to six.

However, before EMS placements can take place, students will have to undergo Pre-EMS, which are basically preparatory classes for students to learn the very basics of animal husbandry, as Dr Howard Wong, Director of Professional Development and Communications and Director for the Centre for Animal Welfare explains: "Local students have relatively little exposure to animals, especially farm animals, compared to many overseas students and

Pre-EMS brings them up to speed in understanding the basics of animal production and husbandry.

"On a chicken farm, for example, they will need to know about the breeds kept locally, which differ from those kept outside Asia. They would also need to know what these chickens eat, how to handle them properly and with confidence and so on. Once the students learn about the rudimentary aspects, then they can begin actual EMS which entails actually working on the farms and doing husbandry work. So Pre-EMS is really a sort of orientation to allow students to perform EMS properly," he adds.

The EMS programme usually takes place in a work setting, such as a farm and animal shelter. For their Pre-EMS, our BVM students visited the Hong Kong Jockey Club Beas River Equestrian Centre, local pig, chicken and fish farms, a cat welfare and adoption centre - *the Lifelong Animal Protection Charity* - as well as the Hong Kong Society for Prevention of Cruelty to Animals.

Through on-site visits, students are expected to pick up basic animal handling skills which include identifying an animal by its breed, observing the behaviour of animals, how to approach an animal in a calm manner or how to take out an animal from its cage properly. Students will also learn how farms and animal facilities are run.

EMS placements are crucial as they basically allow students opportunities to further practice and develop their skills. It also helps students to gain more experience and build up their confidence when dealing with clients and members of the veterinary team. In a nutshell, EMS prepares students for work so that as soon as they graduate, they can '*hit the ground running*'.

Additionally, EMS introduces students to the important concept of lifelong learning and reflective practice which, hopefully, will continue as they develop into independent and caring professionals who will continually seek for more knowledge so as to improve the quality of their daily practices and uphold the standards of the veterinary profession as a whole.
Our first batch of BVM students are very lucky when it comes to EMS…they were given the opportunity to spend five exciting weeks at Cornell University in Ithaca, New York, learning about husbandry and management of cattle, sheep and horses. We will have more on their exciting EMS journey in the next issue…so don't miss it!

校外課程先修班：
實習獸醫的必經磨煉

獸醫學學生不單要埋首書本，還得及早身體力行，因此他們要修讀校外課程。在大學階段跟動物親身接觸，不單讓他們有機會獲得實際工作經驗，也能提升以大學為基礎的學習。

城大獸醫學學士（BVM）課程的校外課程結構建基於英國皇家獸醫學院的，並遵照澳新獸醫管理局理事會的規定要求，在為期六年的課程內，學生必須完成若干星期的校外課程，包括在課程首兩年（臨床前）進行為期 12 個星期的動物畜牧業實習，以及在課程第三至第六年完成為期 26 星期的臨床實習。

然而，學生修讀校外課程之前必須先完成校外課程先修班，讓學生掌握動物畜牧的基礎概念。專業教育及發展兼動物福利中心總監王啟熙獸醫說：「本地學生比外國學生較少接觸動物，尤其是農場動物，而校外課程先修班讓他們更易了解動物生產和畜牧的基本概念。」

他補充：「舉例來說，學生在雞場裡學懂本地養殖的雞隻品種跟亞洲以外地區的分別，也要知道雞隻的飼料和處理雞隻的正確方法。學生掌握這些基本概念後，便可以真正開始校外課程，接觸實際的農場和畜牧工作。因此校外課程先修班是入門途徑，讓學生可以恰當地投入校外課程。」

獸醫學學士課程的校外課程會在農場或動物庇護所等工作環境進行，而校外課程先修班則讓學生到香港賽馬會雙魚河馬術中心、本地豬場、雞場和魚場，以及貓領養中心保護動物慈善協會及愛護動物協會考察。

學生透過這些實地考察學會辨認動物品種、觀察動物行為，並懂得冷靜接觸動物和將牠們脫籠等基本處理動物技巧，也會學習農場和動物設施的運作。

校外課程實習十分重要，讓學生有更多實踐及改善技巧的機會，也建立與顧客及獸醫團隊溝通的經驗和信心。簡單來說，校外課程讓學生作好準備，到畢業時盡展所長。

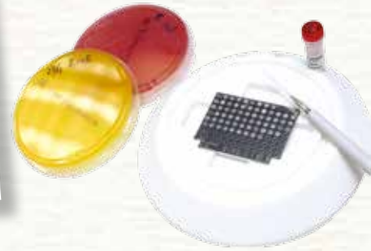
此外，校外課程讓學生明白終生學習和反思實踐的哲學，期望他們成為獨當一面的專業獸醫後，仍然會孜孜不倦學習，行醫質素精益求精，堅守獸醫專業的整體水平。

我們第一屆獸醫學學士課程學生十分幸運，校外課程包括遠赴紐約伊薩卡的康奈爾大學度過精彩的五星期，學習牛、羊、馬的畜牧和管理。下期會有更多關於他們多姿多采的校外課程旅程的報道，萬勿錯過！

CITYU VETERINARY DIAGNOSTIC LABORATORY
城大動物醫療檢驗中心

CityU Veterinary Diagnostic Laboratory in full swing

城大動物醫療檢驗中心全面啟用



Colonies of bacteria are picked from an agar growth plate and loaded onto a target for identification in the MALDI-TOF analysis system
細菌群從瓊脂培養板上挑取後，再用「基質輔助激光解吸電離飛行時間質譜分析系統」鑑定

CityU Veterinary Diagnostic Laboratory is now open and operational, offering microbiology, molecular biology, serology, histopathology, cytology and post mortem services.

The microbiology team led by Dr Vidya Bhardwaj, has identified a number of unique and interesting bacteria using the MALDI-TOF system including: Enterococcus spp resistant to every antibiotic tested against it, Neiseria spp, and Brevibacterium. The broth microdilution method is providing accurate quantitative results for Pasteurella antibiotic sensitivity.

The molecular team, led by Dr Christina To, has developed and used PCR assays to detect Bacillus canis vogeli in canine blood, Mycobacterium genavense in a pigeon and M avium paratuberculosis in a goat. New assays are being developed to identify local pathogens and undertake surveillance to ensure the absence of others.

We also welcome Dr Jeanine Sandy who has joined the pathology team of Dr Allan Kessell and Dr Fraser Hill and brings a wealth of knowledge to our pathology service. The pathologists have been challenged by the unique samples and diseases seen here, including rare skin conditions and neoplasia. Samples from a wide variety of species have been examined including; dogs, cats, mice, rats, crabs, sealions, sharks, pigeons, horses and goats, reflecting the biodiversity in Hong Kong.

The establishment of CityU VDL is an important step in the development of veterinary medicine in Hong Kong giving local veterinarians access to the latest veterinary diagnostic equipment coupled with on-site pathologists and technical staff to assist in disease investigation and interpretation of results.

城大動物醫療檢驗中心現已全面啟用，提供微生物學、分子生物學、血清學、組織病理學、細胞學和屍體解剖服務。

由 Vidya Bhardwaj 獸醫領導的微生物學團隊，以「基質輔助激光解吸電離飛行時間質譜分析系統」辨認出多種獨特有趣的細菌，包括對所有抗生素有抗藥性的腸球菌種、奈瑟菌和短桿菌。微量肉湯稀釋法為巴氏桿菌抗生素敏感性提供準確的定量結果。

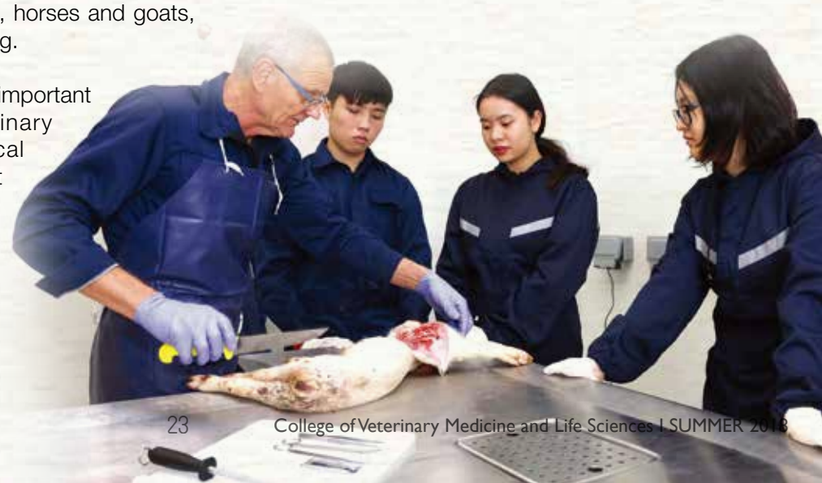
由 Christina To 獸醫領導的分子團隊研發了以聚合酶鏈反應方法檢測犬血液中的犬肺炎芽孢桿菌、鴿子中的分枝桿菌難及山羊中的鳥分枝桿菌，亦正研發辨認本地病原體的新方法，並為確保沒有其他病原體而進行監測。

我們亦歡迎 Jeanine Sandy 獸醫加入 Allan Kessell 獸醫和姚費沙獸醫領導的病理學團隊，為我們的病理學服務貢獻其豐富知識。

病理學家常要解決本地獨有的個案和疾病，包括罕見的皮膚病和瘤，檢查多種樣本如狗、貓、小鼠、大鼠、螃蟹、海獅、鯊魚、鴿子、馬匹和山羊，反映香港的生物多樣性。

城大動物醫療檢驗中心的成立是香港動物醫學發展的里程碑，讓本地獸醫得以使用先進的動物醫學化驗設備，並在駐場病理學家和技術人員協助下調查疾病和解讀結果。

All the vehicles of our courier team are equipped with a thermoelectric cooler and specified containers
檢驗中心運送團隊的所有車輛均配備半導體冷卻器及特製的容器



CityU Animal Health Centre

Construction for the new CityU Animal Health Centre at Trinity Towers in Sham Shui Po began on 21 December 2017. The centre will consist of 3 floors with a total area of about 33,000 square feet and will be, by far, the largest companion animal practice in Hong Kong. The construction work is expected to be completed in December 2018 and the clinic is hoping to begin operation in early 2019.

This new clinic is not only designed with state of the art concepts, but also adopts the best veterinary standards from all around the world.

There will be a total of 7 operating theatres, 3 minor surgery rooms, a first-of-a-kind in Hong Kong intensive care unit (ICU), a cardiology suite, a brand new physiotherapy area with hydrotherapy capabilities, as well as numerous treatment areas in the new Health Center. There will also be a spay-neuter centre to assist animal charities in neutering their cats, dogs and other companion animals.

The centre will possess the latest diagnostic and treatment technologies in disease management, including a 1.5T magnetic resonance imaging (MRI) system, a new 64 slice CT-scan, 2 C-Arms and 3 Digital X-ray units, as well as the latest anaesthetic and critical care monitoring devices.

The veterinary team consists of general practitioners and specialists including surgery, neurology, dermatology, cardiology, ophthalmology, intensive care and internal medicine. Alternative treatment methods such as acupuncture, physical therapy and holistic medicine will also be available. As is provided by CityU PAVC now, emergency care will be available 24 hours a day.

The centre will also be used to support the CityU College of Veterinary Medicine and Life Science in the future . Audio-visual system and direct connectivity to the University will be incorporated in multiple areas of the clinic to broadcast directly to students, whether they are in the clinic or inside the University lecture halls. The system also provides recording functions for future reference and training.

城大動物醫療健康中心

位於深水埗丰匯的城大動物醫療健康中心已於 2017 年 12 月 21 日動工興建，預計於 2018 年 12 月落成。樓高三層的中心總面積達 33,000 平方尺，是香港迄今規模最大的寵物診所，期望在 2019 年初開始營運。

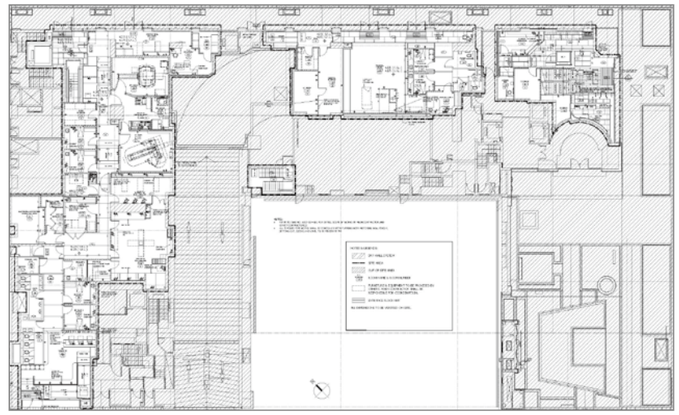
新中心以先進概念設計，並且配備世界最高標準的獸醫設施。

這個中心共有七個手術室、三個小手術室、香港首創的動物深切治療部、一個心臟科套房、一個有水療功能的新物理治療區，以及多個治療區。那裡還設有絕育中心，協助動物志願組織為貓、狗和其他寵物絕育。

該中心擁有疾病應變的最新診斷和治療技術設備，包括 1.5T 核磁共振成像（MRI）系統、新增 64 切電腦斷層掃描（CT-scan）、兩個 C 臂和三個數碼 X 光系統，以及最先進的麻醉和重症監護儀器。

獸醫團隊由全科醫生和各科專家組成，包括手術、神經科、皮膚科、心臟科、眼科、重症監護科和內科，提供針灸、物理治療和全人醫學等替代治療方法，而急症服務則由城大太平道動物診所 24 小時提供。

該中心日後將會支援城大動物醫學及生命科學院，診所多處會設置視聽系統與城大聯繫，讓學生不論身處診所或校園時都能收聽即時廣播，並提供錄影功能，供未來學術參考及培訓之用。



Q&A

Introducing Dr Jun Li
認識李俊博士

I graduated from Tianjin University with a bachelor degree in physics and then joined Beijing Genomics Institute (BGI) in 2003. I was trained as a bioinformatician in BGI and served as a senior project leader for over 3 years, leading a team focused on comparative genomics, evolution and population genetics.

I received my PhD degree from the University of Hong Kong (HKU) in 2013 working in the fields of comparative genomics/transcriptomics for viruses and bacteria. Afterwards, I joined the lab of Dr. Gianni Panagiotou as a postdoctoral researcher at HKU and then the Hans Knoll Institute in Germany, leading research projects in systems biology and microbiome from human, animal and various other environments.

My personal research interest and experience fits into the research theme of CVMLS. I feel this is the place where I can develop new skills and eventually become a leading researcher in the field of computational biology. Compared with human-health related biomedical research fields, advanced bioinformatics and state-of-the-art computational framework have not yet been applied sufficiently to animal health studies. Besides the economic and social benefits from livestock farming and pet keeping, animal studies will also pave the way for follow-up investigations in human subjects.

Besides contributing high-quality research, I will contribute my expertise in statistics, machine learning, big data mining and computational biology to undergraduate and postgraduate education. I will also supervise PhD students and Postdocs, apply for and manage research grants, and design or participate in inter- or intra-departmental collaborative projects in CityU.

Compared with some other researchers in the veterinary or biomedical fields, I have a strong background in mathematics, bioinformatics algorithms and statistical modeling. I hope to bring the expertise of the state-of-the-art computational biology to our department.

I have been studying the human and animal health-related problem using next-generation sequencing (NGS), and how diet or drugs influence our gut microbiota and eventually alter the host health status. I also study antibiotic resistance and virulence factors in the bacteria in both the animal/human microbiome and external environment (like the banknote surface and MTR handrail).

可以介紹一下你的專業背景和工作經驗嗎？
我在天津大學獲得物理學學士學位後，於 2003 年在華大基因接受生物信息學訓練，擔任高級項目負責人逾三年，領導一個專注比較基因組學、進化和族群遺傳學的團隊。

2013 年，我憑研究病毒和細菌的比較基因組學和轉錄組學，獲得香港大學博士學位，後來成為香港大學 Gianni Panagiotou 博士實驗室的後博士研究員，再在德國天然產物研究所領導一個項目，研究人類、動物及各種環境的系統生物學和微生物學。

你為甚麼會加入城大動物醫學及生命科學院？
我的個人研究興趣和經驗跟城大動物醫學及生命科學院一拍即合，我相信這兒會讓我發展新技能，最終成為計算生物學領域的頂尖研究員。比起與人類健康相關的生物醫學研究領域，生物信息學和計算框架仍未充分應用在動物健康研究上。動物研究除了為畜牧業和寵物飼養帶來的經濟和社會效益外，也可鋪路讓牽涉人類的相關研究跟進其研究成果。

你在城大動物醫學及生命科學院負責甚麼？
我不單要進行高水平的研究，還會向本科生和研究生分享統計學、機器學習、發掘大數據和計算生物學等方面的知識。我會監督博士生和研究生、申請和管理研究經費，以及設計和參與城大系內或跨學系的合作項目。

你在生物信息學範疇有甚麼專長？為甚麼這門知識在動物醫學中如此重要？
跟其他動物醫學或生物醫學的研究員相比，我在數學、生物信息學算法和統計建模方面的背景較強，希望為我們的學系帶來最先進的計算生物學專業知識。

這些年來，我用下一代測序（NGS）來研究跟人類和動物健康相關的問題，了解飲食和藥物怎樣影響我們的腸道微生物群，以及最終改變主體的健康狀態。我也有研究在動物或人類微生物組和外在環境（例如鈔票表面及港鐵扶手）的細菌抗生素抗藥性和毒力因子。

Equine Transportation and Welfare
Thoughts from our newly appointed Assistant Professor in Animal Behaviour and Welfare

本院新任動物行為及福利助理教授 Padalino 獸醫解釋
運送對馬匹身心健康的影響

The College is pleased to welcome Dr. Barbara Padalino, an Italian equine veterinarian and an Assistant Professor in Animal Behavior and Welfare at the College of Veterinary medicine and Life Sciences. She is also a lecturer in Animal Science at the University of Bari (Italy) and will be teaching our BVM students animal behavior and welfare. Barbara completed her PhD at the Faculty of Veterinary Science at the University of Sydney on the topic of equine transportation. Barbara's research interests span a number of topics relating to equine science including behavior, welfare, training, exercise physiology, and internal medicine. She has published over 100 peer reviewed journal, book chapter and conference papers.

On why transportation for horses is so stressful, Barbara writes "transport stress is caused by a mosaic of stressors which can affect the horse both mentally and physically, causing behavioral and health problems prior, during and/or after trips. The transportation process includes critical stages which can all impact on stress levels: preloading-handling, loading, transport in itself, unloading and adaptation to a new stall/different environment. Each of these stages is a challenging situation for the horse and it is characterized by a different stressor. Preloading handling is usually a source of mental stress because it means separation from familiar physical and social environments.

A fear of loading is innate in horses and can be triggered by a range of stimuli, such as fear of entering an enclosed space, the height of the step leading onto the ramp, and the instability and incline of the ramp. It is these factors that often result in inexperienced horses exhibiting extreme evasive behavior and a strong reluctance to step up onto the ramp. However, experienced horses are still stimulated by climbing the ramp, and an elevated heart rate is often observed during loading, regardless of the level of experience.

城大動物醫學及生命科學院有幸邀得意大利馬匹獸醫 Barbara Padalino 獸醫出任動物行為及福利助理教授將為我們的獸醫學學士學生教授動物行為及福利。Padalino 獸醫目前兼任意大利巴里大學動物科學講師，她在悉尼大學取得獸醫學博士學位，主攻馬匹運送，研究興趣涵蓋多個與馬匹科學相關的範疇，包括行為、福利、訓練、運動生理學及內科，曾發表超過 100 份同行評審期刊論文、書本篇章及會議文章。

問及 Padalino 獸醫，馬匹何以會因運送而身心緊張，她解釋：「運送壓力由多種不同的壓力源造成，對馬匹的生理和心理都有影響，導致牠們在運送前後或過程中出現行為和健康問題。運送過程中的多個階段均會影響壓力程度：準備工作、裝載、運送、卸載，以及適應新馬廄或新環境等。每個階段都有不同的壓力源，對馬匹造成重大考驗。裝載的準備工作通常是精神壓力的來源，因為馬匹要告別自己熟悉的環境和群居生活。

馬匹天生害怕被裝載，並會受多項事情引發恐懼情緒，包括被困在封閉的空間、坡道的踏板太高、坡道太斜或不穩。這些原因常令經驗幼嫩的馬匹步步為營，不願走上坡道，但即使成熟的馬匹也會因攀爬坡道而緊張。其實馬匹不論經驗多少，都會在裝載過程中心跳攀升。

Hills supports BVM students with book donation

希爾思贈書予獸醫學學生

On 13 April 2018, our students were presented with individual copies of Hand et al's Small Animal Clinical Nutrition, 5th Edition by Dr. Julie Chen DVM, MS, Professional Veterinary Affairs Manager, Hill's Pet Nutrition Asia Limited. Hills continues to be extremely supportive of the College of Veterinary Medicine and Life Sciences with sponsorship for CPD seminars as well as webinars We would like to thank Hills on behalf of our first cohort of BVM students!

Don't miss the next Hills event with Dr. Susan Little on 20 July 2018 -- Approach to cats with lower urinary tract diseases

2018 年 4 月 13 日，亞洲希爾思寵物營業品有限公司專業獸醫事務經理陳琬筑獸醫（DVM, MS），向我們的學生各送一本由 Michael S. Hand 等人編著的《小動物臨床營養》（第五版），令我們的學生十分高興。希爾思一直鼎力支持城大動物醫學及生命科學院，贊助「持續進修課程」研討會及網絡研討會。我們代表第一屆獸醫學學士課程學生對希爾思感謝萬分！

萬勿錯過 2018 年 7 月 20 日另一場希爾思活動，由 Susan Little 獸醫講解貓的下尿路疾病。

Year 1 BVM students with their new (and heavy!) copies of Small Animal Clinical Nutrition. Dr. Julie Chen, Hills (3rd from right), Ms. Annie Leung, Hills (2nd from right) and Dr. Howard Wong, CVMLS, Director of Professional Development (right)
獸醫學學士課程一年級學生手持重甸甸的《小動物臨床營養》。希爾思代表陳琬筑獸醫（右三）、希爾思代表梁素英小姐（右二）及城大動物科學及生命科學院專業教育及發展總監王啟熙獸醫（右）。

Dr. April Fong (Right)
方心如博士（右）

Kakato Entrance Scholarship By MaxiPro Limited

萬士博 Kakato 入學獎學金成立

Our College is privileged to have the support of MaxiPro (Asia) Limited (MaxiPro), a respected company in the veterinary industry, for the Bachelor of Veterinary Medicine programme by making a generous donation for establishing the "Kakato Entrance Scholarship" for top-performing local freshman admitted to the BVM programme.

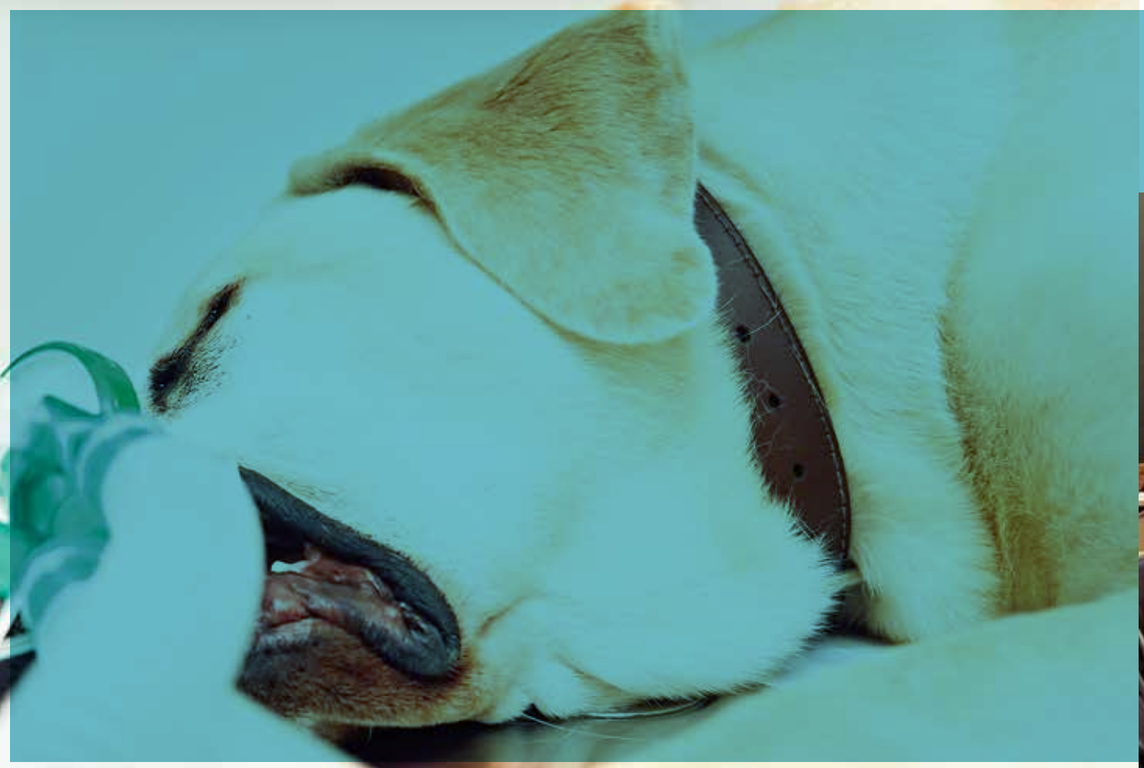
Founded by Dr April Fong in 2007, MaxiPro has always been dedicated to providing premium pet products, including food, nutraceutical and pharmaceutical products, as well as medical accessories; with its business covering Hong Kong, Macau, Taiwan, Singapore, Mainland China, and other Asian countries.

Dr Fong, Founder and General Manager of MaxiPro, who is also a veteran of the companion animal industry with more than 20 years of experience, is excited about becoming the first supporter in the industry to work hand in hand with our College in grooming the next generation of veterinary professionals.

城大動物醫學及生命科學院有幸獲得獸醫界翹楚萬士博（亞洲）有限公司（下稱「萬士博」）慷慨解囊，成立「Kakato 入學獎學金」，支持獸醫學學士課程錄取的傑出本地新生。

萬士博自 2007 年由方心如博士成立以來，一直矢志提供優質寵物產品，包括食品、營養品、藥物及醫療配件，業務遍及香港、澳門、台灣、新加坡、中國內地和其他亞洲國家。

萬士博創辦人及總經理方心如博士在寵物界擁有超過 20 年經驗。能成為是首位跟城大動物醫學及生命科學院合作孕育新一代獸醫專業的業界人士，方博士深感興奮。



Local vets given a dose of small animal CPR

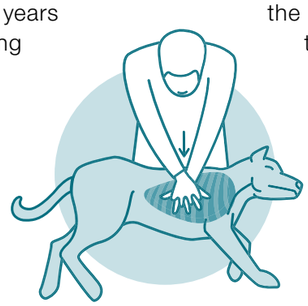
Mouth-to-snout…? What might that be, you ask. We have often heard of medics, or even Good Samaritans, applying mouth-to-mouth to humans in cardiac arrest situations. Well, believe it or not, “mouth-to-snout” resuscitation is what your vetwould administer to your beloved pets should they get into a similar situation.

Cardiopulmonary resuscitation (CPR) for small animals is not exactly new but experts in the field have fine-tuned the practise over the years and this was the exciting topic during the Continuing Professional Education (CPE) event which kicked off on 28 January 2018.

Dr Daniel Fletcher, from the Cornell University College of Veterinary Medicine, was invited to give an update on CPR at the workshop.

Dr Fletcher is internationally well-known for his revolutionary animal robotic simulation technology and more importantly, for the first evidence-based veterinary CPR guidelines, known as the RECOVER Initiative, which he, together with Dr Manuel Boller, published.

During the workshop - organised by City University of Hong Kong’s College of Veterinary Medicine and Life Sciences - Dr Fletcher explained in detail the RECOVER Initiative to local vets, vet technician as well vet nurses.



Attendees at the workshop were taught how to rapidly recognise patients with cardiopulmonary arrest and properly administer high-quality chest compressions

using the most up-to-date approaches in dogs and cats. They were also shown how to provide mouth-to-snout or intubated ventilation according to current evidence-based guidelines and utilise effective communication and team skills that will improve their ability to manage emergent and critically ill patients. They were told how to choose the most useful monitoring devices for patients in cardiopulmonary arrest as well as read and interpret the data from the various monitoring devices.

Other helpful tips included how to rapidly diagnose the arrest ECG rhythm to help choose the best ALS therapies for the patient, administer the most effective drugs and other adjunctive therapies for patients with cardiopulmonary arrest and perform lifesaving procedures such as venous cutdowns, intraosseous catheter placement and open chest CPR.

Teams of attendees also ran CPR scenarios using high fidelity simulators with heart and lung sounds, palpable pulses and a simulated patient monitor.

Dr Reimi Kinoshita, a private vet with a clinic in Happy Valley, was a participant at the CPR workshop and gave the thumbs up. She says such workshops were very useful to consolidate updated information and areas of progress, adding that veterinary CPR was a pertinent subject for all vets and the hospital team.

“Having Dr Fletcher in person to explain the RECOVER Initiative was really helpful,” she says. “He is an effective communicator. The training was well structured, summarizing his and the group's excellent work and publications on veterinary CPR and presenting it in a way that was easily understood and practical.”

Dr Kinoshita says she is looking forward to other CPE events: “As vets (or vet technicians and nurses), we need to constantly update and improve our skills and knowledge, as a responsibility to the animals under our care. We are always looking for high quality, effective continuous professional development (CPD) to help us achieve this.

Vet nurse, Daffy Lam Ngai Chau Lam, who also attended the workshop says the CPR course was especially impressive with the animal simulator and all the scenario practices. “It is very useful to practice and review the CPR skills,” she says.

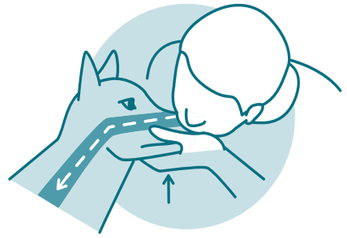
Ms Lam says staff at her clinic have had experience conducting resuscitation on animals, whether during a walk-in emergency or on hospitalized patients. “Our team pretty much has the same protocol as the guidelines in this CPR course.”

She says if no such CPE events are found in Hong Kong - such as the one organised by City University’s College of Veterinary Medicine and Life Sciences - she would constantly have to go online to look for such courses.

“I am always interested in different CPE topics to enhance my knowledge and skills, as well as keeping up with up-to-date information in the veterinary field,” she adds.

Asked what other vet-related topics would she find useful and hope that CityU’s vet school could come up with, she says: “I am quite interested in emergency and critical intensive care. There are not many emergency centres in Hong Kong and I would love to see topics like these.”

小型動物心肺復甦法



人類心臟病發時，醫護人員或見義勇為的急救者會跟他做「嘴對嘴」復甦法，但你可能未曾聽聞復甦法也可以「嘴對喙」。當你心愛的寵物遇上心臟病時，「嘴對喙」復甦法也可大派用場。

小型動物的心肺復甦法不是新事物，但行內專家多年來不斷改進手法，而 2018 年 1 月 28 日舉行的「持續專業教育」活動中正是探討這個令人振奮的主題。

美國康奈爾大學動物醫學院 Daniel Fletcher 獸醫應邀主持這個工作坊，介紹心肺復甦法的最新發展。Fletcher 獸醫以革命性的動物機械模擬技術享譽國際，並跟 Manuel Boller 獸醫合作撰寫了首份循證獸醫心肺復甦法指引《RECOVER Initiative》。

這個工作坊由城大動物醫學及生命科學院舉辦， Fletcher 向本地獸醫、獸醫技術員和獸醫護士闡述這個心肺復甦法指引。

他教導工作坊參加者怎樣迅速確定患病者是否心肺驟停，以最新方法對貓狗進行適當有效的胸部按壓，示範根據當時循證指引進行「嘴對喙」或插管通氣的復甦法，並以有效的溝通和團隊技巧來處理新病發和危重的患病者。參加者亦學會為心肺驟停患病者挑選最有效的監測設備，以及解讀各種監測設備的數據。

其他實用知識包括如何迅速診斷心電圖節律，從而為患病者選擇最好的肌萎縮側索硬化症治療方法，為心肺驟停患病者用最有效的藥物及其他輔助治療方法，並施行如靜脈切割、骨內導管放置及開胸心肺復甦法等拯救程序。

參加者亦以配備心肺聲音、可見脈搏和模擬病人監測器的高仿真模擬器，來體驗心肺復甦法的個案。

參加者之一、在跑馬地私營獸醫診所執業的木下禮美獸醫對這個心肺復甦法工作坊極之欣賞，表示可以得知最新資訊和發展情況，並指獸醫心肺復甦法對所有獸醫和醫護團隊來說都是重要課題。

她說：「由 Fletcher 獸醫親身講解獸醫心肺復甦法指引很有價值，他溝通能力很高，工作坊很有系統，總結了他和其團隊在心肺復甦法的傑出工作和論文成果，並用顯淺實際的方法來表達。」

木下禮美獸醫對其他「持續專業教育」活動充滿憧憬：「我們作為獸醫、獸醫技術員或獸醫護士，都要不斷裝備自己，增進知識，這是照顧動物的應有之義，為此我們一直尋求優質有效的持續專業發展項目。」

另一位參加工作坊的獸醫護士林小姐對動物模擬器和個案練習印象最深，說：「這對練習心肺復甦法技巧十分有用。」

林小姐說她的診所同事都曾經為動物施行復甦法 ，有些動物是急症求診，有些則是正在留院，她說：「我們的團隊用的方法跟這個心肺復甦法指引十分相似。」

她表示，要不是城大動物醫學及生命科學院在香港舉辦這種持續專業教育活動，自己只能在網上搜尋類似課程。

她說：「我對持續專業教育一直深感興趣，希望藉此增進自己的知識和技能，也追上獸醫業界的最新資訊。」

問她期望城大動物醫學及生命科學院將來舉辦哪些獸醫有關課題，她答：「我對急救和深切治療頗有興趣，香港的急救中心不多，我希望可以探索這類題目。」

Ultrasonography techniques for Veterinary Practitioners

超音波檢查技術

Dr Heng

Dr. Heng is the section head of diagnostic imaging at Purdue University's College of Veterinary Medicine. He is a Diplomate of the European College of Veterinary Diagnostic Imaging in 2004 and a Diplomate of the American College of Veterinary Radiology. Dr. Heng's research interests include ultrasounds of the gastrointestinal tract, forensic radiology, imaging of neoplasia, and imaging of orthopaedic diseases.

邢福淦獸醫小檔案

邢福淦獸醫於美國普渡大學任職獸醫學院診斷影像部主管，2004 年獲歐洲戰醫診斷影像學院文憑，亦曾獲美國獸醫放射學院文憑，其研究範圍包括胃腸道超聲波、法醫放射學、腫瘤影像和骨科疾病影像。

A lively and practical workshop was delivered by Dr Hock Gan Heng, kindly sponsored by the Industrial Promoting Co. Ltd, on 7 and 8 November 2017. This 2-day workshop first covered basic principles and techniques of ultrasonography. After that, Dr. Heng expertly took the participants step-by-by through the examination of the different organs and systems of the abdominal cavity.

A total of 13 participants took part in the workshop, representing 9 small animal veterinary practices. Such small-sized groups for practical workshop of this nature meant that every participant had plenty of opportunities to practise scanning and each received one-on-one attention and feedback from Dr. Heng.

邢福淦獸醫於 2017 年 11 月 7 日及 8 日主持了一個生動實用的工作坊。這個為期兩天的工作坊由振業儀器有限公司贊助，首先探討超音波檢查的基本原則和技術，再由邢獸醫帶領參加者逐步體驗怎樣檢查腹腔各種器官和系統。

該工作坊有 13 人參加，來自 9 間小型動物獸醫診所。由於工作坊以小班進行，每位參加者有足夠機會練習掃描，並且得到邢獸醫個別指導和給予意見。

Waterworks Matters

Workshop on Urinary Disease

貓狗腎病與泌尿病工作坊

On the 31st of October 2018, a selected group of veterinarians worked with Dr David Senior and Dr Allan Kessell to understand the ins and outs of kidney and bladder disease in dogs and cats. Using easy to follow lectures, backed up with practical stations and real life case examples, Dr Senior and Dr Kessell ensured that all participants had the opportunity to learn and apply information imparted in the course. The small group format with high teacher-student ratio considerably enhanced the learning experience for the participants. Dr Vidya Bhardwaj from the Veterinary Diagnostic Laboratory at the City University of Hong Kong, acted as a guest lecturer for the workshop and provided an insight into antimicrobial susceptibility testing.

2018 年 10 月 31 日，一班獸醫獲邀跟 David Senior 獸醫和 Allan Kessell 獸醫探討貓狗腎病和泌尿病的各類問題。兩人的工作坊深入淺出，附以實用攻略和真實個案，務求讓參加者能學以致用。工作坊採用小班教學形式，令參加者能充分領略內容。城大動物醫療檢驗中心 Vidya Bhardwaj 獸醫更擔任工作坊的客席嘉賓，向參加者闡述抗菌藥敏感性測試。

Dr David Senior, BVSc., Dipl. ACVIM SAIM; Dipl. ECVIM-CA

Dr David Senior, a veterinary graduate from The University of Melbourne, is a specialist in small animal internal medicine as well as urology. His area of specialty is the urinary tract. He has served as the Head of the Department of Veterinary Clinical Sciences for over 15 years, and Associate Dean for 8 years at the School of Veterinary Medicine, Louisiana State University. Having served as Conference Coordinator for the North American Veterinary Conference since the early 1990's, David is proficient in the skills required to deliver a successful workshop. David is a very sought-after speaker and presents at several prestigious, international conferences every year.

David Senior 獸醫（BVSc., Dipl. ACVIM SAIM; Dipl. ECVIM-CA）小檔案

David Senior 獸醫畢業於澳洲墨爾本大學獸醫學系，是小型動物內科及泌尿科專家，專門研究泌尿道。他擔任美國路易斯安那州立大學臨床動物醫學系主任逾 15 年、動物學院副院長 8 年，並自 1990 年代初出任北美獸醫會議的會議協調員，主持出工作坊極為出色。他發表的演說也大受歡迎，每年參與多個重要的國際會議。

Professsor David Hampson awarded the Gilruth Prize

Hampson 教授榮獲澳洲獸醫協會獎項

David Hampson, Chair Professor in Pathobiology and Head of the Department of Infectious Diseases and Public Health in the College of Veterinary and Life Sciences has been awarded the Gilruth Prize from the Australian Veterinary Association (AVA) at their recent annual conference in Brisbane.

This Gilruth Prize has been awarded annually since 1953. It is named to commemorate the noted veterinarian Dr J.A. Gilruth who was a Dean of the Faculty of Veterinary Science at Melbourne University, the first Chief of the Division of Animal Health, CSIRO, and a leading veterinary authority. The Gilruth Prize is the AVA's most prestigious award and is given for outstanding service to veterinary science in Australia.

The award to Professor Hampson reflects his output as a veterinary researcher, teacher and senior administrator. Before moving to City University Professor Hampson worked for 31 years at Murdoch University in Perth, Western Australia. He was a Professor of Veterinary Microbiology and the Dean of the School of Veterinary and Life Sciences, which includes an internationally accredited College of Veterinary Medicine.

David is particularly well known for his work on spirochaetal bacteria infecting pigs, poultry and human beings. The newly emerged pig pathogen *Brachyspira hampsonii* was named to acknowledge his work in this area.

David qualified as a Veterinarian from the Royal Veterinary College, London, and received a PhD from the University of Bristol and a Doctor of Science degree from the University of London. David has received many other prizes and awards over the years. He was awarded Fellowship of the Australian Society for Microbiology, Fellowship of the American Academy of Microbiology, Fellowship of the Royal College of Pathologists, and Fellowship of the Royal College of Veterinary Surgeons. Some other notable prizes received include the Royal Agricultural Society of England Silver Medal, the Ian Clunies Ross Memorial Award, the Frank Fenner Research award, and the G. Norman Hall Gold medal from the Royal College of Veterinary Surgeons.

城大動物醫學及生命科學院傳染病及公共衛生學系主任兼病理學教授 David Hampson 教授，於澳洲獸醫協會（AVA）最近在布里斯本舉行的周年會議中榮獲 Gilruth Prize。

Gilruth Prize 於 1953 年開始設立，以墨爾本大學前動物醫學院院長、聯邦科學與工業研究組織（CSIRO）首位動物健康部長及動物醫學界權威 J. A. Gilruth 獸醫命名，是澳洲獸醫協會最高榮譽的獎項，每年頒給對澳洲動物醫學有重大貢獻的人。

這個獎項肯定 Hampson 教授在動物醫學研究、教學及管理方面的成就。加入城大之前，他曾任職位於西澳洲柏斯的梅鐸大學 31 年，擔任獸醫微生物學教授及動物醫學及生命學院（該院轄下的動物醫學院備受國際稱譽）院長。

Hampson 教授以研究豬隻、家禽和人類感染的螺旋體細菌而聞名。新出現的豬病原體 Brachyspira hampsonii 以 Hampson 教授命名，以表揚他在這方面的研究成就。

Hampson 教授在倫敦皇家獸醫學院修讀，成為獸醫，後獲布里斯托爾大學和倫敦大學分別頒授博士學位及理學博士學位，多年來獲獎無數。他曾獲澳洲微生物學會獎學金、美國微生物學會獎學金、英國皇家病理科醫學院獎學金及英國皇家獸醫學院獎學金。他獲得的重要獎項包括英格蘭皇家農業學會銀獎、Ian Clunies Ross 獸醫教學紀念獎、Frank Fenner 研究獎和英國皇家獸醫學院的 G. Norman Hall 金獎。

Lecture Series on the Pathology of Laboratory Animals

實驗室動物病理學講座系列

College of Veterinary Medicine and Life Sciences in collaboration with Cornell University

The College of Veterinary Medicine and Life Sciences, CityU Veterinary Diagnostic Laboratory (CityU VDL) and the Hong Kong University of Science and Technology (HKUST) Animal & Plant Care Facility jointly delivered the first of a series of lectures on the Pathology of Laboratory Animals in December 2017. The event was attended by over 45 laboratory animal veterinarians and technicians from four universities with well-developed laboratory animal research units namely CityU, HKUST, University of Hong Kong and Chinese University of Hong Kong and began with a tour of the recently opened CityU VDL led by Dr. Fraser Hill, the head of the laboratory.

Prof Ralph Bunte, a distinguished professor of pathology from Duke NUS Medical School in Singapore, and who trained at the renowned Walter Reed Army Institute of Research in the USA, gave lectures on neuropathology and the issue of special stains needed to evaluate myelination and axonal changes and mouse necropsy support in a biomedical research facilities and the pathology of prevalent mouse diseases. Dr Allan Kessell, a pathologist from CityU VDL talked about the importance of a necropsy programme as part of a holistic sampling plan and why it was necessary to sample normal as well as abnormals to develop a library of samples. Dr Anthony James concluded with a talk on lab animal microbiology and how the opening of CityU VDL allows us to better sample animal models and how it is crucial in helping the development of laboratory animal units in local universities.

香港城市大學的動物醫學及生命科學院、動物醫療檢驗中心和香港科技大學動植物養育實驗所，於 2017 年 12 月合辦實驗室動物病理學講座系列，吸引了逾 45 位實驗室動物獸醫及技術員參與，首先在城大動物醫療檢驗中心總監姚費沙獸醫帶領下參觀中心設施。他們來自均設有先進實驗室動物研究中心的香港城市大學、香港科技大學、香港大學和香港中文大學。

新加坡國立大學杜克醫學院病理學傑出教授、曾受訓於著名美國沃爾特里德陸軍研究院的 Ralph Bunte 教授主持多個講座，闡述神經病理學、評估髓鞘形成和軸突變化所需的特殊漬問題、生物醫學研究設施中的小鼠屍體剖檢和流行小鼠疾病病理學。城大動物醫療檢驗中心病理學家 Allan Kessell 獸醫則講解屍體剖檢在整理抽樣計劃的作用性，並解釋正常和異常樣本抽樣對開發樣本庫的重要性。另外，Anthony James 獸醫主持關於實驗室動物微生物學的總結講座，指出城大動物醫療檢驗中心的成立可以提升動物樣本抽樣，有助本地大學實驗室動物部門的發展。

Canada Pet Day
加拿大寵物日

Promotion of animal welfare was the theme for the Canada Pet Day which was held on a lovely sunny day in December 2017 and hosted by the Canadian Government together with CityU's Centre for Animal Welfare. Pet owners got the opportunity to try the latest Canadian pet food and let their pets roam whilst seeing the superb work done by local animal NGOs. Responsible pet ownership was also promoted by the Agriculture, Fisheries and Conservation Department and pets even got a free massage from Paws in Motion which specializes in veterinary physiotherapy. CityU PAVC Clinic hosted a very popular veterinarian try out stand where kids were taught basic dog anatomy and then allowed to gown up and practice their surgical, bandaging and endotracheal tube insertion skills under the watchful eyes of veterinary specialists Drs. Saskia Quante and Kim Beaulieu.

2017 年 12 月一個陽光燦爛的日子，城大動物福利中心與加拿大駐香港及澳門領事館合辦了「加拿大寵物日」，以推廣動物福利。寵物主人可試用新推出的加拿大寵物食品、認識本地動物志願組織的出色工作，也讓自己的寵物寫意散步。漁農自然護理署在場宣傳「做個盡責任的寵物主人」訊息，專門提供動物物理治療的組織 Paws in Motion 為現場寵物提供免費推拿。城大太平道寵物診所的模擬獸醫攤位向小孩子示範基本的狗隻解剖學，極受歡迎。他們在 Saskia Quante 獸醫和 Kim Beaulieu 獸醫教導下，披上醫生袍，學習外科、包紮和插喉技巧。

World Vet Day 2018

世界獸醫日

Dr. Michelle Yeung, Acting Assistant Director, Agriculture, Fisheries and Conservation Department, attending the opening ceremony of the World Veterinary Day display.
漁農自然護理署署任助理署長楊莉獸醫主持開幕演講

Dr. YY Ho, Controller, Centre for Food Safety (right) and Dr. Henry Ng (left), Principal Medical Officer, Centre for Food Safety, visiting the World Veterinary Day display with Dr. Howard Wong.
食物安全中心食物安全專員何玉賢醫生（右）及首席醫生吳志翔醫生（左）在王啟熙獸醫陪同下，參觀世界獸醫日的展覽

Hong Kong celebrated World Veterinary Day 2018 with a display in the Run Run Shaw Library at CityU showcasing the vital role of veterinarians in ensuring animal welfare, food safety, food security, safe world trade in animals and animal products as well as protecting animal and public health. The World Veterinary Day was initiated by the World Veterinary Association (WVA) in 2000 in order to celebrate the veterinary profession annually on every last Saturday of April. Jointly held with the Agriculture, Fisheries and Conservation Department (AFCD) and CityU Library, the event kicked off with talks outlining the importance of veterinary medicine by Dr. Michelle Yeung, the acting Assistant Director of AFCD and our Dean, Professor Michael Reichel.

香港響應 2018 年世界獸醫日，於城大邵逸夫圖書館舉行展覽，展示獸醫在維護動物福利、食物安全、動物及其產品的安全國際貿易、保護動物及公共衛生的重要角色。世界獸醫日由世界獸醫協會於 2000 年創立，於每年 4 月最後一個星期六向獸醫致敬。今年漁農自然護理署及城大圖書館合辦世界獸醫日展覽，漁農自然護理署署任助理署長楊莉獸醫及本院院長禮哲教授主持開幕演講，闡述動物醫學的重要性。

All in the name of love (and curiosity)…

students delve headlong into world of Animal Care

從愛心和好奇心出發

學生邁進動物護理世界

They came, they saw and they "conquered" everything they needed to know about animals - great and small… and slithery.

Picked from an applicant pool of over 300 students representing over 100 local schools, this cohort of 72 secondary school students, recruited in 2016, spent the past months venturing into the world of animals, figuring out their relationship with humans and society as a whole and looking into improvements in animal care practices.

Having now completed the required 180-hour course, these students will soon see the fruits of their labour when they receive their Hong Kong Diploma of Secondary Education (HKDSE) Applied Learning (ApL) in Animal Care.

"The Animal Care course has been a very fruitful journey for both teachers and students," says Dr Queeny Yuen, course leader and Continuing Education Coordinator from City University's Department of Infectious Diseases and Public Health. "As teachers, we witnessed the students mature and develop their knowledge and understanding about animal needs.

"They also became more confident when presenting their work and thoughts on animals," she adds. "The students, on the other hand, made new friends with students from other schools. At the end of the course, they all walked away with a much clearer understanding of what it takes to work with animals and what type of work they would like to do with animals in the future."

The idea of the Animal Care course was first mooted by the Hong Kong Education Bureau as

a collaboration with City University of Hong Kong's School of Continuing and Professional Education (SCOPE) and supported by the College of Veterinary Medicine and Life Sciences. They actively participated in the design of the curriculum which is aimed at inspiring senior secondary school students to care for animals, so that after leaving school, they will consider pursuing a career in veterinary sciences to ensure the health and wellbeing of animals.

Modules 1 – 3 are comparatively more theory-based, covering topics such as basic animal welfare principles and ethics, animal care overview, animal behaviour as well as animal anatomy and physiology.

Modules 4 - 5 provide practical contexts for students to apply the knowledge and understanding developed in the previous modules and these involve field studies where students learn to sharpen their animal-handling skills.

Assessments in animal care are varied to allow every student the opportunity to shine, depending on their preferred style of learning. Assessment tasks include a written test, reflective writing, group project presentations and practical skills examinations.

If you love animals or are fascinated by them…and want to make their world a better and safer place, take up Animal Care course. For more information, please visit:

1) Education Bureau Applied Learning webpage:
www.edb.gov.hk/en/curriculum-development/cross-kla-studies/applied-learning/index-1.html

2) CityU School of Continuing and Professional Education website:
www.cityu.edu.hk/ce

The course structure comprises 5 modules, with a total of 180 teaching hours.
課程由以下五個單元組成，合共 180 個教學小時。

- Animals and Society
  動物與社會
- Animal Welfare
  動物福利
- Applied Science Knowledge
  應用科學知識
- Animals in Hong Kong
  香港的動物
- Animal Care Needs and Husbandry
  動物護理需求與飼養

他們前來上課，擴闊了眼界，學習到自己需要知道關於動物的各種大小知識……

2016 年，有來自逾 100 家本地學校的超過 300 名中學生申請入讀「動物護理」課程，結果有 72 名學生獲得取錄。他們過去多個月進入了動物世界探索，了解到牠們跟人類和整體社會有甚麼關係，並且探討怎樣改進動物護理的方式。

這批學生現已完成規定的 180 小時課程，即將看到自己辛勤努力的成果——獲得完成香港中學文憑考試應用學習課程「動物護理」的證明。
該課程的學術統籌兼城大傳染病及公共衛生學系持續進修統籌阮穎嫻博士表示：「對導師和學生來說，這個首次推行的動物護理課程都是豐盛的旅程。作為導師，我們看到學生不斷成長，對動物需要的認識也日益加深。」

她補充：「他們在工作和照顧動物時也變得更有自信。而各學生則結交到來自香港不同院校的新朋友。到課程完結時，他們更明白做跟動物有關的工作需要甚麼條件，也更了解自己將來想從事甚麼跟動物相關的職業。」

動物護理課程的意念最初由教育局提出，與城大專業進修學院合辦，動物醫學院積極支援，參與課程設計。課程目標在於啟發香港中學生對動物護理的興趣，讓他們會考慮在畢業後投身保障動物健康和福祉的事業。

單元一至單元三較著重理論基礎，涵蓋範圍包括動物福利五大框架、各種動物道德觀、動物學習和行為、解剖學及生理學。單元四及單元五中的實地考察和技巧學習等活動，讓學生將單元一至三的知識應用在實際情景中。學生也要作不同動物的護理評估，讓他們應用自己喜歡的學習方法一展所長，評估項目包括寫作測試、檢討文章、小組報告及實用技巧考試。

欲知更詳盡的動物護理課程資料，請瀏覽教育局應用學習網頁 www.edb.gov.hk/en/curriculum-development/cross-kla-studies/applied-learning/index-1.html 或城大專業進修學院網頁 www.cityu.edu.hk/ce。

Connect With Us on Social Media!

到社交媒體追蹤我們！

The College of Veterinary Medicine and Life Sciences recently launched a Facebook Page and Twitter account to bring you more information about all veterinary and life science related content from the College.

We would like to invite you to "LIKE"/"FOLLOW" us on Facebook and "FOLLOW" us on Twitter for the latest news, information about upcoming events and much more.

We hope you comment on our posts and feel free to ask any questions or share our content with friends and family.

城大動物醫學及生命科學院最近設立 Facebook 專頁和 Twitter 帳戶，為你帶來更多關於動物醫學及生命科學的資訊。

請大家在我們的 Facebook 專頁「按讚」或「追蹤」，也請「追蹤」我們的 Twitter 帳戶，以獲取最新消息、活動資訊等。

也請在我們的貼文留言、踴躍發問，並跟親友分享我們的內容。

JOIN US ON FACEBOOK:
追蹤我們的 Facebook：

https://www.facebook.com/HKVetSchool/

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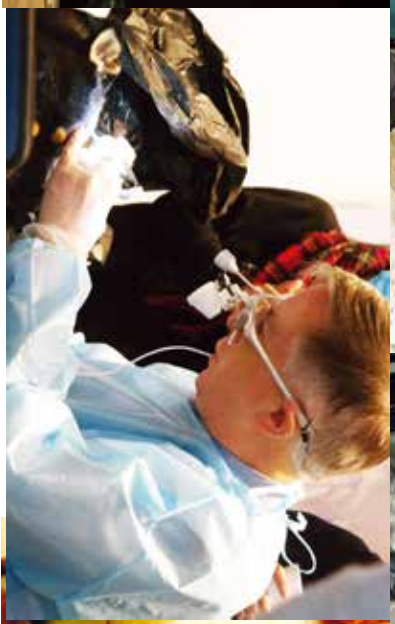
追蹤我們的 Twitter：

https://twitter.com/HKVetSchool

DID YOU KNOW

Over 3.5 million tonnes of shrimp are farmed annually with Asia Pacific producing over 80% of global output?

CONTINUING PROFESSIONAL EDUCATION



2009 - 2012

- One-Health Workshop
- Treating Heart Disease in the Dog: Now and Next
- Asian Equine Upper Airway Symposium
- Conference in Small Animal Practice
- Hands On Ultrasound Workshop

2013

- Veterinary Imaging & Cardiology Seminar
- Treating Lymphoma in Dogs and Cats
- Veterinary Nursing Workshop - Essentials in Veterinary Radiography
- Equine Colic and Abdominal Surgery Symposium
- IACUC/AEC training programme
- Surgical Evenings for Veterinary Surgeons / Veterinary Assistants
- Orthopaedic Seminar
- Mini-Conference in Small Animal Geriatric Care
- Pathology of Forensic Animal Welfare Cases
- Animal Welfare Symposium
- South China Small Animal Veterinary Conference
- Charity Seminar for Philippines

2014

- 香港禽畜業發展: 香港農業發展方向研討會
- 在香港發展高科技農業的探討：香港農業發展方向研討會
- 中國出入境檢驗檢疫模式與制度：香港農業發展方向研討會
- AOVet course - Principles in Equine Fracture Management
- Veterinary Continuing Education in Cytology and Oncology
- Orthopaedic Surgery Workshop
- Overview of fracture fixation: Orthopaedic Surgery Lecture
- Medial patella luxation and cranial cruciate ligament rupture: Orthopaedic Surgery Lecture

2015

- AOVet course - Advances in Equine Fracture Management
- Where do emerging diseases come from?
- Stress management workshop: the veterinary profession as an illustration
- Genomics of worms, with an emphasis on carcinogenic liver fluke - major opportunities for discovery and biomedical outcomes
- Emergency & Critical Care Workshop
- The Economics of Transboundary Disease Control: Case Studies of FMD Planning in the United States and New Zealand
- One Health MRSA
- Asian online course for animal welfare
- Critical Care Wet Laboratory
- Abdominal Exploration: How to do it right

2016

- Small Animal Veterinary Toxicology
- Animal as Pets and Companions to People: Animal Welfare Series
- Ophthalmology in Small Animal Practice
- An Introduction to Animal Welfare with Particular Reference to Pets: Animal Welfare Series
- Fundamentals of Anaesthesia for Nurses and Technicians
- Dientamoebiasis – an emerging zoonosis
- Companion Animal Welfare Ethics: Animal Welfare Series
- Veterinarians and Mental Health: How to be a Veterinarian AND be happy?
- Chemotherapy in Veterinary General Practice
- "Animal Welfare Protection?" Law & Action: Animal Welfare Series
- Regional Transboundary Animal Disease Workshop
- Animal Behaviour I: Dog Behaviour & Training "Partnering up with your dog": Animal Welfare Series
- Animal Behaviour II: Animal & Children Interactions: Animal Welfare Series
- Antimicrobial Resistance - A Global Epidemic
- Caring for Senior Pets: Animal Welfare Series
- 'Keeping your eye in' - A seminar in companion animal ophthalmology
- Wet Lab in Veterinary Local Anaesthesia
- Workshop in Monitoring Veterinary Anaesthesia
- Animal Population Management: Animal Welfare Series
- Eleven metre baleen whale species not recognised until the end of the 20th century
- Caring for Senior Pets II - Quality of Life and End-of-life Care & Decisions: Animal Welfare Series

2017

- Host switching of herpesviruses - species specificity is no more
- Time to Act: Decisions for Emergency Surgery
- Current and Future - Swine Breeding Management
- Endodontics: Good health comes from within
- Antimicrobial resistance - Current evidence gaps for informed public health risk management
- Pathobiology at SVM, CityU: Getting things started
- The Role of Veterinarians in Aquaculture
- Stepping Out Deeper into the Waters: The Increasing Role of Veterinary Medicine in Aquaculture
- Birds, People and Avian Influenza
- AOVET Focus Course - Diagnosis and Management of Common Fractures in the Thoroughbred Racehorse
- AOVET Course - Principles in Small Animals Fracture Management
- Infection Control in a Clinic
- Becoming National and International Leader in Aquatic Animal Veterinary Medicine
- WASAVA One Care Particatpory Approaches in Human Behaviour Change for Animals online course
- Health and Production Management on Commercial Pig Farms in Europe
- A holistic case-based approach to Clinical Pathology results interpretation
- Transportation of Horses and The Implications for Health and Welfare
- The Itchy Infected Skin
- Practical Haematology Workshop
- Management of Addisonian Crisis
- Demodex in Dogs
- A visit to the veterinary mind temple
- New Zealand's Animal Welfare Strategy
- Waterworks Matters: A practical workshop looking at the diagnosis and treatment of urinary tract disease
- Basic Ultrasonography techniques for the General Practitioner
- Neuropathology and the issue of special stains needed to evaluate myelination and axonal changes: Lecture Series on Pathology of laboratory Animals
- Importance of a necropsy programme as part of a holistic sampling plan plus why we need to sample normal abnormals to develop a library: Lecture Series on Pathology of laboratory Animals
- Mouse necropsy support in a biomedical research facilities and the pathology of prevalent mouse diseases: Lecture Series on Pathology of laboratory Animals
- Lab animal microbiology and how a lab on our door step allows us to better sample our animal models: Lecture Series on Pathology of laboratory Animals
- Post Graduate Continuing Education in Advanced Animal Welfare Online Course

2018

- Emergency and Critical Care Workshop: ACVECC Certified CPR course. Dr Dan FLETCHER
- Animal Welfare Webinar Series: Animal Welfare in the Veterinary Clinic. Dr Natasha LEE
- Veterinary Laboratory Techniques Series: Blood Analysis – make it perfect. Dr. Jason WONG, Ms Fannie TSANG and Ms Isabelle NG
- Dermatology seminar: Atopic dermatitis. Dr Charles CHEN
- Symmetric dimethylarginine (SDMA) - The New Renal Biomarker. Dr Jennifer OGEER
- Feline Medicine Webinar Series. Prof Danielle GUNN-MOORE
- Veterinary medicine and the Law. Dr Bernard MURPHY
- How to get the most out of your veterinary diagnostic laboratory. CityU Veterinary Diagnostic Laboratory
- Feline Nutrition Seminar. Dr Susan LITTLE
- Dermatology seminar: Otitis externa. Dr Stefan HOBI
- Pharmacology and Endocrinology seminars. Prof Jill MADDISON and Prof David CHURCH
- Clinical reasoning case based workshops. Prof Jill MADDISON and Prof David CHURCH
- Animal cruelty seminars & workshops. Dr Paula BOYDEN and Prof Ranald MUNRO
- UFAW 2018 Animal Welfare across Borders Conference.
- Veterinary practice management & mental health seminars and workshops.