All critters great and small

School of Veterinary Medicine

City University of Hong Kong

香港城市大學動物醫學院 通訊





City University of Hong Kong - School of Veterinary Medicine

in collaboration with Cornell University



第五期 ISSUE

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First Veterinary Medicine Programme Ready in Hong Kong 香港首個獸醫課程準備就緒

With the launch of Hong Kong's first-ever Bachelor of Veterinary Medicine (BVM) programme, aspiring veterinarians no longer need to leave Hong Kong to pursue their professional ambitions. Instead, they can train at City University of Hong Kong (CityU) with its unique six-year programme.

On 15th September 2016, CityU in collaboration with Cornell University announced the launch of the first Bachelor of Veterinary Medicine programme in Hong Kong.

Modelled on Cornell's curriculum, the BVM emphasises four topics of high interest and relevance to Hong Kong and the surrounding region, namely, emerging infectious diseases, food safety, aquaculture and animal welfare.

To further promote this newly introduced programme to prospective students, School of Veterinary Medicine staged an elaborative information counter with interactive teaching tools of veterinary medicine at the CityU Information Day on 15 October 2016. The SVM booth and admission talk attracted lots of interested secondary school students and parents and proved to be a fruitful and meaningful platform to let students learn more about us.



Students try out the haptic cow simulator. 學生試用觸感牛模擬器。



Demonstration of animal health check. 動物身體檢查示範。



The programme opened for applictions in mid October 2016. During the three and a half months application period, up to early February 2017, an overwhelming response was received, reflecting the strong local demand and the desire to pursue veterinary medicine in Hong Kong.¶

香港推出首個獸醫學學士課程,令有志成為獸醫的人無須離開香港追求專業目標,而得以留在本地修讀香港城市大學獨有的六年制課程。

2016年9月15日,城大與康奈爾大學宣布推出香港首個獸醫學學士課程。該課程以康奈爾大學的課程為藍本,並強調加強跟香港和鄰近地區相關的四大重點範圍,包括新興人畜共患疾病、食物安全、水產養殖和動物福利。

動物醫學院為向準學生推廣這個新推出的課程,於2016年10月16日的城大資訊日設置一個精心設計的資訊攤位,並展示獸醫學的互動教材。動物醫學院的攤位和入學講座吸引眾多對課程有興趣的中學生和家長,提供一個既充實又有意義的機會能讓學生進一步了解動物醫學院。

課程於2016年10 月中開始接受申請,直至2017年2 月初的短短三個半月的入學申請期間,我們接獲的反應 極之踴躍,反映在香港修讀獸醫的需求極大,對修讀獸 醫的興趣非常殷切。¶



Professor Philip Stott gives a briefing to prospective parents Philip Stott 教授為家長講解。

SVM is ready to welcome the first cohort of BVM students

動物醫學院準備迎接香港第一批獸醫學學士課程學生 in Hong Kong



SVM receives a Letter of Reasonable Assurance from the Australasian Veterinary Boards Council



動物醫學院獲澳新獸醫管理局理事會頒合理保證信

• • •

The School of Veterinary Medicine (SVM), a project in collaboration with Cornell University, strives to provide high quality education opportunities in veterinary medicine for the Hong Kong community. To this end, we engaged the Australasian Veterinary Boards Council (AVBC), one of the three internationally credible professional accreditation bodies for veterinary schools, and sought their opinion on our veterinary school, curriculum and facilities.

The AVBC has a specialist sub-committee that accredits the veterinary programs in Australia and New Zealand, and by extension through a mutual recognition agreement, also veterinary schools in the United Kingdom. That committee, the Veterinary Schools Accreditation Advisory Committee (VSAAC), is chaired by Emeritus Professor Norm Williamson from Massey University, New Zealand.

VSAAC has now visited SVM twice, in December of 2015 and 2016, respectively, the latter visit being a full site visit with a team of eight distinguished veterinarians from Australia and New Zealand. They spent a full week at SVM, and toured its facilities, talked to its faculty and senior management and assured themselves that everything was in place for a first intake of students for the autumn of 2017.

The process is guided by an Accreditation Standards Manual, a 200-page document that lists criteria for 12 standards, ranging from assessment of the university's structures and finances, to outcomes assessment for the "final product", the veterinary graduates.

The Board of AVBC, at its most recent meeting, assessed the report of the visiting team and decided to give SVM the full tick of approval, "Reasonable Assurance" which means that we have satisfied all 12 standards, and, in fact, received two commendations for our commitment to research and continued professional development in Hong Kong and the Region, as well as for the rigor and quality of CityU's outcomes assessment.

Members of the AVBC and SVM at the Sha Tau Kok Aquaculture Research Centre site inspection

澳新獸醫管理局理事會和動物醫學院成員於沙頭角水產養殖研 究中心進行實地考察。





This is a great start for our BVM and sets us up for future growth – this has already translated into overwhelming applications places in this highly desirable course – the result of hard work at SVM and CityU.

AVBC/VSAAC will continue to monitor the growth of our school, and are expected back in 2018/2019 for another visit. This kind of feedback, also on our annual reports, will give further assurances that we are staying on the right path for our first class of graduates in 2023.¶

動物醫學院與康奈爾大學致力為香港社會提供高質素的獸醫課程,我們並諮詢三大國際認可的獸醫學院專業認證機構之一—澳新獸醫管理局理事會,聆聽他們對城大動物醫學院的課程和設施的意見。

澳新獸醫管理局理事會轄下的專門小組委員會負責認證澳洲和新西蘭的獸醫課程,並透過互相承認協議延申認證英國的獸醫學院。該專門小組委員會名為「獸醫認證諮詢委員會」,由新西蘭梅西大學名譽教授 Norm Williamson擔任主席。

獸醫認證諮詢委員會於2015年和2016年的12月對動物 醫學院進行認證考察,後者是一個全面的考察,考察團體 由八位澳洲和新西蘭的傑出獸醫組成。他們在動物醫學院 逗留一個星期並參觀所有設施,並與學院的資深管理層交 流,確保2017年秋天當第一批學生入讀時,學院一切已 準備就緒。

該考察過程以「認證標準手冊」為指引,該200頁的文件列出12項認證準則,這些準則涵蓋由大學結構及財務評估,到"完成品"即獸醫學生的結果評估。

澳新獸醫管理局理事會的董事局在最近會議中評估了考察團隊的報告,並決定給予動物醫學院完全週關——「合理保證」,表示我們符合12項認證準則,並且獲得兩項表彰,包括我們對香港及區內的研究和持續專業發展的承諾,以及城大的結果評估的嚴謹和質素。

這是動物醫學院的一個好開始,為我們將來的發展奠下 穩妥基礎。這穩妥基礎上已由數以百計的高質素入學申 請者反映出來。此課程有此踴躍反映動物醫學院和城大 努力的成果。

AVBC/VSAAC 將繼續留意課程的發展,並預計在 2018/2019 年再次到訪。 我們的年度報告並會匯報有 關進展,確保我們將在2023年的第一屆畢業生建立穩健 的道路。¶

AVBC's 12 Accreditation Standards 澳新獸醫管理局認證程序 十二項認證標準

- 1. Organization 組織
- 2. Finances 財務
- 3. Facilities and Equipment 設施設備
- 4. Animal Recourses 動物資源
- 5. Information Resources 信息資源
- 6. Students and Learning Support 學生與學習支援
- 7. Admission and Progression 入學及進度
- 8. Academic and Support Staff 學術和支援人員
- 9. Curriculum 課程
- 10. Assessment 評估
- 11. Research Programs, Continuing and Higher Degree Education 研究課程, 持續高等教育
- 12. Outcomes Assessment 成效評估





Sha Tau Kok Aquaculture Research Centre - SVM's First Extension Facility

沙頭角水產養殖研究中心 — 動物醫學院首個擴展設施







Sha Tau Kok Aquaculture Research Centre, the first extension facility of SVM, is located in the north-eastern part of Hong Kong. It is about 180,000 square feet in size, with abundant species and rich biodiversity suitable for aquaculture initiatives. The Centre will be a crucial part of aquatic research and education in SVM, with the main focus on aquatic biology, breeding of aquatic species, fisheries management and conservation.

The farm comprises a variety of aquaculture facilities, notably a recirculation system, raceways systems, disinfection systems, etc. Other than the aquaculture facilities, a fish culture pond is also included in the area and is well-equipped with advanced pumping and filtration system. There are numerous species of endemic fish species in the pond, including seabreams, snappers, gobbies, mullets and scats. The pond is also inhabited by 35 giant groupers which will be used as broodstock for subsequent breeding research and projects.

The mission of the centre is to promote and expand the aquaculture industry in Hong Kong and the Region, to increase the productivity, innovation and profitability of aquaculture operations, while respecting sustainability and good practice. The Centre is going to support teaching and research activities of the SVM from Bachelor degree to post graduate research. The establishment of the Aquaculture Research Centre will strengthen the understanding of students and even the general public on the local aquatic industry and also promote public awareness on the importance of conservation of our fisheries resources and marine environment. ¶

動物醫學院首個擴展設施——沙頭角水產養殖研究中心位於香港東北地帶,佔地180,000平方呎,擁有豐富的物種和生物多樣性,適用於發展水產養殖研究。該中心將會成為動物醫學院水產養殖研究和教育的重要部分,焦點在於水產生物學、水產物種繁殖、漁業管理和保育。

該中心包括多種水產養殖設施,最觸目的是循環系統、滾道系統和消毒系統等。除了水產養殖設施外,該中心還設置一個水產養殖池,配備先進的泵水和過濾系統。池塘中有多個特有魚類品種,包括鯛魚、紅鮋、林哥、烏頭、蝦虎魚、金古。池塘也住了35條龍躉,將用作繁殖研究項目的種原。

沙頭角水產養殖研究中心旨在推廣和擴展香港和地區的水產養殖業,提升其生產效率、水產養殖運作的創新及牟利能力,同時配合可持續發展及良好作業的目標。該中心將支援動物醫學院由學士課程到研究生課程的教學和研究活動。水產養殖研究中心的成立將加強學生和普羅大眾對本地水產養殖業的了解,以及令公眾更關注保護本地漁業資源和海洋環境的重要性。¶







Hong Kong developed as a fishing village long before it became the financial centre it is known for today. The mariculture industry today in Hong Kong is relatively small with around 900 marine fish farms distributed amongst 26 fish culture zones around the coast of Hong Kong and covering an area of around 200 hectares (AFCD 2016).

However, aquatic production in Asia represents over 90% of global production whilst China alone has over 60%. The demand for aquatic food worldwide is increasing significantly year on year and at the same time there is pressure for more efficient production and safe food while taking into account environmental and sustainability issues throughout the entire aquatic food value chain including issues such as the judicious use of veterinary drugs and animal welfare.

City University of Hong Kong's School of Veterinary Medicine, in collaboration with the University of Stirling (Scotland), will be introducing an MSc in Aquatic Production and Veterinary Health in September 2017.

This programme responds to the large global prevalence of aquatic products and the rising demand in the aquatic industry in Mainland China and Hong Kong. Most aquatic-related master's programmes in the region approach aquatic production from marine biology, ecology, or environmental perspectives.

This MSc programme is differentiated by its focus on aquatic production with a veterinary element, and will attract industry professionals who are seeking to deepen their knowledge in order to advance their careers moving on from production roles into specialist roles.

The main objective of the programme is to give students training in the wide range of disciplines and skills necessary for the investigation, prevention and control of aquatic animal diseases. Students will gain an understanding of the biology, husbandry and environment of farmed aquatic species, in addition to specialist expertise in aquatic animal diseases. The graduates will be able to appraise aquaculture operations and contribute to management decision making. It is also intended to prepare students who later plan to pursue a PhD in the area of aquaculture science. The one year full-time programme will begin in September 2017.¶

早在香港成為今天的金融中心之前,我們曾經發展成為一個漁村。現今香港的海水養殖業規模相對較小,在香港海岸附近的26個魚類養殖區中,約有900個海水養漁場,約佔香港海域總面積200公頃(漁農自然護理署2016資料)。

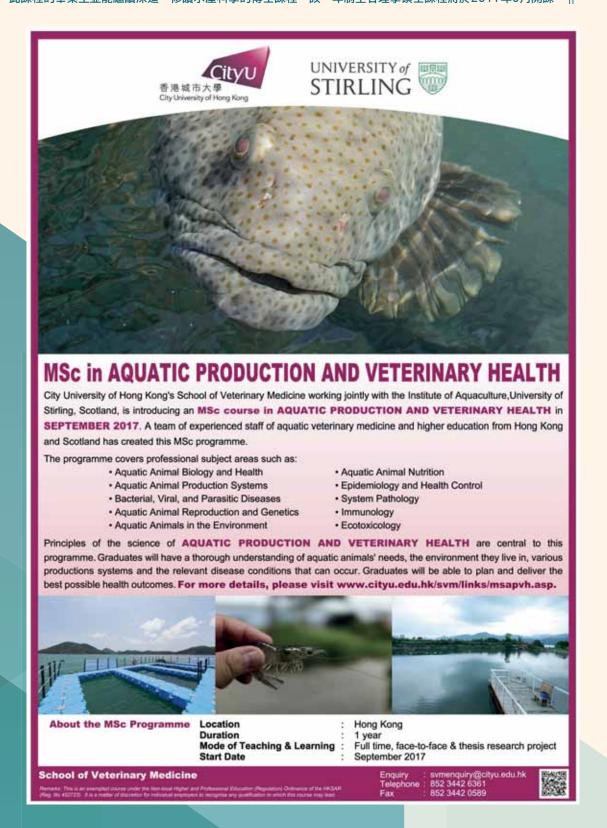
然而,亞洲生產的水產食品已佔全球產量達90%,單是來自中國的生產已佔超過60%。世界各地對水產食品的需求連年顯著增加,因而對提高生產效率和加強食物安全造成一定壓力。同時,在整個水產食品的生產鏈上,人們也要思考獸醫明智用藥及動物福利等環境和可持續發展的議題。

城大動物醫學院與蘇格蘭斯特靈大學合作,於2017年9月推 出理學碩士(水產及獸醫衞生學)課程。該課程回應全球對水 產食品的需求,也切合對中國大陸及香港的水產養殖業的持續 增長的趨勢。



區內跟水產養殖有關的碩士課程,大多從海洋生物學、生態學或環境學角度探討水產養殖,而我們的理學碩士(水產及獸醫衞生學)課程與別不同,在於其焦點是有獸醫元素的水產養殖,有助有志深化知識的行內專業,令他們在事業上由生產角色提升得更加專門。

該課程的主要目標是讓學生在多範疇的學科上獲得訓練,並培養出調查、預防及控制水產動物疾病的所需技巧。學生除了學會處理水產動物疾病的專業知識外,並會了解水產動物的生物、養殖和環境情況。畢業生將能評估水產養殖業務,並參與管理決策過程,此課程的畢業生並能繼續深造,修讀水產科學的博士課程。該一年制全日理學碩士課程將於2017年9月開課。¶







1. Where are you from originally and where did you study veterinary medicine?

I am from Germany where I studied veterinary medicine between 1979 and 1984.

2. You originally wanted to be a cattle vet? What happened?

Difficult to say, but it was probably a mix of feeling insecure about my clinical skills and worrying that I might become bored too soon. During my studies, I chose to work for a few weeks in a German development project in Colombia, South America, and that introduced me to the possibilities of population animal research, specifically veterinary epidemiology. I also realised that the skills provided by my veterinary training, even though they were more academic than practical, allowed me to make a useful contribution in developing as well as developed countries anywhere around the world.

3. What are your particular interests in veterinary medicine?

I want to make a contribution to a better understanding of the reasons behind the spread of diseases between animals and also from animals to humans. Rather than conducting experiments in a laboratory, I am doing this in a real world context and enjoy in particular that it provides me with an opportunity to learn about other people and cultures.

4. What are your most memorable events or experiences during your long career in veterinary medicine?

Most memorable experience for me have been the few weeks I spent in Somalia in 1987 where we worked with nomadic herds and at local slaughterhouses, and also the time I spent in New Zealand studying bovine tuberculosis in wild possums by catching and tracking the animals on a beef-sheep farm, with my wife actually.

5. What does Asia need most from the veterinary profession and how can CityU's SVM help achieve this?

The challenges are enormous, particularly given the amazing pace of economic development in many parts of Asia. Veterinary services will have the key role to play in food safety standards. Besides, food security remains an issue in some parts of Asia. Human population growth together with increasing demand by the urban middle class for meat protein from less efficient feed converters such as pigs and ruminants may even increase the strain on food quantity. Emerging infectious diseases, including antimicrobial resistance, are already a major issue in Asia. The veterinary profession has an essential role to play in dealing with all these challenges. A pre-requisite is the access in the region to veterinary education at a high standard in the region. SVM has a unique opportunity to become the regional Centre of Excellence in veterinary education. This includes and extends to becoming a scientific knowledge hub for One Health, which needs to be tailored to regional needs since these are different from those of any other continent.

6. Tell us about the One Health Paradigm.

When I embarked on my research career, I soon realised that for dealing with complex animal health challenges, we have to learn from and collaborate with various other scientific disciplines, such as those in the medical and environmental sciences, and I guess that is why I ended



up in veterinary epidemiology. During the last 5-10 years, the One Health paradigm which came along' emphasizes the importance of bringing together human, animal and environmental health, based on interdisciplinary rather than single discipline or multi-disciplinary research approaches. This also includes what in my view is the most difficult challenge, and that is the need to integrate knowledge generated by social science disciplines, such as economics, behavioural economics or ethnography with that produced by natural science disciplines. This is based on the realisation that human behaviour is a key factor behind the emergence and spread of zoonotic infectious diseases. Effective disease prevention and control therefore in many instances requires the development of interventions that result in human behaviour change, and the knowledge for this to be achieved is generated by the social sciences, not the natural sciences.¶

1. 請問你來自哪個國家,又在哪兒讀獸醫呢? 我來自德國,在1979至1984年在德國讀獸醫。

2. 你本來想當治療牛隻的獸醫嗎?後來發生甚麼事 了?

這件事一言難盡,想來也是源於自己的複雜感受,一方面 我對自己的臨床技巧不夠信心,又擔心自己很快會悶。我讀 獸醫時,在南美洲國家哥倫比亞逗留幾個星期,為了進行 一項德國的發展項目,因而有機會認識動物人口研究的可 能性,尤其是獸醫流行病學。我也因此發現獸醫訓練帶給 我的技巧雖然學術性多於實際性,卻讓我能在世界各地不 論發展中國家或已發展國家作出貢獻。

3. 動物醫學之中最令你有興趣的是甚麼?

我希望作出一點貢獻,令大家更明白動物之間傳染及動物 向人類傳染的疾病的背後原因。我不用埋首在實驗室研究 ,而是在真實世界裡達成目標,我最享受動物醫學的,就 是它讓我有機會認識其他人和其他文化。

4. 你投身獸醫專業多年,最難忘的事情或經驗是甚麼?

我最難忘的是1987年在索馬利逗留了幾個星期,跟遊牧民 群合作,又要在當地屠場工作。我也很難忘在新西蘭藉着 捕捉和追蹤牛羊養殖場上的動物來研究野生負鼠的牛結核 病,當時我的太太也跟我在新西蘭。

5. 獸醫專業之中,亞洲地區最需要的是甚麼呢? 城大動物醫學院如何達到這個目標?

今天社會的挑戰很大,尤其亞洲很多地方的經濟發展增 長驚人,獸醫服務因此也要拼命趕上,即使不求令食物 安全改進,起碼要保持現有的水平。

除了食物安全外,亞洲某些地方要保障食物產量也不容 易,因為人口增長令城市中產階級對肉類蛋白質的需求 大增,偏偏豬和反芻動物等飼料轉化率卻在降低,因此 加劇對食物產量的壓力。而新興傳染性疾病如耐藥性也 是亞洲正在面對的主要問題。

獸醫專業在應付這些挑戰上擔當重要角色,但要解決問 題的先決條件是區內要有高水平的獸醫教育。動物醫學 院有此獨特良機,矢志成為區內獸醫教育的卓越中心, 包括成為健康一元化的科學知識樞紐,這個知識樞紐要 切合區內需要,因為我們的挑戰跟其他地方不同。

6. 請告訴我們甚麼是健康一元化典範?

當我修讀學士課程時,我們要學會相信動物健康和動物 福利的進展主要依賴課程裡多個學科的知識,包括病理 學、微生物學、病毒學、手術等等。直到我投身學術研究 後,很快發現要應付複雜的動物健康挑戰,我們要向不同科 學範疇如醫學和環境科學學習,互相合作,我想這就是為 甚麼我會投身獸醫病理學中。

在最近的5至10年,健康一元化典範冒起,強調根據跨 學科研究方法將人類、動物和環境健康結合的重要性, 而非像以前的單學科或多學科研究方法。這就是我認為 最難的挑戰,即要把許多社會科學範疇如經濟學、行為 經濟學或人類學的知識,跟自然科學範疇的知識結合起

這是基於我們明白了人蓄共患傳染性疾病的出現和傳播 背後,人類行為才是主要因素,要達致有效的疾病預防 和控制,自然就得先改變人類的行為。而改變人類行為 的知識,是來自社會科學而非自然科學。¶





Veterinary Diagnostic Laboratory Development on Track

動物醫療檢驗中心如期進展



CityU Senior Facilities Manager Mr PK Chan (centre) presents a symbolic key to signify the completion of the veterinary diagnostic laboratory renovation to the Laboratory Director Dr Fraser Hill (left) and the Dean of the School of Veterinary Medicine Professor Michael Reichel (right).

城大動物醫學院院長Michael Reichel教授(右)、動物醫療檢驗中心總監Fraser Hill獸醫(左)和城大高級設施經理陳保強先生(中)於動物醫療檢驗中心交收儀 式上。

After extensive renovation, the former television media suite located in the Academic One building of City University has been transformed into a multidiscipline veterinary diagnostic laboratory. Incorporating the latest in safety equipment, including security controlled access to every room and carefully controlled air pressure, the laboratory will enhance the veterinary diagnostic capacity of the School of Veterinary Medicine for the veterinarians of Hong Kong and the region.

The laboratory plans to offer state-of-the-art diagnostic testing when it opens later this year. Laboratory Director, Dr Fraser Hill said equipment is being delivered and fitted into the laboratories and staff recruitment is proceeding rapidly.

A team of highly qualified staff is being assembled to operate the laboratory including technical, administrative and quality assurance personnel. Employing specialist veterinary pathologists ensures expert analysis of tissue samples and a local presence will allow rapid case turnaround time.

Brand-new, technologically advanced equipment installation will enable the laboratory to offer a full range of diagnostic tests and investigate new testing opportunities while contributing to student teaching and cooperating in the SVM research projects.

Developing and opening a Veterinary Diagnostic Laboratory demonstrates CityU's commitment to establishing a world leading veterinary school within Asia.¶









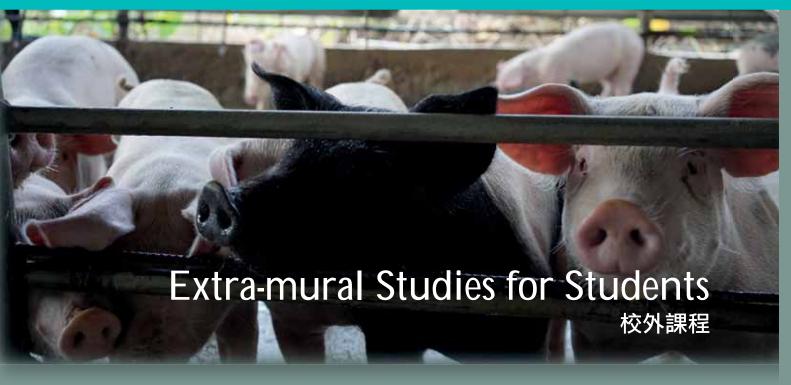
位於香港城大市學學術樓(一)的前電視媒體室, 經過全面翻新而改建成的全方位動物醫療檢驗中心, 安裝了最先進的安全設備,每個房間均設置保安控 制裝置,並有嚴謹的空氣壓力控制。該動物醫療檢 驗中心將令城大動物醫學院及香港和區內的獸醫提 升診斷能力。

動物醫療檢驗中心計劃在今年稍後日子啟用,提供最先進的診斷測試,檢驗中心總監Fraser Hill獸醫指檢驗中心設備正陸續運送和安裝中,而檢驗中心的員工招聘也在火速進行。檢驗中心需要一個高質素的員工團隊來運作,這些員工包括技術、行政和質素保證的人員。檢驗中心也會聘用獸醫病理專家,以確保組織樣本的專業分析,而檢驗中心位處本港能加快化驗結果。

新穎和高科技設備裝置有助檢驗中心提供全方位的 診斷測試,並能鑽研最新測試機會,同時與動物醫 學院的教學和研究項目通力合作。香港城市大學致 力發展和營運動物醫療檢驗中心,展示城大矢志履 行在亞洲建立世界領先動物醫學院的承諾。¶







All internationally-accredited veterinary schools and colleges strive to appoint the highest-qualified staff in each discipline and to provide state-of-the art facilities so that the intra-mural learning environment is of as high a standard as possible. However, the staff do not have a monopoly on experience and expertise and the facilities cannot represent the entire spectrum of animal and veterinary enterprises in which the students as graduates may find themselves working in the future. Hence, all veterinary schools and colleges require students to learn from professional animal managers or veterinarians. narians in extra-mural environments. In post-graduate veterinary programmes extra-mural studies (EMS) are a pre-requisite for entry, but in undergraduate programmes EMS is undertaken within the programme, but outside of semester time. The importance of exposure to a range of experts, experiences and environments is recognised by the international accrediting bodies such as the Australasian Veterinary Boards' Council (AVBC), and the AVBC requires a minimum of 12 weeks of animal husbandry EMS and 16 weeks of clinical EMS.

The curriculum of City University's Bachelor of Veterinary Medicine (BVM) incorporates the AVBC requirements as 'clinical milestones'; that is, skills or experiences that are requirements for graduation with a BVM but which are outside of the course structure.

Husbandry EMS is preceded by a 2-week intra-mural structured course ('Pre-EMS')

during which students will attain some basic skills and understanding that will equip them for extra-mural work with the major domestic species of animals including farmed fish. Husbandry EMS will be undertaken in one-week blocks and there will be a requirement for a minimum period with enterprises dealing with each of the major domestic species but provision for choice of species for the last few weeks.

Similarly, clinical EMS will have compulsory requirements for placements in each of the major types of veterinary practice but there will be provision for choice of veterinary enterprise for the last few weeks. 'Veterinary enterprise' will be broadly defined and may include, for example, a pharmaceutical company that employs a veterinarian who is willing to host students undertaking EMS.

EMS requires many partners willing to provide practical learning opportunities. The School of Veterinary Medicine is grateful to the Hong Kong farmers who have already indicated their willingness to host students for husbandry EMS and the veterinarians who have also expressed interest, even though for them clinical EMS is several years away. There may well be a spin-off down the track: Participation in clinical EMS is an informal but time-honoured means by which veterinary practices assess the capabilities and attributes of students and find, amongst them, future employees.¶



所有獲國際認可的獸醫學院均致力招聘各個學科的專才,並提供高端及先進的設施,優化校內的學習環境。然而,學院的教職員並不能完全代表整個行業的經驗和專業知識,而校內的設施亦不可能涵蓋整個動物及獸醫業多元化的運作環境。因此,所有獸醫學院均會要求學生透過修讀校外課程向在職動物管理專家或獸醫學習相關的經驗和專業知識。

有別於獸醫學碩士課程(即申請人必須曾修讀相關的校外課程),校外課程是獸醫學學士課程的重要一環。獸醫學本科生會被安排於課堂以外的時間修讀校外課程。事實上,大部份獸醫學課程的國際認證組織均認為獸醫學生必須接觸不同範疇的專業、經驗及環境。例如,澳新獸醫管理局理事會要求獸醫學本科生修讀最少12個星期的「動物畜牧校外課程」,以及最少16個星期的「臨床校外課程」。

香港城市大學的獸醫學學士課程採納澳新獸醫管理局理事會的「臨床里程碑」要求,即學生需要在課堂以外學習相關的技術和經驗,以達致畢業的要求。

在修讀「動物畜牧校外課程」之前,學生必須修讀一個為期兩星期的「校內動物畜牧預備課程」,學習動物畜牧工作(包括主要家畜以及養殖魚類)的基本技巧和知識。在正式修讀「動物畜牧校外課程」時,學生需要在不同的企業實習一段時間,學習處理各類主要家畜,他們亦可在該課程的末段時間根據個人喜好選擇於個別企業實習。

「臨床校外課程」同樣要求學生於不同的獸醫診所進行實習工作,學生亦可在該課程的末段時間根據個人喜好選擇於個別的 獸醫診所學習。此外,「臨床校外課程」亦可能在聘有獸醫並 願意為獸醫學生提供實習機會的製藥公司等進行。

香港城市大學動物醫學院感謝所有願意參與「動物畜牧校外課程」的農場以及「臨床校外課程」的獸醫同業,為獸醫學生提供寶貴的實習機會。我們相信,透過參與「臨床校外課程」, 獸醫同業亦可評估各獸醫學生的資質與能力,從而招攬優秀的畢業生。¶







CityU PAVC Case Study 城大太平道寵物 診所病例分享

Peace Avenue Veterinary Clinic was acquired by CityU in September 2016. Following is the first of a series of case studies that highlight the work that goes on at CityU's companion animal clinic.

城大於2016年9月收購太平道寵物診所,進行一系列病例個案研究,以下是我們突顯城大寵物診所工作的最早期例子:

Overview

Pemphigus foliaceaus belongs to an uncommon group of auto-immune skin diseases called pemphigus complex. Pemphigus is characterized by acantholysis, which is the loss of intercellular connections between epidermal cells. The separated keratinocytes become rounded basophilic acantholytic cells. Pemphigus Foliacaeus is the most common autoimmune disease in cats but all in all a rare condition. No sex, breed or age predisposition has been reported. The pinnae, face, clawbed and nipples are common affected areas. Those areas become very crusty and a cheesy exudate might accumulate around the claws. Pruritus can be mild to severe and affected animals might be lethargic, febrile and anorexic.

Diagnosis is typically made by histopathology but clusters of acantholytic cells can be supportive. Affected animals need immunosuppressive treatment and usually have a guarded to good prognosis.

History

Tung Tung is a 4-year-old, female spayed local cat. She was referred to the dermatology unit of CityU PAVC for recurrent pododermatitis.

The skin problem started around one year ago and doesn't seem to be pruritic. Otherwise the cat is in good shape and doesn't show any systemic signs.

Several courses of different antibiotics and antifungals didn't bring any improvement.

Examination and Diagnostics

On presentation at our clinic, the cat shows a good general condition with normal vital parameters. There is multifocal hypotrichosis, mild erythema and crust formation esp at the dorsal nose and both pinnae. In addition a mild to moderate paronychia at multiple claws of different paws can be detected. The rest of the hair coat looks very nice and smooth.

Further investigations (Wood lamp, Trichogram) didn't bring any abnormal findings. In several cytology samples clusters of acantholytic cells could be detected but no bacteria or fungal organisms.



Diagnosis

Based on the history, affected areas, clinical signs and the cytology findings, a tentative diagnosis of pemphigus foliacaeus could be made. Skin biopsies for a definitive diagnosis were declined by the owner.



14 days after the initial presentation the cat went into complete remission. At the moment we are slowly tapering the systemic prednisolone so that we hopefully can control the disease just by topical medications.







Treatment

Oral prednisolone in combination with a topical steroid spray and a disinfectant was prescribed. The first weeks the cat also got a gastric protectant due to the high-dose steroid treatment.¶

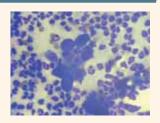
概括

天皰瘡屬於一種罕見自身免疫性皮膚病,稱為天皰瘡綜合症,特徵在於棘層病變,即表皮細胞之間的細胞連接喪失,分離的角質形成細胞因而變為圓狀嗜鹼性棘層細胞。 天皰瘡是貓隻之中最常見的自身免疫性疾病,但仍然是罕見情況,至今未有報告顯示該疾病的性別、品種和年齡傾向。最常感染的身體部位包括耳殼、臉部、爪部和乳頭,受感染部位的皮膚變硬,爪子周圍積聚膿物,瘙癢程度由輕微至嚴重,受感染動物會有昏睡、發熱和厭食病徵。我們可透過組織病理學進行診斷,也可透過棘狀細胞群作出診斷。受感染的動物需要免疫抑制治療,通常有良好的預後。

病歷

東東是一隻4歲的雌性本地貓,因足皮膚炎復發而被轉介到城大太平道寵物診所的皮膚科。牠的皮膚病約在一年前出現,但似乎並不瘙癢,否則東東的狀態頗佳並無任何系統性病徵。雖然進行過多種抗生素和抗真菌藥物的治療,但都沒有令病情改善。

檢查和診斷



我們在診所進行病情簡介,東東的一般情況良好,也有正常的生命參數。牠有多點稀毛症、輕度紅斑外皮形式,尤其在鼻側和兩個耳殼。此外,牠的手掌腳掌多個爪子有輕微至中度的甲溝炎,其他毛髮則漂亮光滑。我們的進一步調查(紫外光檢查、毛髮顯微鏡檢查)並無發現其他異常情況。在幾個細胞學樣本中,偵查到棘層細胞群,但沒有發現細菌或真菌生物體。

診斷

根據病歷、感染部位、臨床表徵和細胞學檢驗結果,可以對天皰瘡作出臨時診斷。寵物主人並無以皮膚活組織進行確定性診斷。

治療

東東獲處方口服類固醇、局部類固醇噴霧劑和消毒劑, 由於最初幾個星期的類固醇劑量大,因此東東也獲得胃 部護劑。

結果

在第一次病情簡介的14天後,東東病情完全緩和。我們目前正逐漸減輕系統性類固醇的劑量,希望通過局部處方來控制東東的疾病。¶

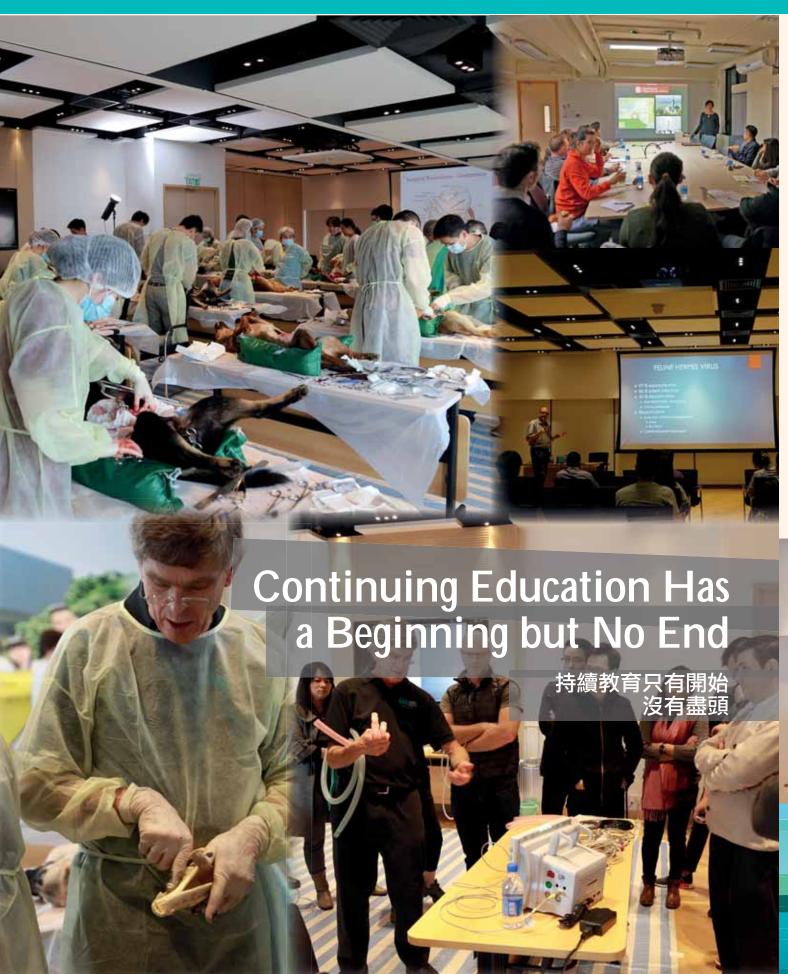






Stefan Hobi, Dr.med.vet. Edward Ho Kit Hang, DVM Dermatology Unit Peace Avenue Veterinary Clinic City University of Hong Kong 香港城市大學太平道寵物診所皮膚科







The last few months have seen a variety of CPE events at SVM. We aim to ensure that all members of the veterinary community, including vet nurses and veterinary technicians in Hong Kong, can access high quality and affordable CPE, thus maintaining a high standard of the profession.

CityU has worked very hard to provide quality hands-on workshops. Dr Tom Edwards and Dr Jacque Parker from the US army veterinary corps ran a very successful workshop in emergency surgery, attracting several participants from overseas. Dr Colin Dunlop from Advanced Anaesthesia Supplies, ran two very practical and interactive sessions in veterinary anaesthesia.

We also have a strong commitment to one health education. In the last few months, we have hosted seminars on antimicrobial resistance by Prof Mary Barton and Prof Katharina Staerk, herpesviruses by Prof Klaus Osterreider, porcine health and management by Assoc Prof Roy Kirkwood and marine mammal anatomy by Dr Tadasu Yamada.

Small animal clinicians have been well provided for with seminars ranging from oncology and ophthalmology to dentistry, presented by international speakers of high repute.¶

動物醫學院在過去幾個月舉辦過多項持續專業教育活動, 旨在確保獸醫社群內所有成員包括香港的獸醫護士和獸 醫技術人員,能夠獲取高質素又可承擔的持續專業教育, 從而維持獸醫專業的極高標準。

城大致力提供優質工作坊,來自美國的 Tom Edwards 及 Jacque Parker 獸醫主持了一個十分成功的急救手術工作坊,吸引許多來自海外的參加者。「先進麻醉用品」的 Colin Dunlop 獸醫主持兩個十分實用及互動的獸醫麻醉環節。

我們承諾促進健康一元化教育,在過去幾個月主持了一系列研討會,包括由 Mary Barton 教授和 Katharina Staerk 教授講解耐藥性,Klaus Osterreider 教授講解 皰疹病毒、Roy Kirkwood 助理教授講解豬隻健康和管理,以及 Tadasu Yamada 獸醫講述海洋哺乳動物解剖。這些研討會的範疇由腫瘤學、眼科到牙科,由在國際上有信譽的講者主持,同場還也有小動物臨床醫生。¶







International Transboundary Animal Disease Workshop (ITAD) in Hong Kong

認識跨國界動物疾病

Transboundary animal diseases that impact trade in animals and animal products worldwide were the focus of a course organised by the School of Veterinary Medicine (SVM) at City University of Hong Kong (CityU) in collaboration with the United States Department of Agriculture (USDA). The occasion marked the first time that the International Transboundary Animal Disease (ITAD) course was held in Hong Kong and the surrounding region. Over 30 veterinarians from 14 Asian countries participated in the event, which was held from 26 to 30 September 2016.

Two former Chief Veterinary Officers of the United States, Dr Alfonso Torres and Dr Peter Fernandez, discussed various kinds of ITAD diseases through lectures, discussions, and hands-on sessions, with a strong emphasis on the impact on global economies and food security and safety.

SVM undertook the mammoth task of organising the course, including the facilitation of three half-day sessions on the post mortem examination of pigs, chickens and horses. USDA speakers were ably assisted in these sessions by Dr Neel Aziz, CityU Visiting Fellow and specialist anatomic pathologist. Hong Kong experts, including Professor Malik Peiris of the University of Hong Kong, Dr Chris Riggs and Dr Peter Curl from the Hong Kong Jockey Club, and Mr Lee Ming-wai from the Food and Environmental Hygiene Department, gave guest lectures.

Feedback from participating veterinarians including those from Cambodia, Hong Kong, India, Indonesia, Malaysia, Mongolia and Pakistan was excellent. They said they gained a greater understanding of ITAD across countries and reported feeling more confident in their ability to prevent and control infectious animal diseases.¶



香港城市大學(城大)動物醫學院與美國農業部合辦課程,重點探討跨國界動物疾病對全球動物及動物產品貿易的影響。此活動標誌着跨國界動物疾病國際課程首次在香港和鄰近地區舉行。課程於2016年9月26日至30日舉行,吸引來自14個亞洲國家超過30位獸醫參加。兩名前美國首席獸醫Alfonso Torres 獸醫及 Peter Fernandez 獸醫透過講座、討論及實踐環節,探討多種跨國界動物疾病,並重點闡述這些疾病對全球經濟及食物安全的影響。

動物醫學院全力統籌是次課程,其中包括三場各歷時半天的 豬隻、雞隻和馬匹屍體解剖環節。城大客座研究員兼解剖病 理學專家 Neel Aziz 獸醫在這三場解剖環節中為美國農業部 的講者提供協助。香港大學裴偉士教授、香港賽馬會李恪誠 醫生和郭沛德醫生,以及食物環境衛生署的李明偉先生等香 港專家亦發表演講。

參加課程的獸醫來自柬埔寨、香港、印度、印尼、馬來西亞、蒙古及巴基斯坦等國家,他們對活動給予高度評價。他們表示加深了對跨國界動物疾病的認識,並對預防和控制動物傳染病的工作更有信心。¶



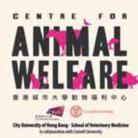




Post Graduate Continuing Education in Advanced Animal Welfare Online Course 2017

研究生持續教育高級動物福利網上課程2017







Animal welfare is a growing field of science and is gaining more recognition within the veterinary profession as a necessary competency for every veterinarian. CityU SVM's Centre for Animal Welfare (CAW) is proud to be a partner of the Federation of Asian Veterinary Associations (FAVA) in delivering to veterinary professionals in Hong Kong and around the world an online post-graduate continuing education course in Animal Welfare.

The 'Post Graduate Continuing Education in Advanced Animal Welfare' online course (2017) focuses on understanding the concepts underpinning animal welfare science, ethics and law, and how these concepts are relevant to veterinarians and other professionals working with animals. As

part of the course, participants will meet in Thailand for 5 days, during this time the online learning elements will be reinforced and participants will also learn how animal welfare can be assessed through a hands-on workshop on animal welfare assessment.

The teaching-learning materials and activities will be hosted by CityU's e-learning platform, a Learning Management System (LMS) called CANVAS. Dr. Queeny Yuen, from School of Veterinary Medicine and a 2016-graduate of the course will provide technical assistance to the participants, to help them get the most out of their learning experience on CANVAS.



The course started on 6 March 2017; besides Hong Kong, we are pleased to be receiving participants from all over the world this year, including New Zealand, Japan, Nepal, Singapore, Thailand and Malaysia.

The Learning objectives of this course are:

- * To understand the different concepts of animal welfare, ethics and law
- * To understand and practice assessing animal welfare and to learn about the various approaches to animal welfare assessment
- * To learn about the various common welfare issues in Asia
- * To get inspired to integrate animal welfare into practice, policies or teaching ¶

動物福利是一門發展迅速的科學範疇,愈來愈受獸醫專業界認可為每位獸醫必須具備的能力。城大動物醫學院動物福利中心有幸成為亞洲獸醫學會聯盟合作夥伴,共同為香港和世界的獸醫專業推出研究生持續教育動物福利網上課程。

「研究生持續教育高級動物福利網上課程2017」專注了解動物福利科學、道德和法律的基礎概念,以及這些概念對獸醫及其他跟動物相關專業的關係。在課程進行之時,參加者將於泰國進行為期五天的會面,網上學習元素將會加強,參加者透過動物福利評估工作坊來學習考核動物福利。

城大網上學習平台——「學習管理系統」CANVAS將管理教學材料,動物醫學院阮穎嫺博士以及該課程一位2016年畢業生將為參加者提供技術支援,協助參加者於CANVAS獲得最佳的學習體驗。

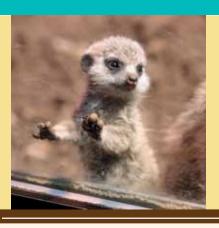
該課程於2017年3月6日展開,今年除了招收香港的學生外, 也錄取了世界各地如新西蘭、日本、尼泊爾、新加坡、泰國 和馬來西亞的參加者。



此課程的學習目標為:

- * 了解動物物福利、道德和法律的各種概念
- * 了解及學習評估動物福利,以及學習評估動物福利的各種方法
- * 學習亞洲地區各種福利議題
- * 受到啟發將動物福利融合於實踐、政策及教學上¶



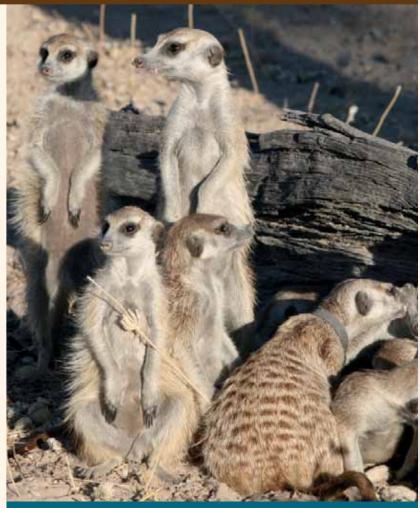


Risk Factors of Tuberculosis (TB) Related Mortality in Wild Meerkats

野生狐獴中因結核病致死的風險因素

As a veterinary epidemiologist, Professor Dirk Pfeiffer, the Chair Professor of One Health of the School of Veterinary Medicine conducts research in animal disease control in many countries around the world. One of his latest research projects investigated tuberculosis (TB) related mortality in wild meerkats. It aims to aid understanding of the epidemiology of TB among meerkats and potentially other social-living wild animal host species, as well as the control measures of this challenging disease.

Tuberculosis (TB) is a major and widespread disease of wildlife, livestock, and humans worldwide. Together with an international team of researchers, Professor Pfeiffer was involved in a retrospective study of over 2000 individually-identified meerkats, which are a group-living species, covering a 14-year period after the first confirmatory diagnosis of TB in this population in 2001. Individual- and group-level risk factors were analysed using time-dependent Cox regression to examine their potential influence on the time to development of end-stage TB.



Meerkats (Photo credit: © Stuart Patterson, Royal Veterinary College, University of London 狐獴(圖片來源:倫敦大學皇家獸醫學院Stuart Patterson)

The research conducted by Stuart Patterson has found that although disease due to TB occurs in younger animals, it is older animals that are at greater risk. At a group level, once TB is active within a group, the likelihood of others developing the disease rises drastically. However, there is weaker evidence of an environmental factor contributing to the risk of the disease. Since ageing and intra-group transmission are the key risk factors, possible measures to control TB in wild meerkats may include targeted vaccinations of groups that experience immigrations, or culling of older animals in diseased groups soon after an initial case. The paper titled "Social and environmental factors affect tuberculosis related mortality in wild meerkats" was accepted by the Journal of Animal Ecology in February 2017.¶



作為獸醫流行病學家,動物醫學院健康一元化講座教授Dirk Pfeiffer教授曾在全球多個國家進行有關動物疾病控制的研究。他其中一個最新的研究項目是調查野生狐獴因結核病致死的情況。該研究旨在加深了解狐獴和其他群居野生動物的結核病流行病學,以及如何控制這些具挑戰性的疾病。

結核病是野生動物、家畜以及全球人類一個主要廣泛傳播的疾病。Pfeiffer教授與一國際研究團隊,對超過2000隻個別選取的狐獴進行追溯研究。狐獴屬於群居動物,研究追溯期由2001年自首宗確認結核病個案起計算,為期14年。研究團隊使用隨時間變動的「Cox迴歸」模式分析個別和組別的風險因素,以評估這些因素對狐獴由發病到發展至末期結核病的影響。

Stuart Patterson的研究發現,雖然年輕的動物也會感染結核病,但老年的動物有更大的患病風險。他們在組別研究中發現,若結核病活躍於一個族群之中,同族群的動物的患病機會也會大增。然而,因環境因素引致患病風險的證據則較弱。由於老年和族群內傳染是主要風險因素,控制野生狐獴感染結核病的可行措施包括對曾有遷徒活動的族群進行針對性疫苗注射,以及一但發生首宗感染個案便在患病族群中撲殺老年動物。該論文的題目為「野生狐獴因結核病致死的社會和環境因素」,於2017年2月獲《動物生態學期刊》採納。¶







SVIVI Commu



@ CityU Alumni Home Coming Day





unity Outreach



@ Community
Pet Fair





The School of Veterinary Medicine Joins the Animal Watch Scheme

動物醫學院支持動物守護計劃

Recently the School of Veterinary Medicine was invited to join the Hong Kong Police's Animal Watch Scheme. The scheme, which was founded in 2011, is a collaboration between the Police, the Agriculture, Fisheries and Conservation Department and the SPCA (HK) and also supported by local veterinary associations and animal welfare groups.

The Scheme aims to bring relevant parties together to promote animal welfare and tackle animal cruelty through a combination of intelligence gathering, investigation, publicity and education.

Animal Welfare is one of the four stated missions of the School and the SVM hopes to bring added dimensions to this multi-party collaboration including post mortem and forensic investigations at the SVM's Veterinary Diagnostic Laboratory, education and training for those involved in animal welfare investigations and reviews and assessments of current animal welfare legislation.¶

動物醫學院最近獲邀加入香港警務署的動物守護計劃。該計劃 於2011年成立,由香港警務署、漁農自然護理署及愛護動物 協會合作,並獲本地獸醫協會及動物福利團體支持。

該計劃旨在將各個相關界別凝聚起來推廣動物福利,同時透過 情報收集、調查、宣傳和教育活動來推廣動物福利和打擊虐待 動物事件。

動物福利是動物醫學院的四大宗旨之一,我們希望為這個多方合作的計劃增加另一層面的支援,包括在動物醫學院的診斷化驗所進行驗屍及法醫調查,並教育及訓練調查動物福利事件的相關人員,以及檢討及評估現時動物福利方面的相關法例。¶







City University of Hong Kong - School of Veterinary Medicine in collaboration with Cornell University

A holistic case-based approach to Clinical Pathology results interpretation

Join us for an interactive, case-based seminar discussing the interpretation of clinical pathology results. Using canine and feline case data containing several diagnostic modalities, Dr Allan Kessell will walk us through the nuances of pathology results interpretation in the clinic.



Dr Allan Kessell, a

specialist anatomic pathologist at the City University of Hong Kong, Veterinary Diagnostic Laboratory, has worked as a diagnostic and academic pathologist for over 20 years, with his time evenly divided between anatomic and clinical pathology. Allan is passionate about practical veterinary education and has taught several courses at the undergraduate and post graduate level over the years.



Date: 18 July 2017 (Tuesday)

Time: 8 pm to 10 pm (Light dinner available at 7 pm)

Venue: Rm8210, 8/F, Lau Ming Wai Academic Building (AC3),

City University of Hong Kong

Fee: Veterinarians: HKD300

Veterinary Students: HKD150

For programme details and registration, please visit: http://www.cityu.edu.hk/svm/links/20170718CPE.asp

Enquiries: Tel: (852) 3442 6138 Email: svm.cpe@cityu.edu.hk



UPCOMING CPE EVENTS







Format	Date	Topic
Seminar	July 18	Pathology: Clinical Pathology Results Interpretation
Seminar	Aug 22	Dermatology: Atopy, Pyoderma and Sarcoptes
Seminar	Sep 4	Adrenal Crisis
Seminar	Sep 18	Dermatology: Demodex
Seminar	Oct 16	Mental Health for Veterinarians
Webinar	June 20	Feline Osteoarthritis
Webinar	Sep 19	Feline Hypothyroidism
Workshop	Aug 21	Pathology: Workshop in Haematology
Workshop	Oct 31	Managing UTI

Contact information 聯絡方法

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