SHAPING THE FUTURE OF VETERINARY MEDICINE AND LIFE SCIENCES
Some people talk to animals. Not many listen though. That's the problem.

A A Milne
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Welcome to our College

Our Jockey Club College of Veterinary Medicine and Life Sciences embraces the life sciences initiatives of City University of Hong Kong under the “One Health” concept. The Department of Biomedical Sciences offers two Bachelor level degree offerings that prepare new professionals to make a contribution to Hong Kong society in a variety of ways. Their very active postgraduate research programme offers over 150 students the opportunity for cutting edge research training in areas such as Cancer Biology, Stem Cell research, Nano medicine and Neurosciences.

The new Bachelor of Veterinary Medicine is part of our One Health offerings and is preparing the new graduates for a career in the broad range of disciplines that make the veterinary profession such an exciting and rewarding career, but has particular emphasis on training and research in Food Safety, Emerging Infectious Diseases, Animal Welfare and Aquatic Animal Health. This undergraduate degree is being developed and coordinated with the assistance of Cornell University, one of the premier veterinary schools in the world. In collaboration with Cornell we have also been offering an interdisciplinary PhD research degree that is giving up to 30 postgraduate students to spend some time in Cornell labs.

We believe that with this continued collaboration we will be in a position to deliver one of the top twenty veterinary programmes in the next few years, our “20/20” vision, and will be able to have significant impact in research, learning and teaching for the benefit of all our students of Veterinary Medicine and Biomedical Sciences, and hence, make a difference to the local community and the Region.
JOCKEY CLUB COLLEGE OF VETERINARY MEDICINE AND LIFE SCIENCES

- Department of Biomedical Sciences
  - Biomedical education
  - Research on cancer, neuroscience, regenerative medicine
- Centre for Applied One Health Research and Policy Advice
- Centre for Animal Welfare
- CityU Animal Health Centre
- CityU Veterinary Diagnostic Laboratory
- CityU Laboratory Animal Research Unit
- Department of Infectious Diseases and Public Health
  - Aquatic Animal Health Husbandry Services
  - Livestock Husbandry Services
President Way Kuo initiates the vision of developing a centre of excellence in veterinary education at CityU.

The vision becomes a core initiative in the CityU’s Strategic Plan 2010-2015.

The initiative is endorsed by the Senate and supported by the University Council.

A long-term strategic partnership is established with Cornell University's College of Veterinary Medicine in the US.

CityU receives a $125 million gift to support CityU’s strategic initiatives.

Establishment of the School of Veterinary Medicine.

Establishment of the Department of Biomedical Sciences.
2015
Establishment of the Development Fund for Veterinary Medicine
CityU receives two gifts of $200 million and $100 million to support CityU’s Strategic initiatives.
Establishment of a collaborative PhD Programme with Cornell University

2016
Acquisition of Peace Avenue Veterinary Clinic
Launch of the six-year Bachelor of Veterinary Medicine programme

2017
Bachelor of Veterinary Medicine programme secures Provisional Accreditation from the Australasian Veterinary Boards Council
The School is renamed the College of Veterinary Medicine and Life Sciences
A $100 million gift to support CityU’s strategic initiatives is received
The first cohort of Bachelor of Veterinary Medicine students commences study
The Hong Kong Jockey Club Charities Trust donates $500 million to CityU to boost its One Health initiative.

2018
Land purchased in Lam Tsuen to establish a dairy farm
The College is renamed Jockey Club College of Veterinary Medicine and Life Sciences in appreciation of the donation of the Hong Kong Jockey Club Charities Trust
The University Grants Committee decides to support CityU’s six-year Bachelor of Veterinary Medicine programme as a publicly-funded programme starting from 2019-20
To create a centre of excellence in veterinary and biomedical education and research under the One Health paradigm to enhance Public health, Food safety, Animal welfare and help prevent and control Infectious diseases in Hong Kong and the region.
OUR VISION & aspirations

ADVANCE
Animal health and Welfare

PROTECT
Public health and Food safety

SUPPORT
Agricultural development in Hong Kong and Mainland China

IMPROVE
The quality and status of veterinarians in Asia

DRIVE
Discovery and support research
It is widely recognised that the majority of infectious diseases affecting humans originate from wild and domestic animal populations and are major threats to public health. This means that veterinary expertise is required to more effectively reduce the risk of such transmissions, particularly in an increasingly connected and urbanised world where any newly introduced infections will be able to transmit more effectively than in the past. The Jockey Club College of Veterinary Medicine & Life Sciences (JCC) fills an important gap through complementing Hong Kong’s existing strengths in medical education and research, when trying to protect the health of the city’s population.

The College’s approach to veterinary education and research is based on One Health interdisciplinary principles, thereby acknowledging the need to integrate human, animal and environmental health to more effectively protect our planet, and everyone living on it. Understanding their epidemiology and pathogenesis, as well as the host-pathogens interaction and specific immune response to eradicate pathogens are of particular importance in preventing their dissemination. This means that CityU also recognises that veterinary education and biomedical research cannot stand on its own, but instead contributes an essential, and previously missing, dimension to protecting Hong Kong from new and emerging infectious diseases.

**OUR VETERINARY FOCUS**

Human and animal health are intricately intertwined and food security and food safety is a critical part of any veterinary curriculum. Veterinarians are involved in all aspects of food safety ranging from monitoring of livestock farms, wet markets, control of slaughter and processing of animal products to importation and distribution of products of animal origin as well as risk assessment and communication.

As an integral component of the One Health concept, food safety will be at the forefront of the College’s educational and research activities. This will guarantee that current and future veterinarians will be equipped with the necessary expertise to assure excellent food safety and quality through integrated, multidisciplinary approaches involving the entire food chain. Furthermore, the Jockey Club College of Veterinary Medicine and Life Sciences aims to develop into a regional leader in knowledge dissemination in this part of the world that frequently experiences significant challenges related to food safety and security.
Aquaculture is an important source of food, nutrition, and income for hundreds of millions of people around the world. World aquaculture production now provides over 50% of all fish for human consumption, and China has played a major role in this growth, as it represents more than 60% of global aquaculture production.

Being geographically located in the middle of the global aquaculture industry presents Hong Kong with a unique opportunity to collaborate with this industry and the JCC has placed aquatic animal health as one of its core subjects for its BVM curriculum. Training veterinarians in aquatic animal veterinary medicine is at the heart of its mission. Students will have ample exposure and training in aquatic animal health so that the next generation of veterinarians can aid farmers in disease diagnosis and suggest appropriate treatment regimes.

The mission of the College's aquatic animal health initiative is to promote, expand and support the aquaculture industry in Hong Kong and the Region, and increase the productivity, innovation and profitability of aquaculture operations, whilst respecting sustainability, promoting good practice and improving aquatic animal health.

02 Promoting aquatic animal health

03 Enhancing animal welfare

The Jockey Club College of Veterinary Medicine and Life Sciences of City University recognises that the welfare of animals and the promotion of animal wellbeing are central not only to the vocation of those who enter into the veterinary profession and the para-professions in animal healthcare but to the community at large. The mission of the Centre for Animal Welfare is to support the development of Hong Kong as a leader in promoting animal welfare to enhance animal and human wellbeing through scientific research, public education and community outreach programmes. Animal welfare is also a core component of the One Health paradigm, and a critical component essential for improving human and animal health. Enhancing sustainability and public health in Hong Kong and the region requires educating the community to appreciate that humans, animals and the environment are inextricably linked and that many of the answers to questions about sustainability and public health require collaborative actions by the government, professionals, NGOs and the community at large to realize the One Health goals.

The Centre of Animal Welfare (CAW) was established to achieve these goals. In addition to ensuring that students of the College gain a well-grounded understanding of animal welfare; from the original historical origins of man caring for animals, to the present day’s rapid development of animal welfare science, the College also considers the Centre has a central and strategic role to improve the animal welfare knowledge base of communities in the region.
Biotechnology and Nanomedicine

The technologies for biomedical research are rapidly evolving and driving the advances in disease treatment especially in novel biotechnology. The existing strengths of our faculty in this field include targeted photodynamic therapy, peptide therapy, gene editing technology, single chain antibody development, proteomics, stem cell therapy, gene therapy, transcription factor engineering, immune therapy, bioinformatics, novel treatment for bacterial diseases and RNA therapy.

Nanotechnologies further broaden our approaches for disease diagnosis and therapy and perfectly complement our strength on basic research. The research on nanomedicine focuses on developing nanoparticle-based drug delivery vehicles, nanomaterials for cell and tissue engineering, and nanodevices for highly sensitive and early disease detections. Drug delivery vehicles at nanometer scale could offer enhanced bioavailability, improved therapeutic efficacy, tissue specific delivery and/or precise control of drug release.

Neuroscience

The neuroscience group in the Department of Biomedical Sciences ranges from the molecular, cellular, circuit, and systems neurosciences to cognitive and translational neurosciences. Our faculty members work on the auditory, visual, olfactory, sensory, and motor systems, using different methodologies, such as functional anatomy, electrophysiology, optogenetics, pharmacology and behavior. Some of the research goals include: characterization of chronic pain associated synaptic metaplasticity and brain network desynchrony that lead to emotional and

Cancer Biology

Cancer is one of the leading causes of death in the world and the Department of Biomedical Sciences' multidisciplinary team is working together to understand fundamental mechanisms of tumorigenesis and progression, and to translate new knowledge into the development of novel diagnostic and therapeutic strategies for prediction, prevention, and treatment of cancer. Our faculty mainly focus on three research areas: tumor microenvironment, cancer cell migration and metastasis, and precision cancer medicine. We actively promote interdisciplinary collaboration to accelerate the discovery, innovation, and translation of research into clinical applications and cultivate a new generation of scientists on cancer research and precision cancer medicine.

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Regenerative Medicine
The use of stem cells, therapeutic molecules, or biomaterials to regenerate or repair tissue/organ has the promise to revolutionize how human diseases are treated in the future. Our faculty mainly focus on three research areas: cardiovascular regeneration, central nervous system and peripheral nervous system repair, and stem cell/tissue engineering. Together, our faculty and students aim to understand the fundamental mechanism of tissue/organ repair and to develop novel stem cells and regenerative medicine.

Our regenerative medicine research at BMS is highly applicable and translational. We focus on developing gene-based regenerative medicine, stem cell technology, cell engineering, genome editing, and biomaterials for various therapeutic purposes.

Novel Diagnostics and Therapeutics
Many diseases are rooted in genetic defects or invades of external genetic materials, be it in human and in animals. We integrate and develop advanced molecular technologies to precisely and efficiently pinpoint genetic abnormalities for a variety of diseases across One Health. Research in molecular diagnostics is at the global forefront development with innovation spinoffs impacting the society, such as in the areas of advanced cancer diagnosis and pharmacogenetics.

The development of novel therapeutics involves deep understanding of biology in humans and animals. We integrate breakthrough technologies discovered from human, animal and bacteria to develop therapies against cancers, metabolic disorders and rare diseases. Our teaching, research, translation and entrepreneurship contribute to knowledge-based therapy development in Hong Kong and the world.
One of the great strengths of CityU’s JCC is its collaboration with Cornell University’s College of Veterinary Medicine (CVM), one of the most prestigious veterinary schools in the world. CVM is closely involved in the design of the curriculum, facilities and recruitment of teaching faculty. Cornell will also be responsible for quality assurance, and there will be opportunities for student attachments in Cornell and probably other sites in the US.

In addition, Cornell will ensure that JCC’s curriculum and facilities meet the accreditation standards of the Australasian Veterinary Boards Council. Accreditation will not only prepare graduates to work in Hong Kong, Australia, New Zealand, South Africa, the United Kingdom and Southeast Asia, but also to sit the qualifying examinations in Mainland China, and the US.
Generous donations highlight strong public support for JCC. Our efforts have won enthusiastic support from the Hong Kong Jockey Club Charities Trust, generous donors and the community at large.

The "Li Dak Sum and Yip Yio Chin Development Fund for Veterinary Medicine", set up with a donation of HK$100 million, demonstrates the community’s confidence in CityU’s vision to develop a world-class hub for veterinary education, training and research. In addition, a local entrepreneur, Dr. Yeung Kin-man, has also donated HK$100 million to fund JCC’s strategic developments.

A $500 million donation from the Hong Kong Jockey Club Charities Trust to CityU to build a top-notch facility for One Health in Hong Kong further underscores the importance of a veterinarian’s role in public health in Hong Kong.
UNDERGRADUATE & POSTGRADUATE PROGRAMMES
CityU’s Jockey Club College of Veterinary Medicine and Life Sciences (JCC) in collaboration with Cornell University’s College of Veterinary Medicine (CVM), strives to be the premier provider of comprehensive, evidence-based veterinary training, research and service in Asia, aspiring to become an international centre of excellence for animal health in the region.

With increasing health threats arising from emerging zoonotic diseases, food safety issues and other public health issues, the six-year Bachelor of Veterinary Medicine (BVM) programme will produce locally trained veterinary professionals who possess the knowledge and expertise demanded by the community and market in Hong Kong and the region.

The BVM programme will have immediate global recognition because of the strengths of our strategic partner, the CVM at Cornell University, which runs one of the most prestigious veterinary medicine education and research programmes in the world.

The content and structure of the six-year programme is modelled on the Cornell curriculum. It will include pre-clinical courses in biology, chemistry, physics, statistics and English plus rich opportunities for immersion in animal husbandry and CityU’s Gateway Education courses. What’s more, students will be exposed early on to important issues such as the “One Health” concept, food safety and animal welfare.

Students will be required to undergo 26 weeks of clinical extra-mural study and 12 weeks of animal husbandry placements during term breaks, broadening their practical experience with farming operations and veterinary practice locally, regionally and overseas.

Students will have the option of placement opportunities as well as student exchange programmes at Cornell University. There will also be extra-mural placements in approved locations in Hong Kong, Mainland China and other locations regionally and globally.

They will also have access to our world-class facilities and resources here in Hong Kong, including our specialty clinic for small animals, our veterinary diagnostic laboratory, and other teaching laboratories.
PRECLINICAL STUDIES

- Basic Science Courses
- One Health
- Animal Welfare
- Food Safety
- Aquatic Animal Health
- Animal Husbandry

PARA-CLINICAL

- Food Safety
- Function and Dysfunction
- Host, Agent and Defence
- Evidence-based Veterinary Medicine
- Pharmacology

CLINICAL

- Animal Health and Disease
- Conservation Medicine
- Zoological and Exotic animal diseases
- Clinical Rotations

12-WEEK HUSBANDRY Extra Mural Studies  26-WEEK CLINICAL Extra Mural Studies
Bachelor of Science in Biomedical Sciences

This programme emphasizes the integration of fundamental knowledge in biomedical sciences with investigative skills and state-of-the-art technologies to enable students to understand the causes, diagnoses and treatments of human disorders and disease. The programme is designed to prepare graduates for employment in biomedical research, medical device and diagnostics, and biotech and pharmaceutical industries. Our unique industry-informed curriculum provides the students with extensive exposure to medical laboratory technology and modern biotechnology, and applied research and clinical/industrial training opportunities through our strategic partnership with healthcare and medical laboratory sectors, and biotech and pharmaceutical industries.

Career Prospects
Possible career choices of the following sectors are available upon students’ graduation:

**Medical and Health Services**
- Diagnostics sector in medical and health industry
- Medical devices sector in health industry
- Pharmaceutical and laboratory instrumentation industries

**Scientific and Research Work**
- Academic laboratory in universities
- R&D in pharmaceutical and biotech industry
- Government, forensic or medical laboratories

**Management and Consultant**
- Consultancy services
- Laboratory management and clinical trials management
Bachelor of Science in Biological Sciences

This major aims to nurture students to embark on professional, educational, scientific or technical career after graduation. We provide a rigorous, broad-spectrum curriculum combined with specialization in major fields of biology such as cancer biology, nanobiotechnology, neurobiology and ecology. The programme presents an in-depth study of modern biology, with courses ranging from bioinformatics to biochemistry, genetics and cellular molecular biology. It provides a thorough understanding of how science is done with state-of-the-art equipment in laboratory for students interested in research and other science-based careers.

Career Prospects
Upon graduation, students can work in various areas, such as:

- **Bio-related Scientific Research**
  - Academic laboratory in universities
  - R&D in pharmaceutical and biotech industries

- **Various Government Departments**
  - Environmental Protection Department
  - The Government Laboratory
  - Agriculture, Fisheries and Conservation Department

- **Management and Consultant**
  - Consultancy services
  - Laboratory management

- **Commercial, Industrial and Education Sectors**
City University of Hong Kong (CityU) is a dynamic, fast-growing university that is pursuing excellence in research and professional education. As a publicly-funded institution, the University is committed to nurturing and developing students’ talents and creating applicable knowledge to support social and economic advancement. Currently, the University offers postgraduate research programmes in various disciplines, including business, creative media, energy, engineering, environment, humanities, law, science, social sciences, and other strategic growth areas, including veterinary medicine.

The College strives to be at the frontier of veterinary and biomedical research and discovery. Our cutting-edge research in these areas thematically operates under the “One Health” concept, which recognizes the interconnectedness of human and animal health. The College fosters interdisciplinary collaborations involving a wide range of scientific disciplines aimed at achieving optimal health outcomes for people, animals and the environment within a local, regional and international context.
The PhD programme in Veterinary Medicine is an interdisciplinary programme, jointly supervised by CityU and faculty from Cornell University, open to outstanding graduate students who wish to conduct state-of-the-art basic, clinical and translational life sciences research alongside highly experienced research professionals. The programme is student-centered and led by faculty who are accessible, engaged and committed to ensuring that our postgraduate students reach their full potential in research, teaching and professional development.

The students which are admitted to the programme will be eligible to undertake research work as research interns for up to 12 months at the Cornell University. The students will participate in research programmes leading to PhD degrees in one of the following areas:

- Comparative Biomedical Sciences
- Immunology & Infectious Disease
- Molecular & Systemic Neuroscience
- Public Health & Epidemiology
The Department of Biomedical Sciences carries out internationally competitive research and promotes interdisciplinary collaboration in the biomedical sciences. Its research programmes aim to understand fundamental mechanisms of biological processes and diseases, and translate new knowledge into the development of novel diagnostic and therapeutic strategies for prediction, prevention, and treatment of human diseases.

Departmental research focuses on four strategic areas:

- Neuroscience;
- Cancer biology;
- Regenerative medicine;
- Infectious diseases and immunity.

Departmental research focuses on four strategic areas: neuroscience, cancer biology, regenerative medicine, and infectious diseases and immunity. Multidisciplinary approaches are employed and supported by a wide range of state-of-the-art equipment with cutting-edge techniques in areas including molecular and cell biology, genetics and genomics, physiology and pharmacology, systems biology and bioinformatics, microbiology and immunology, and biotechnology and nanotechnology.
The Department of Infectious Diseases and Public Health focuses on One Health, an area spanning the health of animals, humans and the environment. Our principal research areas include:

- enhancing an understanding of the pathogenesis and natural history of infectious diseases in animals, with the overarching aim of improving methods for their diagnosis and control
- improving animal health and welfare through application of more effective disease control methods
- supporting the efficient and economic production of safe, both terrestrial and aquatic, animal-based food and other derived products
- monitoring current and emerging infectious diseases in animals that may impact on human health, including drug-resistant pathogens
- fostering collaborations between medical and veterinary personnel in the provision of targeted public health measures
- improving animal welfare through research, teaching and public education
The JCC has established a relationship with the Hong Kong Jockey Club that will extend to a physical presence and the infrastructure required for undergraduate teaching. An equine teaching facility will be made available that would facilitate the teaching of “core competencies” at the time of graduation and students will get to experience equine ambulatory practice with Hong Kong Jockey Club veterinarians.
CityU Lam Tsuen Dairy Farm

CityU is developing a plot of rural land in Lam Tsuen, near Tai Po into a small modern dairy unit, planned for operation in 2019. Twenty-eight pedigree Jersey cows will be imported from Australia and will be kept in a state-of-the-art bio-secure unit. Veterinary students who work there will experience the strict bio-secure procedures needed to enter a modern farm, and learn how to milk and handle the cows. This work will introduce the students to current animal husbandry concepts and techniques in dairy feeding, such as proper dairy cow nutrition, reproductive techniques such as artificial insemination, and ensuring strict milking parlour hygiene.
Aquaculture Facilities

The College has explored and secured a series of locations for education and research units where staff and students can work together to promote international excellence in aquatic animal health teaching and research.

In collaboration with CityU State Key Laboratory in Marine Pollution (SKLMP), a fish raft has been established at Tai Tau Chau, Sai Kung. The fish raft plays the role as an experimental based mariculture platform to support in situ scientific research and initiatives. Together with the on-campus, Aquatic Science Lab, fresh water fish pond sites and our local world renowned Ocean Park oceanarium, students and staff have ample opportunities to further aquatic animal health collaboration.
The CityU Veterinary Medical Centre (CityU VMC) began operation in April 2019 and it is one of the largest and most advanced 24/7 companion animal veterinary clinics in Hong Kong. It comprises almost 35,000 square feet of facilities, including a veterinary imaging suite, an emergency and critical care unit, seven surgical suites, a spay and neuter clinic, and a state-of-the-art physiotherapy centre. With Hong Kong’s largest complement of veterinary specialists, CityU VMC is ushering in a new era of veterinary care in Hong Kong.
CityU Veterinary Diagnostic Laboratory

The opening of CityU Veterinary Diagnostic Laboratory (CityU VDL) marks a milestone in the development of veterinary medicine in Hong Kong and the region. It is one of the most comprehensive and advanced veterinary diagnostic laboratories in Asia. It provides full-service diagnosis for the veterinary community of Hong Kong and the region, and also serves as an important training ground for the BVM programme. The CityU VDL operates independently and provides services to all veterinary clinics, local livestock operations and fish farms in Hong Kong.
The Biomedical Sciences Laboratories are purpose built and equipped with cutting edge equipment designed to provide the best environment for research and teaching. They consist of:

- Research laboratories;
- Teaching laboratories (equipped with state-of-the-art medical analyzers and equipment in four major fields of haematology, clinical chemistry, microbiology, and histopathology);
- Functional rooms (including tissue culture rooms, pathogen labs (Class II), walk-in cold rooms, autoclave rooms and washing rooms which support both teaching and research activities) and;
- Core facilities and equipment such as the Clinical Diagnostic Instrument Core, Molecular and Genomic Core, Imaging Core, Flow Cytometry Core, High Performance Liquid Chromatography Core and Centrifuge Core.
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 instruments in the university before they enter the commercial sector.

Centrifuge Core
The centrifuge core is equipped with different types of centrifuges from bench top to floor standard ultra-speed centrifuges (up to 504,000 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.

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.

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

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.

High Performance Liquid Chromatography Core
We have two HPLC systems to facilitate the separation of molecules with various chromatography techniques.
Laboratory Animal Research Unit (LARU)

Since Sept 2015, LARU has supported over 30 Faculty members and 250 research staffs/students across different departments at CityU to cater for the need of an increasing demand on Life Science animal research, as well as veterinary students, who will be able to complete part of their husbandry Extra-Mural Studies placements at LARU.

LARU’s phase II expansion will accommodate more than 30,000 animals (mainly rodents). LARU Phase II is a barrier facility that ensures the health and well-being of animal colonies and is equipped with the latest technology (such as air or wet shower entry, irradiated feed, filtered and sterilized drinking water, steam-sterilized bedding and individual ventilated cage units) to prevent the incursion of diseases into the facility and to uphold animal welfare by introducing minimum cage space requirements for all laboratory animals. In addition there will be a Biological Safety Level 2 (BSL-2) animal lab, which allows animal users to work on level 2 microbes for infectious disease research.

We also provide surgery facilities equipped with advanced equipment including dissecting microscopes with digital video camera system for teaching purposes, digital stereotaxic instruments for brain surgery and microinjection systems, isoflurane anaesthesia systems, and downdraft surgery tables to ensure a safe working environment.

LARU offers regular training workshops to qualified animal users to introduce important information on animal husbandry and care such as appropriate attire for work in the facility and safe use of facility equipment, proper animal handling techniques such as restraint, sexing, oral feeding and intra-peritoneal injection.
RESEARCH & OUTREACH
The Jockey Club College of Veterinary Medicine and Life Sciences is establishing ambulatory extension services that will aim to facilitate the development of modern and sustainable agriculture and aquaculture in Hong Kong through which will enhance the overall competitiveness of these local industries. The services will seek to identify the major constraints on pig, poultry and fish health and production in Hong Kong and to develop interventions that will result in improved productivity, animal welfare, food safety and also provide monitoring for early warnings of new and emerging zoonotic diseases. Based on the needs of individual farms, a tailored animal health and production management service programme will be discussed and implemented on participating farms. These services will also help the local fisheries communities to move towards high value-added operations.
Centre for
Applied One Health
Research and Policy
Advice (OHRP)

One Health is an integrated effort to achieve optimal health for humans, animals and the environment.

Global increases in animal-to-human transmitted infectious diseases (zoonoses), antimicrobial resistance in the food chain, and other food safety issues continue to pose threats to human health. An estimated 75% of new and emerging infectious diseases (EIDs) are zoonoses and arise from human, animal and environment factors.

Some well-known examples are avian/swine influenza, Ebola, Middle East Respiratory Syndrome (MERS) and severe acute respiratory syndrome (SARS). Antimicrobial resistant bacteria can exist in our food sources and even persist in the community as well as the environment beyond healthcare facilities.

Hong Kong through its high (>90%) dependence on food imports, high density of human population and their trans-boundary movement, its position as the single most important trade hub between China and the rest of the world is highly vulnerable to emerging disease threats.

The One Health approach is necessary to mitigate the risks arising from the complexities of these growing threats in a holistic manner.

The Centre for Applied One Health Research and Policy Advice (OHRP) was established in 2016 to generate scientific knowledge that will lead to the development of evidence-led policies at local, national, regional and international levels for the prevention and control of infectious animal diseases affecting human health and animal production, welfare and health.
Centre for Animal Welfare

We recognise that the welfare of animals and the promotion of animal wellbeing are central not only to the vocation of those who enter into the veterinary profession and the para-professions in animal healthcare but to the community at large. The mission of the Centre for Animal Welfare is to support the development of Hong Kong as a leader in promoting animal welfare to enhance animal and human well-being through scientific research, public education and community outreach programmes. Animal welfare is also a core component of the One Health paradigm, and a critical component essential for improving human and animal health.

The Centre of Animal Welfare was therefore established to achieve these goals. In addition to ensuring the students of the College gain a well-grounded understanding of animal welfare from the original historical origins of man caring for animals, to the present day's rapid development of animal welfare science, the College also considers the Centre has a central and strategic role to improve the knowledge base of communities in the region with regards to animal welfare, as the Centre being the only of its kind in this region.
Strategic Outreach

Working with our stakeholders is an indispensable part of the College and the JCC has forged strong partnerships with many groups and organisations. These collaborative efforts not only enable us to provide assistance and technical knowledge transfer but they also afford opportunities for our faculty and students to conduct research and gain exposure to local and regional animal health and life science systems. Examples of these collaborations would include Memorandums of Understanding signed with local agriculture organisations, food producers and retailers, animal welfare organisations and animal parks.
Continuing Professional Education

The provision of Continuing Professional Education is a strong focus of JCC. Since 2009, CityU has been providing leading edge continuing professional education activities to cater for the needs of the local and regional veterinary profession. In the past year JCC offered a wide selection of CPE topics, including orthopaedic surgical skills, laboratory techniques in urinalysis and blood analysis, fundamental ultrasonography techniques, practical CPR, animal welfare in companion animal practice and veterinary legal issues. CityU continues to strive to be a pre-eminent provider of further education for veterinarians and veterinary nurses.
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Jockey Club College of Veterinary Medicine and Life Sciences

City University of Hong Kong
in collaboration with Cornell University