



The University of Hong Kong
School of Biological Sciences

Qualifying
Seminar

Animal and zoonotic pathogens in exotic pets in Hong Kong

Date: 16/07/2021 (Fri)

Time: 10:00am

Venue: KBSB 6N-11 & zoom



About the speaker:

Jackie Ko is a graduate from HKUST, specialized in Biochemistry and Cell Biology. She is interested in studying behaviour and health of animals, as well as their relationship with humans. She is currently a PhD student in Dr Simon Sin's lab.



Abstract:

Global demand for exotic pets has been surging in recent years. International trade of exotic pets has facilitated the dispersal of animal and zoonotic diseases, which may pose threats to both wildlife conservation and public health. Hong Kong is one of the major importers of exotic pets and may play a key role in the assembly and dissemination of animal pathogens to other parts of the world. In this study, I will investigate four pathogens in the Hong Kong exotic pet community that threaten wildlife conservation and public health. I will determine the infection prevalence and characterise the sequences of two avian viruses that are mainly carried by parrots, which are the beak and feather disease virus (BFDV) and avian polyomavirus (APV). These two viruses are pathogenic or even lethal to many avian species and are major concerns in wild parrot conservation. To understand more about the impact of BFDV on host health, I will also investigate the microbiome composition of BFDV-positive and -negative birds. With regard to zoonotic diseases, I will determine the prevalence and evolutionary history of two zoonotic bacteria, *Chlamydia psittaci* and *Salmonella*, which are carried by a broad range of exotic pet species and could cause serious health consequences in humans. To further understand the risks of *Salmonella* infection by exotic pets, serotypes of isolated *Salmonella* and their resistance towards antibiotics will be investigated.