



The University of Hong Kong  
School of Biological Sciences

Qualifying  
Seminar

# Diet and Microbiome of Bats in Hong Kong

**Date: 22 March 2024**

**Time: 0930**

**Venue: KBSB 3N-01**



## About the speaker:

Xiaodong Wei is a 2<sup>nd</sup> year PhD student in Dr. Simon Sin's lab. He is interested in studying bats' dietary composition, gut microbiome, and virome. He is investigating the diet among bat species and its relationship with microbial communities.



## Abstract:

The food of bats ranges from fruit, pollen, and nectar to insects, fish, and even blood. The diversity of bat diets makes this mammalian order widely distributed globally and ecologically important. Meanwhile, as reservoirs of many microorganisms, bats' role in spreading zoonotic pathogens has raised public health concerns. Previous studies have shown that the dietary composition could alter the gut microbiome in bats. However, the dietary composition and gut microbiome of many bat species are poorly known. This study aims to understand the dietary diversity of bat species in Hong Kong, as well as factors associated with their gut microbial communities and viromes. Specifically, the dietary composition of three *Myotis* species as well as ten other insectivorous bat species will be determined in the first and second chapters. The third chapter will further investigate the gut microbiome and its association with host phylogeny and diet. The fourth chapter studies the viral community in bats to reveal its diversity and relationship with different factors.