



The University of Hong Kong  
School of Biological Sciences

**Qualifying  
Seminar**

# Ecological niche partitioning of birds in Hong Kong

**Date: 18<sup>th</sup> Oct 2021**

**Time: 10:00 am**

**Venue: 6N11 + Zoom**



## About the speaker:

Chan Lai Ying, Alex, is an MPhil student in Dr. Simon Sin's lab. She has broad interests on molecular ecology and bird conservation and is now focusing on ecological niche partitioning between sympatric species.



## Abstract:

Ecological niche partitioning governs species coexistence and hence biodiversity. Although bird is one of the most well-studied taxa, our knowledge on how sympatric birds partition food resources remains limited. My study focuses on using molecular approaches to investigate foraging niche partitioning among sympatric species and to explore their ecological roles as seed dispersers for local plants.

I performed DNA metabarcoding on the faecal samples of the critically-endangered Yellow-breasted bunting (*Emberiza aureola*) and 5 other sympatric bunting species to identify their wintering diet. Preliminary results show that buntings consume a large variety of plants and reveal significant intra- and inter-specific variations in terms of dietary composition in arthropods and plants. Understanding their diets will aid in developing conservation strategies to restore their populations.

I will also study foraging partitioning of sympatric avian species in secondary forest. Some birds are important seed dispersers and avian digestive system has been shown to affect seed germination for some plant species. Therefore, I will combine DNA metabarcoding and seed germination experiment to identify plant materials consumed and determine the seed dispersal roles of different avian species.