The University of Hong Kong
School of Biological Sciences

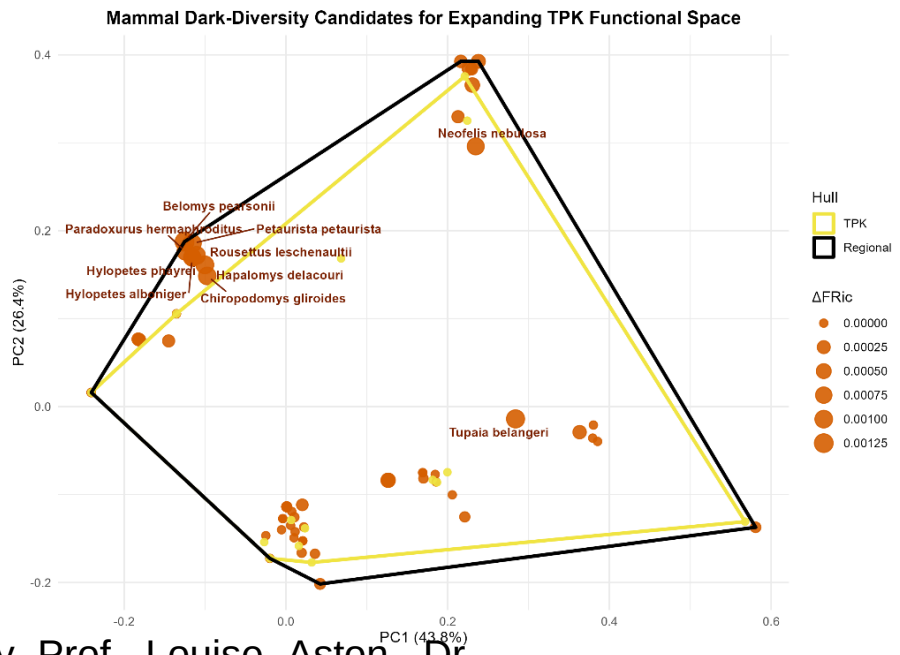
Qualifying Seminar

Missing Links: Seed Dispersal and Pollination as Indicators of Ecological Function in Hong Kong Forests

Date: 27 August 2026

Time: 10:30 am

Venue: 3N-01



About the speaker:

Theodora Chan is a PhD student supervised by Prof. Louise Aston, Dr. Stephan Gale, Dr. Fernanda Cardoso, Dr. Michael Boyle and Prof. Simon Sin. Her research interests focus on seed dispersal, pollination, restoration and forest succession.

Abstract:

Hong Kong's forests present a restoration paradox. A large share of the territory is protected as country park, yet much of this green cover is young or plantation-derived under the legacy of centuries of deforestation and disturbance. Canopy expansion does not, on its own, mean native diversity or ecosystem function have recovered. Pollination and seed dispersal are known to be especially vulnerable to disturbance, offering a more direct test of restoration success than tree cover or species diversity alone.

This thesis builds a function-based framework for assessing forest recovery in Hong Kong across three connected pieces of work. The first compares functional traits of Hong Kong's mammals, birds and plants against a healthier regional reference pool, identifying missing ecological functions and candidate species for restoration. The second uses DNA metabarcoding to test whether pollination networks recover naturally as forests age. The third compares actively restored and passively regenerated forests, asking whether active restoration speeds up this recovery.

Together, this work moves from diagnosis toward action, arguing that restoration success should be judged not by canopy cover, but by whether ecological function is actually returning.