

Research and Development Projects

ECF Project:	ECF 2024-224
Project Title:	Environment and Conservation Fund Constructing the First DNA Barcode Reference Library of Hong Kong Moths
Principal Investigator:	Dr Ashton Louise Amy, School of Biological Sciences, The University of Hong Kong
Total Approved Grant:	\$1,318,639
Duration:	3/11/2025 to 2/11/2028
Project Status/Remarks:	To be commenced
Project Scope:	<p>Moths provide crucial ecosystem services and can be used as rapid bioindicators of forest health. Monitoring bioindicators is essential for assessing ecological health. However, due to their abundance and biodiversity, identifying and monitoring moths requires significant human resources and specialised knowledge. Metabarcoding may provide an exciting solution but requires establishing baseline data in the form of genetic barcode libraries. To date, no barcode library has been established for Hong Kong's moths, presenting a major resource gap for future environmental conservation in the SAR.</p> <p>This project will establish the first genetic barcode library of Hong Kong's moths, providing essential baseline data for future biodiversity monitoring. It will identify cryptic and unnamed species, directly addressing the priorities of the Environmental Conservation Fund. Key outputs will include an open-source barcode library of Hong Kong moths, new educational material in the form of museum-quality images, and citizen science events to help the public understand the importance of moths and other insects for ecosystem health and human well-being. The results of the project will inform government policy for continued restoration and conservation of Hong Kong's natural habitats, aid in monitoring biodiversity, and build resilience in the face of global change.</p>
Summary of the Findings/ Outcomes:	To be available upon completion of the project