

**ON-SITE BIOLOGY COLLOQUIUM**

Friday, 4 Sept 2026 | 4 pm | S3 05-02 Conference Room 1

Hosted by Assoc Prof Huang Danwei

Map to Block S3



Project Phoenix: Reinventing Coral Taxonomy

**About the Speaker**

Andrew Baird attained his undergraduate and postgraduate degrees in Coral Reef Ecology at James Cook University (JCU), finishing his PhD in 2001. He next completed a postdoctoral fellowship at the University of the Ryukyus in Okinawa, Japan. He is currently an Adjunct Professor in the College of Science and Engineering at JCU and an Honorary Research Fellow at the Museum of Tropical Queensland. Andrew's research has taken him to most coral reef regions globally, including Singapore. His current research focus is the taxonomy and systematics of the stony corals, in particular, the family *Acroporidae*. Andrew is in Singapore as part of the Comprehensive Marine Biodiversity Survey II.

Andrew Baird

James Cook University

Over the last three decades, molecular research and examination of type specimens have revealed that the morphological taxonomic framework developed in the 1980s is fundamentally flawed. In particular, almost all the taxonomic decisions from this period are incorrect and the species richness of the coral fauna has been vastly underestimated. Therefore, most of the research based on this framework, in particular all coral biogeography and assessments of vulnerability to extinction, needs to be revisited. But before this can be done, coral taxonomy needs to be reinvented almost from scratch. Part of the process of reinvention involves testing all the nominal species of corals by reference to the type material and the collection of topotypes—specimens that match the original material collected from the type locality—to allow for molecular analysis. Here, I will present a brief history of coral taxonomy, as a case study of how taxonomy can go badly wrong. I will also introduce Project Phoenix, an international collaboration with the aim of developing a robust coral taxonomy for coral reef science and management, as well as some of our recent work including a revision of *Acropora* from the east coast of Australia.