



## BIOLOGY COLLOQUIUM

Friday, 5 May 2023 | 4 pm | DBS Conference Room 1

Hosted by Assoc. Prof Liou Yih-Cherng

# Nature Conservation - Rehabilitating the Ecosystem of Orchid Island

*By* **Li Chia-Wei**

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### *About the Speaker*

Prof Li Chia-Wei is a Distinguished Professor at the National Taiwan Tsing Hua University and is one of Taiwan's most famous advocates for fighting Climate Change. He has authored and co-authored international publications on phyto-taxonomy and paleontology, also working as a reviewer for number of reputable journals. He also held leading positions at National Tsing Hua University, National Museum of Natural Science Foundation, Scientific American Taiwan edition and Dr. Cecilia Koo Botanic Conservation Center.

Realizing the alarming species extinction rate in the modern world, Prof. Li set up the Dr. Cecilia Koo Botanic Conservation Center (KBCC) in 2007 and serve as the CEO since then. KBCC got generous support from Taiwan Cement Company and National Science and Technology Council of Taiwan. Now KBCC hosts more than 33,000 kinds of living plants collected from global tropical regions, representing one of the richest *ex-situ* living botanic collections in the world. In 2016 KBCC launched a full-scale cryopreservation project to preserve the entire genome and transcriptome of all the plant species in KBCC, for the usage of next generation scientists.

Human-driven destruction of the habitats leads us on the brink of a global biological disaster that could rival mass extinctions in evolutionary history. Tropical plants are especially under enormous threat and disappearing at an alarming rate. Conservation strategies designed to protect plants have been taken place at local and international levels in recent decades. However, tropical plants with the richest diversity are mainly neglected, since it is extremely difficult to provide their heat and humidity demands in developed temperate countries.

The Dr. Cecilia Koo Botanic Conservation Center (KBCC), located in southern Taiwan, was established in 2007 with the mission: to conserve the tropical and subtropical plants, in order to sustain the richest biodiversity on Earth. KBCC is generously supported by Dr. Cecilia Koo Botanic Conservation and Environmental Protection Foundation and by National Science Council of Taiwan. It focuses on *ex situ* preservation of living plants, and now houses 34,175 species and cultivars of plants including 17 major kinds, flourishing in 17 greenhouses with 34,440 square meters.

Starting from 2012, KBCC extended conservation efforts to the Solomon Islands, Laos and Vietnam. KBCC also cooperate with government and NGOs, reintroducing endangered plants back to their original habitat.