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From Behavior to Macroecology: Causes and Consequences of Sociality



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Time : 2020. 11. 12 Thu. 15:30

**Venue: Auditorium, 1st Floor,
Interdisciplinary Research Building
跨領域科技研究大樓1樓演講廳**

Host: Dr. Sen-Lin Tang 湯森林研究員

Terrestrial Biodiversity and Ecosystems

Abstract

As an evolutionary ecologist, I have used an integrative approach that includes behavioral observations, experimental manipulations, meta-analysis and evolutionary theoretical modeling, to study the (1) ecological and social determinants of social evolution, (2) the ecological consequences of sociality, (3) species range size and (4) population and species vulnerability to climate change. The model organisms I study mainly include cooperatively breeding birds, Taiwan yuhina *Yuhina brunneiceps*, social burying beetles *Nicrophorus nepalensis* Hope, 1831 and moths. My research contributes to the understanding of macroecology, such as species range size and range limits, using both evolutionary theory and experimental methods. I also use macroecological perspective to study the evolution of sociality, such as the influence of cooperative behavior of social organisms on their distribution ranges and abundance.