



Department of Psychology
The University of Hong Kong
香港大學心理學系

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Departmental Seminar

Flexible cognition in a miniature brain



Prof. Fei Peng
Professor and Head
Department of Psychology
Southern Medical University

10:30a.m. – 11:30a.m.

Room 715, 7/F
The Jockey Club Tower
Centennial Campus
The University of Hong Kong

Abstract

To what extent do different cognitive abilities depend on complex neural structures or higher brain regions, and which information-processing principles may recur across species? In this talk, I explore these questions through recent studies of bumblebee cognition. Despite having a brain smaller than a sesame seed, bumblebees display unexpectedly flexible abilities in complex temporal sequence learning, social cognition, and decision-making. These findings offer a comparative perspective on the general principles that may underlie cognition across diverse species.

About the Speaker

Fei Peng received his PhD from Queen Mary University of London and was a visiting scholar at the University of Cambridge. He is currently Professor and Head of the Department of Psychology in the School of Public Health at Southern Medical University, where he also serves as a Principal Investigator at the Greater Bay Area Brain Science and Brain-Inspired Intelligence Centre. His research focuses on cognition in bumblebees and its neural computational mechanisms. He has led three projects funded by the National Natural Science Foundation of China, and his work has been published in journals including *Science*, *eLife*, *Current Biology*, and *Animal Behaviour*.

Zoom Meeting (For participants who couldn't attend the Seminar in person)

<https://hku.zoom.us/j/94863069034?pwd=OK6MgQMfG5S0mRPrIOKD9FCO0bCkF.1>

Meeting ID: 948 6306 9034 | Password: 330429

~ All are Welcome ~

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