



中央研究院生物多樣性研究中心

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Evolutionary Genetics and Genomics

Fig Worms for Evo-Devo



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Time: 2023. 06. 02 Fri. 10:00

Venue: Auditorium, 1st Floor

Interdisciplinary Research Building

跨領域科技研究大樓1樓演講廳

Host: Dr. John Wang 王忠信副研究員



Abstract

What is the genetic, cellular, developmental, and evolutionary basis of phenotypic diversity? As phenotype construction has multiple causes, a satisfying understanding of phenotypic diversity ultimately requires the integration of multiple points of view. We are currently using the nematode *Caenorhabditis inopinata* to connect functional genetics with evolution and ecology to understand the causes of phenotypic diversity. *C. inopinata* can grow to be nearly twice as long as its close relatives, which include the highly-studied model organism, *C. elegans*. Furthermore, it thrives in the fresh figs and is associated with its pollinating wasps; figs and fig wasps together represent a classic system in evolution and ecology. *C. inopinata* is then well-positioned to connect multiple disciplines that aim to understand the bases of phenotypic variation. Here, I will discuss ongoing work on the evolution of stage-specific body size evolution; nematode-microbe interactions; and the transcriptional basis of body size change.