ΙΝΣΤΙΤΟΥΤΟ ΜΟΡΙΑΚΗΣ ΒΙΟΛΟΓΙΑΣ ΚΑΙ ΒΙΟΤΕΧΝΟΛΟΓΙΑΣ INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

SEMINAR

Perspectives that selective sweeps and gene drives provide to pest insect biology

Population genomic datasets provide us with a powerful way of looking back in time to examine the forces that have recently shaped insect biology. In *Drosophila melanogaster*, the model insect, selective sweep analysis emphasizes the role insecticides have had on this non-pest insect. They also point to a mysterious Ecdysone kinase like gene family, whose functions are diverse if not enigmatic. In the first part of this presentation I will describe some of the approaches we have been using to elucidate function in this gene family.
In the second half of this presentation I will describe how functional genomic knowledge from Drosophila melanogaster can help us look forward to new genetic biocontrol strategies that may offer a better way to control pest insects than chemical insecticides.

Charles Robin

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Charlie received his PhD from Australian National University for research on esterase multigene family evolution based in the laboratory of John Oakeshott at CSIRO. He then went to the University of California, Davis where he began to focus on within-species genomic variation. After a postdoc at Melbourne University, he secured an independent position as a teaching and research academic at Melbourne University where he has been for over twenty years.

THURSDAY 12/06/2025

13:00

Costas Fotakis room

HOST: John Vontas

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