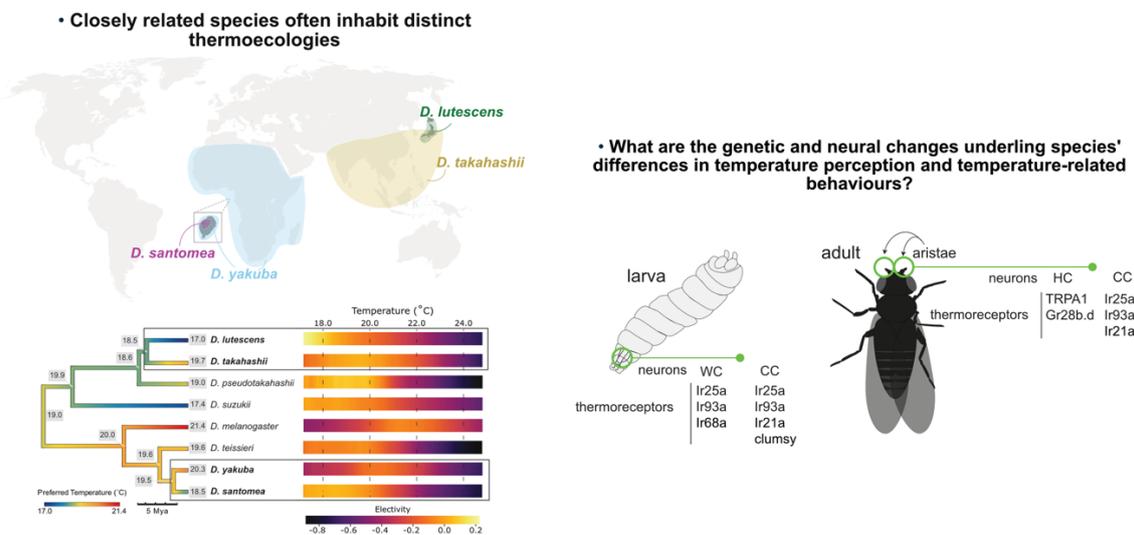


Thermosensory Evolution

About the Project:

How do sensory systems adapt to novel thermal environments? The postdoc will lead a research project to investigate the evolution of temperature perception and thermotaxis across *Drosophila* species. Like many animal taxa, Drosophilids inhabit diverse habitats and can adapt to diverse temperature environments. This project aims to understand how evolutionary changes in sensory neurons and thermoreceptors contribute to these adaptations. This project will use closely related species pairs (*D. santomea*/*D. yakuba* and *D. takahashii*/*D. lutescens*) in which parallel preferences for cool temperatures have evolved in parallel. The postdoc will develop neurogenic tools in these species and use them to study evolutionary changes in thermoperception and to relate the differences to behavioural changes.

The position is for 4 years, supported by a Leverhulme Project Grant.



About You:

Candidates will hold a PhD in neurobiology, genetics, evolution, biology, or a related field. Candidates will need to have experience in at least one of the following: fly genetics, transgenics/CRISPR approaches, neurophysiology, comparative/evolutionary biology.

About the Lab:

[The Arguello Lab](#) focuses on understanding the genetic and cellular bases of sensory evolution. *What are the rapid changes that underlie differences in the way species perceive the world?* Our approach is interdisciplinary and we combine wet and dry lab techniques to bridge evolutionary genomics, neurogenetics, and behavioural biology. The model organisms that we study are *Drosophila* species that come from diverse ecologies from around the globe.

About QMUL :

Queen Mary University of London is a research-intensive university and a Russell Group member. The School of Biological and Behavioural Sciences is one of the UK's elite research centres, according to the 2021 Research Excellence Framework. It offers a dynamic multi-disciplinary research environment and hosts approximately 180 PhD students working on projects in the biological sciences. Our students and postdocs have access to a variety of research facilities/platforms supported by experienced staff, as well as a range of support services.

Genomics is a particular focus within the School, with specific strengths in evolutionary genomics, population genomics, epigenomics, evo-devo, and functional genomics. The Biology Department hosts its own genomic facility and has recently developed a Research Centre on the theme: [The Centre for Evolutionary and Functional Genomics](#).

Contact & Application:

Informal inquires can be addressed to Roman Arguello, r.arguello@qmul.ac.uk
Formal applications must be completed [here](#).
