



Insect Migration and Phylodiversity Lab
<http://www.phylomigrationlab.com>



**INSECT MIGRATION &
PHYLODIVERSITY Lab**



*e-mail: gerard.talavera@csic.es
Phone: (+34) 932890611*

PHD OPPORTUNITY: BUTTERFLY MIGRATION GENOMICS

GRANT: Genomic and epigenomic signatures of migration in butterflies (PID2023-152239NB-I00)

PROJECT OVERVIEW:

We are inviting applications for a PhD position focused on investigating the genomic and epigenomic underpinnings of migratory behavior in butterflies. The project aims to uncover key genetic traits and regulatory mechanisms that influence butterfly migration in response to environmental cues. Areas of focus include the adaptation to migratory divides, seasonal shifts in movement direction, the evolution of sensory gene families, and epigenetic responses to rapid environmental stressors. The research will involve a combination of fieldwork, laboratory behavioral studies, and analyses of genomic, transcriptomic and epigenomic data. The PhD plan will be flexible within this framework, and tailored alongside the selected candidate according to their interests. The PhD candidate will join a interdisciplinary team and receive training in evolutionary genomics, animal behavior and migration ecology.

LOCATION: Institut Botànic de Barcelona (IBB, CSIC-CMCNB), Spain, (www.ibb.csic.es)

The IBB is a leading research center for biodiversity research in Catalonia, offering a vibrant academic environment for cutting-edge research in evolutionary biology, ecology and genomics.

RESEARCH GROUP:

The candidate will join the **Insect Migration and Phylodiversity Lab** (www.phylomigrationlab.com). Our lab specializes in the behavior, movement ecology, phylogeography, and genome evolution of migratory insects. Our current team includes three PhD students, a laboratory technician, three Master's students, two visiting students and the Principal Investigator (PI). We maintain strong collaborative ties with colleagues at Uppsala University (Sweden), the University of Ottawa (Canada) and the University of Edinburgh (Scotland), and research stays abroad will be encouraged. Our lab fosters a culture of collaboration and mutual support, both within our team and with our international partners.

CANDIDATE REQUIREMENTS:

We are seeking for a highly motivated individual with a keen interest in genomics, entomology, bioinformatics, phylogeography, evolution and behavior.

Qualifications:

- A Master's degree related to Biological Sciences, Bioinformatics, Genetics or a related field.
- Excellent communication skills in English.
- Experience and knowledge in genomic data analysis, population genomics, evolutionary theory, and use of computing clusters.

CONTRACT: 4-year contract

Starting date: Between January 1st and March 1st, 2025

Gross annual salary: 24.000 – 30.000 euros

APPLICATION DEADLINE: September 15th, 2024

EXPRESSION OF INTEREST: Interested candidates, please send (1) a letter of motivation, (2) Curriculum Vitae (CV), and (3) (Optional) contact information for potential references.

Please send your application to **Gerard Talavera** (gerard.talavera@csic.es)