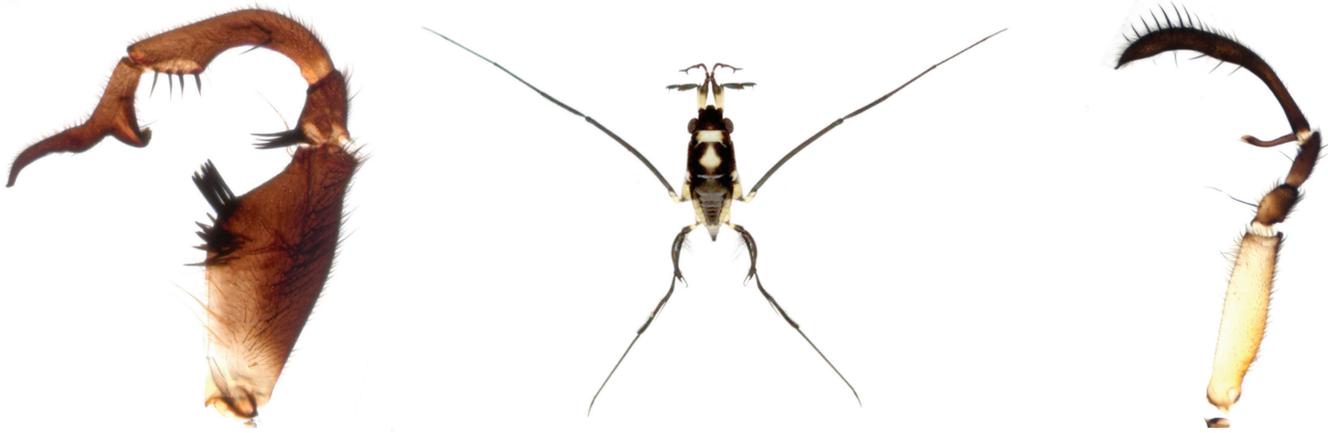


Postdoctoral position in Evolution and Development

Sexual conflict in water striders



Deadline: Till position is filled

Contacts: abderrahman.khila@ens-lyon.fr or locke.rowe@utoronto.ca

Duration: 24 months.

Starting date: As soon as possible.

A position as a postdoctoral researcher is available in a collaboration between the Institute of Functional Genomics of Lyon (IGFL, France) and the Department of Ecology and Evolutionary Biology at the University of Toronto (EEB U of T, Canada). The fellow will be based in Lyon and will work in collaboration with Abderrahman Khila (IGFL) and Locke Rowe (EEB U of T).

A detailed description of IGFL can be found here: <http://igfl.ens-lyon.fr/>

and the Khila lab here: <http://igfl.ens-lyon.fr/equipes/a.-khila-developmental-genomics-and-evolution>

A detailed description of the EEB U of T can be found here: <http://www.eeb.utoronto.ca/>

and the Rowe lab here: <https://rowe.eeb.utoronto.ca/>

Project description: Selection in males and females is often antagonistic where traits favoured in one sex may impose costs to the other (Arnqvist and Rowe, 2005). This project examines the development and evolution of male modified antennae in a genus of water striders called *Rheumatobates* (see Khila et al. Science 2012). In this genus, of about 40 species, we know of at least five independent events of male-specific modifications of the antennae into grasping traits (Rowe et al. Can. Ent. 2006). While these modifications converge functionally, there is a striking divergence in their morphology. This project includes three primary parts:

- 1- Behavioural analyses of how males of three *Rheumatobates* species use their antennae to grasp females during pre-mating struggles
- 2- Test, using RNA interference, the role of the gene *distal-less* in these modifications (Khila et al. Science 2012; Crumiere and Khila, Biology Letters 2019)
- 3- Analyses of sex biased gene expression based on existing RNAseq data of male and female antennae of six species, including three with modified male antennae and the other three with monomorphic antennae.

Qualifications: The successful candidate must have a PhD in evolutionary or molecular biology/genetics. Documented experience in bioinformatics and analyses of genomic/transcriptomics data is strongly desired. Good communication skills, both in terms of written and spoken English. A competitive track record. We will also favour candidates with a demonstrated ability to work collaboratively in a team.

Desired qualifications: Experience with non-model organisms and EvoDevo is a plus but not a requirement for this position. These skills can be acquired in the host lab.

How to apply: Please send the following by e-mail to abderrahman.khila@ens-lyon.fr or locke.rowe@utoronto.ca

- 1- A letter of intent explaining how this position would fit your career plan, your fit to the position, and your research interests.
- 2- Your CV including your publication list and a description of your education
- 3- Names and contact information of three references who can write letters of recommendation on your behalf