

PhD Student- Evolution of male-male competition and sexual conflict

What do we offer? We offer a 4-year PhD fellowship starting on September 2018 to January 2019.

To do what? We are looking for a PhD student interested in studying the evolutionary factors modulating the intensity of male-male competition and sexual conflict, and its consequences in terms of population viability. Strong sexual selection can improve population viability and evolvability through a number of processes, such as genetic capture. However, strong sexual selection will also often give rise to sexual conflict and female harm, which does not only tend to deviate females from their evolutionary optima, but can drastically affect population viability, leading to a “reproductive tragedy of the commons”. We are still far from understanding what factors modulate the evolution of male-male competition, female harm levels, and sexual conflict at large, and how this all feeds back into population viability.

Our on-going research aims to contribute to fill these gaps in knowledge by investigating factors potentially modulating the evolution of sexual conflict. For example, we are currently investigating the role of kin selection in leading to reproductive cooperation (or “reproductive altruism”), how temperature affects male-male competition levels and the potential for sexual conflict, or the evolutionary interplay between ageing and sexual selection (e.g. can ageing magnify sexual conflict?).

The research project mainly involves behavioural experiments and lab work with *Drosophila melanogaster*, some experimental evolution, and some fieldwork in Europe, the USA and potentially in Australia.

Where? The student will be supervised by Dr. Pau Carazo, and based at the Behaviour and Evolution group of the Ethology Lab, at the Cavanilles institute of Biodiversity and Evolutionary Biology (University of Valencia, Spain). For information about our group visit our website (<http://paucarazo.com>).

Who? We are looking for a motivated, enthusiastic, hard-working candidate with some background (and a strong interest) in sexual selection, and evolutionary biology and animal behaviour at large.

Contact For further information and expressions of interest, please contact Pau Carazo (University of Valencia; pau.carazo@uv.es). The deadline for applications is the 31st March.