

# PhD CONTRACT OFFER

## Social context effects in physiology and male reproduction

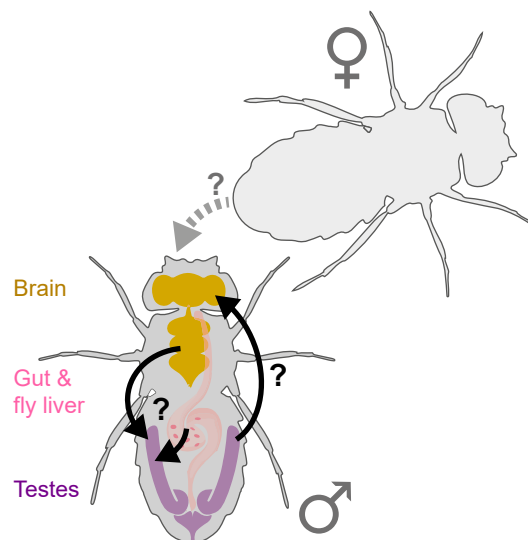
Centro Andaluz  
de Biología  
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Reproduction requires the tight coordination of stem cell activity at the gonads, triggering specific behaviours and physiological preparedness. This coordination has been extensively described in female animals, but is largely overseen in males. Leveraging the powerful genetics of our model system, *Drosophila melanogaster*, our lab recently described for the first time that the social context affects the activity of the male gonad – the presence of potential mating partners, detected by female-secreted pheromones, is sufficient to induce an activation state of the stem cells residing at the testis. This depends on interorgan communication, with signals secreted by the brain (Octopamine) and the visceral muscle of the testis (TNF $\alpha$ ).

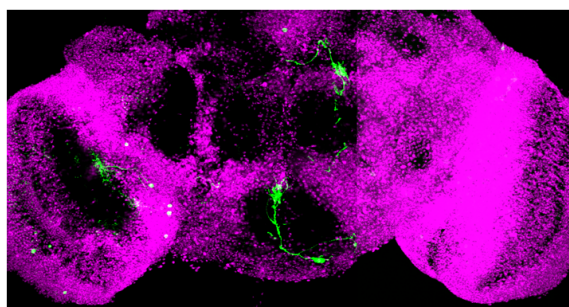
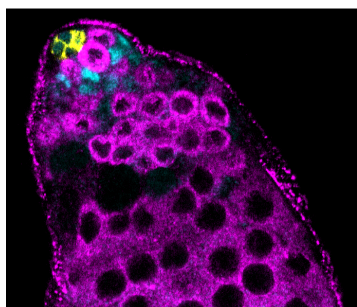
We think this activation is part of a larger physiological response we define as “pre-mating response”. Our goal is defining the neurobiological, behavioural and hormonal responses during this response, aimed to cope with the higher metabolic demands, consequence of the increased testis activity.

We offer a 4-year predoctoral contract in a stimulating environment with a comprehensive and multidisciplinary training program, at the intersection of stem cell biology, neurobiology and physiology.



**Applications, including an updated CV and academic records:**

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### We look for:

- Completed Master Studies in biosciences
- Good academic qualifications
- High motivation and adaptability.
- Excellent organizational, communication and team skills
- Good knowledge of written and spoken English

### We offer:

- A stimulating and friendly environment, with a work culture based on the values of teamwork, respect, diversity, equality and emotional wellness
- Interdisciplinary training, including techniques such as genetics, confocal microscopy, metabolic tests, behaviour assays, transcriptomics...
- Enrollment in the excellency-awarded “Programa de Doctorado en Biotecnología, Ingeniería y Tecnología Química” from the Universidad Pablo de Olavide (UPO)
- Mentoring scheme at the CABD, with regular presentations at internal and external seminars. Attending at national and international conferences.



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