





PhD position in Spermatology and Epigenetics

The Group of Comparative Molecular Physiology from the Spanish National Research Council (CSIC), located in the Institute of Biotechnology and Biomedicine (IBB) from Autonomous University of Barcelona (UAB), is recruiting a highly motivated PhD student for a research project funded by the Spanish Ministry of Science and Innovation (MICINN) entitled "Biomarking the fish sperm epigenome and molecular cargo for a sustainable aquaculture". The objective of the project is the identification of epigenetic marks and paternal molecules as candidate biomarkers of sperm quality to evaluate the fertilization success and offspring viability in fish, using the zebrafish and gilthead seabream as model organisms.

As a PhD student in the group you will:

- Be hired by a 4-year predoctoral contract fully supported by Spanish MICINN, starting around autumn 2023.
- Acquire training in molecular biology of spermatozoa and various genome-wide technologies, such as whole-genome methylome analysis, proteomic analysis of histone posttranslational modifications, ChIP- and RNA-seq, and high-throughput chromosome conformation capture (Hi-C), as well as in computer assisted sperm analysis (CASA).
- Benefit from ongoing national and international collaborations with top-quality laboratories.
- Work embedded in a group of experienced researchers in reproductive cell biology with complementary expertise, who will provide constant support and training.

The specific requirements for the position are:

- To hold a Master degree in Biotechnology, Biochemistry, Biology or related fields before October 2023.
- Practical experience in cell and molecular biology techniques.
- Experience in bioinformatics, ideally epigenomics and NGS data analysis principles.
- Strong interest and basic knowledge in reproductive biology and/or epigenomics.
- Excellent communication and documentation skills in English.

For a glimpse of the current research interests of the group, please check recent publications at <u>PubMed</u>.

Interested applicants should contact Joan Cerdà and send a detailed curriculum vitae, and names and email addresses of at least two references (Emails: jcerda@icm.csic.es or joan.cerda@uab.cat).