



CENTRE FOR
ORGANISMAL STUDIES



UNIVERSITÄT
HEIDELBERG
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PhD student (m/f/d)

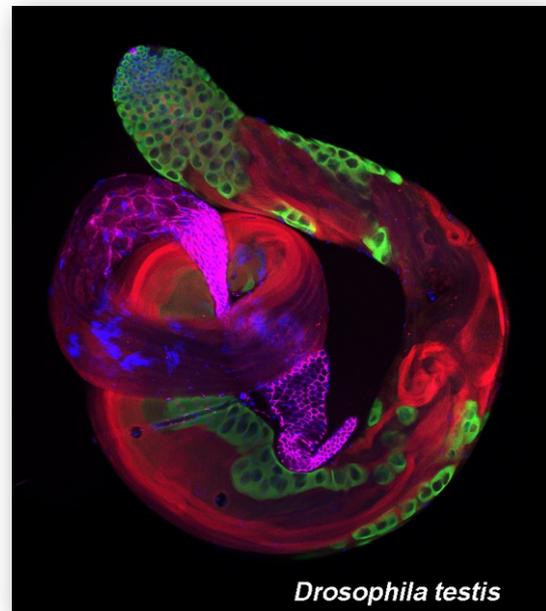
Wnt Pathway in Male Germline Stem Cell Control

About the project

Wnt signaling is critical for stem cell development and homeostasis. However, it is still underexplored how Wnt pathways controls different stem cell populations within one tissue in a cell-type specific manner and how this pathway contributes to genome integrity in stem cells. Within this project, we will apply advanced genomic techniques (single cell RNA-seq, CUT&RUN), cell-specific genetic perturbations (CRISPR, RNAi, protein degradation) as well as high-resolution imaging in the *Drosophila* male germline stem cell system to address these fundamental questions. Resolving the Wnt-encoded stem cell fate stabilization and specificity will not only advance our general understanding of stem cell biology but will also have important implications for the translational use of stem cells.

About the advertised position

We are looking for a highly motivated student, who easily integrates into an interdisciplinary team, works independently and enjoys scientific discussions. The successful applicant should have a passion for the Wnt pathway, experience in *Drosophila* genetics and molecular biology and a deep interest in applying genomic techniques and bioinformatics for data analysis. The project is embedded in the DFG funded Wnt research consortium (<https://sfb1324.de>). The position is available immediately, the salary is according to TV-L regulations. Disabled persons with comparable skills will be preferentially considered.



Drosophila testis

About the Department of Developmental Biology

The Department of Developmental Biology at the Centre for Organismal Studies (COS) Heidelberg dissects fundamental principles of transcriptional regulation with a focus on Hox transcription factors. In addition, the group studies the *Drosophila* testis to understand how stem cell maintenance and differentiation is controlled and how stem cell heterogeneity contributes to tissue homeostasis.

How to apply

Candidates should have a master or PhD degree in biology, biochemistry, biotechnology or a related field. Applications should be directly sent to Ingrid Lohmann (ingrid.lohmann@cos.uni-heidelberg.de).