

## Postdoctoral position in cell biology and development on Drosophila muscles

A three year post-doctoral position is available in Vincent Mirouse's team to study the establishment and maintenance of the myotendinous junction in Drosophila. In this specific context, the role of Dystrophin and the Dystrophin Associated Protein Complex (DAPC) will be explored in depth.

Although the genetic involvement of Dystrophin in Duchenne and Beker muscular dystrophies is well established, there is still a major gap in our fundamental understanding of its molecular and cellular functions (Mirouse, 2023). On the basis of our recent findings (Cerqueira Campos et al, 2020, Dennis et al, 2023) and preliminary data, the project aims to analyze the organization of the ECM at the myotendinous junction and how this organization is modulated by DAPC and how, ultimately, it has an impact on muscle function. The successful candidate will benefit from the many genetic tools we are developing to study both ECM and DAPC and will have access to state-of-the-art imaging facility, including super-resolution and light-sheet microscopes. He/she will work closely with a PhD student and an imaging engineer, as well as a molecular biology and biochemistry technician dedicated to the project. In addition, this project is also part of a collaboration with laboratories working on C. elegans and mouse models, and regular scientific exchanges will contribute to its scientific progress. More details about the project will be provided to the candidates upon request.

The team is part of the Institute of Genetics, Reproduction and Development (iGReD), which gathers 15 different teams and well-equipped facilities in a very recent building. The laboratory is supported by CNRS, INSERM and Université Clermont Auvergne. It is located in Clermont-Ferrand, a town appreciated for its quality of life in the centre of France.

We are looking for a highly motivated and enthusiastic candidate whose expertise in muscle biology would be highly valued and who could take up the post in 2024. Other skills could include a good knowledge of the Drosophila model, matrix biology, cell trafficking or advanced cell imaging approaches and quantitative imaging data analysis. Please send your application or contact us at this email address: vincent.mirouse@uca.fr

de la recherche

## **References:**

Dennis et al, BioRxiv, 2023 DOI: 10.1101/2023.03.22.533752 Mirouse, 2023, Front Cell Dev Biol, PMID: 37384252 Cerqueira Campos et al, Development 2020 PMID: 32156755







