

Job Type**PhD student****Starting date****Autumn 2023****Discipline****Life Science**
Cell biology
Genetics
Genomics**Qualifications****MSc degree**
Research experience**Duration****Up to 5 years****Salary****UniL payscale** 
(assistants diplômé)**Funding****European Research Council**

The **Vještica Lab** at the Center for Integrative Genomics, University of Lausanne in Switzerland is looking for a **PhD student** to study fission yeast blocks to refertilization.

Vještica lab (wp.unil.ch/vjesticalab) is interested in the sexual lifecycle of fungi, with a focus on **mechanism of gamete-to-zygote transition** in fission yeast. Fertilization between two haploid gametes triggers fission yeast to rapidly switch fate and acquire zygotic identity. Failure in this early developmental step, or its mere delay, leads to refertilization and consequently, formation of progeny with aberrant ploidy^{1,2}. Since ploidy alterations increase fitness under certain conditions in both non-pathogenic and pathogenic fungi, **understanding fungal blocks to re-fertilization**, holds relevance not only for developmental but also evolutionary and medical biology.

The PhD student will work on the ERC Starting Grant-funded project to **characterize the mechanisms of fission yeast refertilization blocks**. Work will rely on integrating high-throughput genomics and proteomics, advanced genetics, microscopy and image analysis. The PhD candidate will be enrolled in the **Doctoral School of the Faculty of Biology and Medicine** at the University of Lausanne.

Candidates must hold a **recent MSc degree** (or equivalent), show strong **interest in life sciences**, have **research experience** (e.g. master project) and excellent command of oral and written English. Experience in high-throughput data analysis, microscopy and genetics is advantageous. The position comes with a competitive **assistant diplômé salary** and includes research, teaching and training responsibilities.

The Vještica Lab is supported by the European Research Council (ERC Starting Grant), the Swiss National Science Foundation (Eccellenza Professorial Fellowship) and the University of Lausanne. We offer an exciting working atmosphere in the interdisciplinary environment of the Center for Integrative Genomics. University of Lausanne is a leading research institution with possibilities for continued professional education and a multitude of scientific and cultural activities to discover. Located in the francophone part of Switzerland, Lausanne offers a multicultural, diverse and dynamic environment with easy access to alpine nature and big cultural centers of Europe.

To apply, please contact Aleksandar Vještica (Aleksandar.Vještica@unil.ch) with a single PDF file containing the CV and a motivation letter that summarizes applicant's previous work and interest in projects of the Vještica lab.

References:

1. Vještica, A. et al. *Nature* 560, 397–400 (2018).
2. Vještica, A. et al. *PLoS Biol* 19, e3001067 (2021).

**VJEŠTICA LAB**