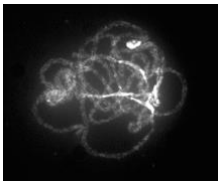
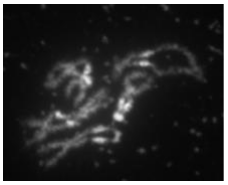
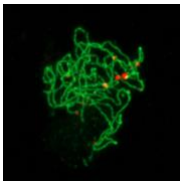

2-YEAR POST-DOCTORAL FELLOWSHIP

Meiotic recombination in response to temperature

FUNDING

International Research Center on Sustainable AgroEcosystems (CIR1, ISITE CAP20-25)

WHERE

IGReD - Institute of Genetics, Reproduction and Development
Université Clermont Auvergne, CNRS-UMR6293, INSERM U1103, Clermont-Ferrand, France
Meiosis, Recombination and Adaptation team - https://www.igred.fr/equipe/reclab/

Part of the University Clermont Auvergne (~40 000 students), the iGReD is a scientifically vibrant, interdisciplinary research institute, which aims to understand the genetic and epigenetic programs underlying reproduction and development. We are located next to the Chaine des Puys – Limagne listed as a UNESCO World Heritage Site.

WHEN does it start?

1st September 2026 (Application deadline: 30 June 2026)

PROJECT

We are currently seeking a motivated postdoctoral researcher to join our team **for a 2-year funded project.** Our research focuses on investigating the mechanisms involved in meiosis from various perspectives, with a specific emphasis on unraveling the molecular regulation of meiotic recombination and how genetic and epigenetic contexts impact this process.
As climate change accelerates, heat waves pose an ever-growing threat to plant reproduction worldwide, yet the biological mechanisms that make plant reproduction so vulnerable to temperature extremes remain largely unknown. Meiosis, the specialized cell division that produces gametes and generates genetic diversity through chromosomal crossovers, is among the most thermosensitive processes in plants: even brief heat or cold stress during meiosis can drastically reduce fertility and grain yield in crops such as wheat, rice, and maize. This project aims to uncover the molecular mechanisms by which key meiotic proteins safeguard recombination and fertility under thermal stress, in both wheat and Arabidopsis. We will focus on the key meiotic recombinase DMC1, which is proposed to play an important role in meiotic recombination under thermal stress in wheat and we will use *Arabidopsis thaliana* as a genetically tractable model. The project is highly multidisciplinary and involves molecular biology, cytology and biochemical approaches.
The recruited postdoctoral researcher will collaborate closely with technicians and an assistant professor from our group who will assist with experimental design, molecular biology, microscopy analysis and data analyses. The project involves a collaboration with the team of Pierre Sourdille (INRAE GDEC, Clermont-Ferrand; GeCO Team) working on wheat and Simon Amiard (CODED Team) for biochemistry analyses.

BACKGROUND AND SKILLS

- Ph.D. in a relevant field (genetics, cell biology, molecular biology, biochemistry, etc.).
- A background in plant chromosome biology, meiosis, or related areas will be appreciated.
- Experience and/or strong interest in working with plants
- Excellent communication and collaboration skills.

HOW TO APPLY

Interested candidates should submit a cover letter, CV, and contact information for two references to Olivier Da Ines (Olivier.da_ines@uca.fr).