Postdoctoral position in Plant Molecular Biology

Rice Meiotic Recombination

An industry-academia collaboration between Meiogenix and CIRAD

We are seeking a highly motivated postdoctoral scientist to join our team. This joint industry–academia project will be focused on studying meiotic recombination in rice. This project aims to develop innovative approaches to engineer meiotic recombination in rice, with the long-term goal of facilitating the generation of new genetic combinations for plant breeding. Building on a recent proof-of-concept demonstrating the stimulation of targeted recombination at specific genomic regions in rice (Herbert et al., Frontiers in Plant Sciences, 2025), the project will focus on further optimizing targeted crossover stimulation. The project will also explore various strategies to modulate recombination and engineer the distribution of crossovers, while evaluating the potential of these approaches in rice.

This project brings together Meiogenix's targeted recombination technology platform and Cirad's expertise and research infrastructure in rice genetics and reproductive biology. The postdoc will work at the interface of the two, combining the pace and focus of a start-up with the depth of a leading agricultural research institute.

About Meiogenix

Meiogenix, an ag biotech startup with a new vision for agriculture. Our mission is to bring back the diversity in complex traits that has been lost during intensive breeding. We are developing advanced breeding technologies by targeting meiotic recombination to unlock the genetic diversity of crops for better performance. Meiogenix aims to develop products that meet new food trends, adjust crops to climate change and eliminate the use of harmful chemicals.

Location: CIRAD, Montpellier, France
Position: Full-time
Start date: January 2027

Key Responsibilities:

- Designing and optimizing high-throughput assays for validation of protein function and DNA binding during meiosis in rice.
- Designing high-throughput quantitative assays to detect crossover and noncrossover events in male and female gametes.
- Designing cloning strategies and generating molecular constructs.
- Monitoring scientific advances in meiosis, recombination, and plant biotechnology, and proposing innovative research directions.
- Excellent problem solving and troubleshooting skills.
- Regular communication of research progress to the Cirad and Meiogenix teams and to company leadership
- Maintaining detailed records of experimental details, project data and other documentation.

Desired Qualifications:

- PhD in Molecular Biology, Biochemistry, Genetics, or a related field.
- Previous work experience in meiotic recombination or DNA repair field preferred.
- Strong background and expertise in molecular biology, with prior laboratory experience, (CRISPR, Cytology: FISH, Immunofluorescence, PCR, RT-qPCR, Western analysis.)
- Bioinformatics skills would be appreciated
- Ability to work independently and adhering to timelines.
- Ability to multi-task and be agile to change course as needed for projects involving fast-paced start-up environment.
- Strong communication, organization, trouble-shooting and interpersonal skills.

How to apply: Send your CV, cover letter and contact details to gagan.sidhu@meiogenix.com