



European Research Council



Bioinformatics engineer position

- Genomic and epigenomic adaptation of polyploid genomes -

Job information

- Organisation: GReD Institute, Clermont-Ferrand, France
- Team: Recombination and maintenance of genome integrity
- Research profile: Bioinformatics engineer
- Duration: 13 months, renewable twice
- Job status: Full-time
- Funding: ERC Starting Grant led by Heïdi Serra
- Starting date: From November 18th, 2024 (flexible)

Offer description

We are looking for a highly motivated bioinformatics scientist to work on the ERC **MeioPoly**, which seeks to elucidate the mechanisms of **meiotic adaptation to allopolyploidy**. Hybridization between related species results in allopolyploid organisms that suffer from genomic, epigenomic and transcriptomic changes that must be overcome for this new species to survive. Meiotic recombination between the subgenomes (inherited from the progenitors) can lead to highly deleterious genome rearrangements and has to be prevented. Using the allotetraploid *Arabidopsis suecica* as a model, the MeioPoly project aims at deciphering the **evolutionary processes enabling meiotic stabilization of young allopolyploids**.

The successful candidate will develop computational tools to characterize genetic variations and genome rearrangements, as well as epigenomic and transcriptomic changes to unravel the bases of meiotic stability and fertility of newly formed allopolyploids.

Background and skills

- Master II or PhD degree in Bioinformatics
- Ability to develop methods and pipelines to analyze, manage and interpret biological datasets
- Excellent programming skills and strong analytical and problem-solving abilities
- Expertise in long-read sequencing (ONT), ChIP-seq and RNA-seq analyses
- Previous work on polyploid genomes will be highly appreciated, but not mandatory
- Ability to work independently and cooperatively with the other members of the team
- Fluent in English

Host Institute

Part of the University Clermont Auvergne, the iGReD (www.igred.fr/en) is highly stimulating and dynamic research institute composed of 15 teams aiming at understanding the genetic and epigenetic programs underlying reproduction and normal/pathological development. We are located next to the Chaîne des Puy – Limagne listed as the UNESCO World Heritage



How to apply?

- Please send your CV including two references and a cover letter to Heïdi Serra (heidi.serra@uca.fr) or via the link <https://emploi.cnrs.fr/Offres/CDD/UMR6293-HEISER-004/Default.aspx?lang=EN>