

Postdoctoral Scientist in Genomics / Bioinformatics – 24 months

IRHS (Institute of Research in Horticulture and Seeds) is a joint research unit (UMR 1345) under the supervision of INRAE, the Rennes-Angers Agro Institute and the University of Angers. It is a research institute composed of 14 research teams and several mutualized technical platforms that integrate expertise in genetics, genomics, epigenomics, physiology, biochemistry, and bioinformatics. Located in Angers (France), researchers enjoy a privileged working environment in a dynamic scientific and teaching environment.

Purpose

We are looking for a high skilled and motivated Postdoctoral Researcher to join our team (VALEMA – VALorization of Epigenetic Marks in plAnts) in Angers for a two years contract (January 2025 to December 2026). We study the effects of transposable elements (TE) on genome evolution and plant adaptation to climate change. The successful applicant will join an international project focused on a perennial plant (Apple - *Malus Domestica*) which aims at (i) characterizing recent natural TE transposition events and their potential effects on plants response to the environment, and (ii) exploiting and inducing this naturally occurring phenomenon to generate novel genotypes in order to propose an alternative method to plant breeding.

Your tasks and responsibilities

You will contribute to establish and validate new bioinformatic methods to compare genome sequences (generated from long read sequencing technologies), identify recent TE insertions, and characterize their effects on plants response to environmental constrains. To this end, you will actively interact with bioinformaticians, data scientists and molecular biologists in an international and interdisciplinary project (a 6-month stay in Switzerland is planned).

Your profile

We seek a candidate who possesses the following:

- PhD in Genomics and Bioinformatics, with strong foundation in plant genomics, as well as strong scientific track record and problem-solving capacities
- Strong background in genome analysis required, particularly in Transposable Element analysis
- Experience in project management in a multidisciplinary and international context
- Experiences in plant phenotyping, molecular biology are helpful
- Excellent communication and presentation skills
- Excellent proficiency in English, both spoken and written, knowledge of French is an advantage

We support a flexible working model with the option of partially working from home. During this postdoctoral experience you will integrate a dynamic team where you will be able to apply your expertise and grow your competencies in a supportive environment.

How to apply:

Applications should be sent via email to <u>jean-marc.celton@inrae.fr</u>, <u>sandrine.balzergue@inrae.fr</u> and <u>anne-laure.fanciullino@inrae.fr</u>

Applications must include an up-to-date resume, a motivation letter and a complete grade report of the PhD degree. Letters of support are welcomed.

Deadline for application: 10/31/24