



THREE-YEAR POSTDOCTORAL POSITION IN COMPARATIVE GENOMICS OF INSECTS

ERC-FUNDED ALTEREVO PROJECT

INRAE (National Research Institute for Agriculture, Food and Environment), Rennes, France

Context. This postdoctoral position is to take part to the ERC-funded ALTEREVO project (2023-2027) coordinated by Dr Jean-Christophe Simon, which aims at identifying the evolutionary and molecular determinants of plant-aphid interactions with a particular focus on host alternation. For more details on the project:

<https://www.inrae.fr/en/news/erc-grant-better-understand-plant-insect-interactions>.

Research environment. The research will be performed in JC Simon's team at INRAE IGEPP, in Le Rheu nearby Rennes, Brittany, France (https://www6.rennes.inrae.fr/igepp_eng/). IGEPP is a joint research unit from three institutional bodies (INRAE, University of Rennes and Institut Agro). It provides excellent infrastructure to carry out comparative genomics in insects, including a bioinformatics platform (BIPAA at <https://bipaa.genouest.org/is/>) hosting dedicated genomic resources, databases and tools, fully equipped facilities for molecular and biological experiments on plants and insects, confined laboratories to work on genetically modified or quarantine organisms.

Research objectives of the position. Under the supervision of JC Simon, within an ambitious project involving other permanent and ERC-funded staff, the postdoc will perform comparative genomics to elucidate the evolution of the molecular mechanisms underlying adaptation to host plant in aphids. The postdoc will analyse whole-genome sequences from multiple aphid species (50 genomes are already available). He/she will also contribute to generate new high-quality assembled genomes for additional aphid species. The postdoc will benefit from scientific and methodological support from partners with excellent skills in evolutionary genomics (Dr Julie Jaquiéry), and bioinformatics (Fabrice Legeai and Stéphanie Robin).

Expected skills. The applicant should hold a PhD in the field of comparative genomics or phylogenomics and an ability to conduct a research project in autonomy while being able to collaborate within a team. Skills and knowledge in molecular evolution and phylogenetics are crucial for the project. Experience in bioinformatics (genomics data analysis) is also required. Excellent skills in writing and communicating in English are expected.

Duration and salary. This 3-year (full-time) position will ideally start in February-March 2024. Net salary of ca. 2,500 euros per month (before taxes). Health care and social security are deducted directly from your salary, but you may need to take out a supplementary health insurance scheme.

How to apply. Application should contain a motivation letter, indicating the names and email addresses of two references, and a 2-page max curriculum vitae including publications. Send your application to jean-christophe.simon@inrae.fr by December 30th. Pre-selected applicants will be interviewed through Zoom or an equivalent video-conference system in January 2024. Call for applications is open until the position is filled.