



European
Research
Council



3 Fully funded positions in molecular plant-fungus interactions

Open at the Laboratoire des Interactions Plante-Microorganismes, Toulouse, France

2 Post-doc positions available from 11/2016 to 11/2018

1 Research assistant position available from 06/2017 to 11/2018

The Laboratory for Plant-Microbe Interaction studies (LIPM) provides an excellent environment to study plant-microbe interactions, with internationally recognized teams of plant biologists and microbiologists and complementary expertise in symbiotic and pathogenic interactions. It is part of the Federative Institute FR3450 (www.fraib.fr) and the TULIP labex excellence program (www.labex-tulip.fr) that includes ~400 researchers working on plant biology, microbiology, ecology and evolution, as well as a state-of-the-art facilities for live cell imaging (www.trigenotoul.com), genomics (www.get.genotoul.fr) and phenotyping.

Projects description

The position will be associated with ongoing projects of the group “quantitative immunity in plants” aiming at unraveling the molecular bases and evolution of plant quantitative disease resistance to the fungal pathogen *Sclerotinia sclerotiorum* (www.qiplab.weebly.com). In frame with the ERC starting grant project VariWhim (www.erc.europa.eu/projects-and-results/erc-funded-projects/variwhim), we develop multidisciplinary approaches to study the mechanisms and evolution of plant interactions with pathogenic fungi (Roux *et al.* 2014 PMID:24796392; Mbengue *et al.* 2016 PMID:27066056; Peyraud *et al.* 2016 PMID:27870294).

A major objective in our lab is to decipher the genetic architecture of plant quantitative immunity. We are especially focusing on the diversity of quantitative immunity program in multiple plant genotypes and species, and on the connections between immunity and the response to abiotic stress. We also develop a research program aiming at understanding how the fungal pathogen *S. sclerotiorum* manipulates plant cells to colonize host tissues, and how its virulence program evolves in the context of plant quantitative immunity.

Our approaches are highly multidisciplinary involving methods ranging from molecular and cell biology, genetics, high throughput phenotyping of plants and microbes, genomics and transcriptomics, systems biology and modeling. We are looking for highly motivated and talented collaborators with expertise in these approaches. Experience in plant pathology or fungal microbiology will be seen as an advantage.

Qualification requirements

Applicants must hold a PhD degree (Post-doc positions) or a Masters degree (Research assistant position) in biology (plant biology, microbiology or closely related field), or an equivalent degree.

Terms of employment

Two post-doc positions are available immediately for up to 2 years (until November 2018). One research assistant position will be available from June 2017. Applications will be reviewed from 30th November 2016. The positions will remain open until filled.

Contact and application

For further information, please contact project leader Dr. Sylvain Raffaele +33 561 285 326, sylvain.raffaele@inra.fr

Apply by contacting Sylvain Raffaele directly or via the LIPM application system (<https://www6.toulouse.inra.fr/lipm/Opportunités-Formations/Candidater>).

Applications should include a cover letter, CV with publication list, and contact information for two references.

