



Post-doctoral position on the role of effectors of the type III secretion system in triggering nodulation in legumes

Institute for Integrative Biology of the Cell, CNRS, Paris-Saclay University, Gif-sur-Yvette (FR)

A two-year post-doctoral position funded by a collaborative project grant of the ANR (National Research Agency, France), is available from October 2021 onwards (applications will be accepted until filling of the position) in the “Plant-Bacteria Interactions” team, headed by Dr. Peter Mergaert, at the Institute for Integrative Biology of the Cell, Paris-Saclay University, located in Gif-sur-Yvette in the Paris region in France.

The post-doctoral fellow will participate in the “ET-Nod” project that studies the role of effectors of the type III secretion system in the symbiotic interaction *Bradyrhizobium*/legumes. The project focusses specifically on effectors that can trigger the symbiotic program of the host (ET-Nods or Effectors Triggering NODulation) ([Teulet et al 2019, PNAS](#)). The hired researcher will be involved in the mutagenesis of the studied *Bradyrhizobium* strains and their phenotypic characterization as well as the functional analysis of already identified ET-Nods. ET-Nod is a collaborative project with teams in the LSTM in Montpellier (Dr. Eric Giraud) and the LIPM in Castanet-Tolosan (Dr. Laurent Deslandes).

The successful candidate will have a PhD in microbiology, bacterial genetics, molecular biology or related fields. She/he will have a solid background in the field of plant-bacteria interactions (symbiosis and/or pathogenesis). Previous experience in bacterial mutagenesis, yeast-two hybrid, protein co-immunoprecipitation, fluorescence and confocal microscopy, generation of transgenic plants will be useful for this project. The candidate will frequently exchange with the partners in this project. Good communication skills are required.

Interested candidates can contact Dr. Peter Mergaert (peter.mergaert@i2bc.paris-saclay.fr) for further information. Applications should be submitted here (<https://bit.ly/3mRDUC2>) and should include a Curriculum Vitae, mentioning past research experiences and publication record, as well as a letter detailing motivation and interest for this project. Applicants should also mention in their letter the names and coordinates of reference persons that would accept to provide a recommendation letter when requested.