



Post-doc position in Plant Sciences

Genomic adaptation of fungal pathogens to their plant host

université de BORDEAUX INRAE



A two years position supported by Bordeaux Plant Science (BPS) research program is available in the BIOGECO Unit in Bordeaux, France. This post-doc position is one of 19 offered positions as part of Bordeaux University excellence BPS program, which will provide access to many scientific events and resources.

The specific objectives of this position is to study the evolutionary dynamics of the adaptation of pathogens to their hosts. The project will focus on three pathogen species, responsible for devastating diseases in host plants of high socio-economic significance, *Cryphonectria parasitica* (blight canker on chestnut), *Plasmopora viticola* (downy mildew on grapevine), and *Fusarium graminearum* (fusarium head blight on wheat). Phenotypic and genomic data are already acquired for the three species. The candidate will implement generic methods of genome analysis and detection of selection signatures taking into account the biological characteristics of each species.

Environment

The position is opened at UMR BIOGECO, recognised world-wide for its expertise in evolutionary ecology and genetics of plants and micro-organisms. The project is co-supervised by Cyril Dutech (UMR BIOGECO), François Delmotte (UMR SAVE) and Marie Foulongne-Oriol (UR MycSA). The three teams, involved in the work-package PRESAGE of the BPS program, gather skills and knowledge with complementary expertise in biology, plant pathology, genetics and genomics. We are located on the plant science campus of the INRAE (French National Research Institute for Agriculture, Food and Environment).

Bordeaux is an easy-going and enjoyable UNESCO world heritage city with many cultural, social, sportive events, famous for its vineyards and only one hour away from marvellous sand beaches.

Candidates

We are looking for highly motivated candidates with a good publication track-record and a strong commitment to research. English communication skills are expected. A solid experience in bioinformatic analyses is required.

Starting date: April 2022

Team/lab websites

<https://www6.bordeaux-aquitaine.inrae.fr/biogeco>

<https://www6.bordeaux-aquitaine.inrae.fr/sante-agroecologie-vignoble/>

<https://www6.bordeaux-aquitaine.inrae.fr/mycsa/>

Selected publications

📌 Demené et al. 2019. FGB
<https://doi.org/10.1016/j.fgb.2019.06.002>

📌 Dussert et al. 2019. GBE
<https://doi.org/10.1093/gbe/evz048>

📌 Laurent B. et al. 2017. BMC Genomics
<https://doi.org/10.1186/s12864-017-3524-x>

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