

# POSTDOC POSITION (CROP MODELING & PHYSIOLOGY, PLANT- MICROBES INTERACTION, CLIMATE CHANGE): BELGIUM (100%)

The Postdoc position will be conducted in the frame of the project "BIOdiversity of soils and FArming Innovations for improved Resilience in European wheat agrosystems (BIOFAIR)", which is part of the European research program BiodivERsA which is financed in Belgium (Wallonia) by the Fonds National de la Recherche Scientifique (F.N.R.S.).

The BIOFAIR project is in partnership with the University of Hohenheim (Germany), the University of Ghent, the Research Institute of Organic Agriculture (FiBL Switzerland and FiBL Europe), the INRAE of Clermont Ferrand (France) and the CSIC of Almería (Spain).

## Context:

In the face of climate change, crop species and agricultural practices will require adaptation to produce high quality food while reducing the impact of agriculture on the environment. The study of mechanisms underlying the anticipated negative impact of climate change on food production thus needs all the attention in order to design cropping systems resilient to climate change. To date, most of the climate change studies have been focused on the plant physiology without addressing key questions linked to root and soil diversity and functioning under fully realistic anticipated climatic scenarios.

## Job position:

Within the BIOFAIR project and other collaborative projects, you will have to decipher and model mechanisms by which climate-stressed plants (wheat) modify their strategies to 1) interact with soil organisms and 2) mobilise soil nutrients for root uptake. For this purpose, you will have access to different platforms (outdoor phenotyping platforms at INREA Clermont-Ferrand and Ecotron facilities at Gembloux Agro-Bio Tech) where wheat will be challenged with future climatic scenarios. The person will take part in the BIOFAIR project management and communication as well as will be involved in the supervision MSc or PhD students.

Research activities will be performed at University of Liège, Gembloux Campus (35 min by train from Brussels) in an international team (Plant Genetics and Rhizosphere Processes Lab) with research focus on plant nutrition and improvement of temperate and tropical crops. Weblink: <https://www.gembloux.ulg.ac.be/plant-genetics/>

## Profile:

The candidate should hold a PhD and have demonstrated expertise as well as scientific publications in at least two of the following research fields: root physiology, crop modelling, plant-microbe interaction, soil microbiology. Candidates with good expertise in statistics and database management are particularly welcome.

Excellent oral and written communication in English is required.

Appointment is for 2 years with possibility of renewal.



**FiBL INRAE**



**Benefits:**

Net salary after taxes and social benefit costs is circa 2250 €/month.

**Information and application:**

Dr Pierre Delaplace ([pierre.delaplace@uliege.be](mailto:pierre.delaplace@uliege.be)) and Dr Cécile Thonar ([cecile.thonar@uliege.be](mailto:cecile.thonar@uliege.be)) Application (CV, cover letter and two letters of recommendation) should be sent by Email to Pierre Delaplace and Cécile Thonar with the Email subject "BIOFAIR application".

**Deadline for application:** 28<sup>th</sup> February 2021; Reviewing of applications will start on 01/03/2021 but the position will remain open until suitable candidate is identified.

**Starting date:** expected starting date preferably in April-May 2021 but possibility to agree on a later starting date