



Post-doctoral position available:

ABA-dependent control of plant hydraulics

CNRS/INRA, Montpellier, France

A position is open to work on the control of plant water transport by the stress hormone abscisic acid (ABA). Research will be carried out in the group of Dr Christophe Maurel in the Biochemistry and Plant Molecular Physiology department (Montpellier, France). The host group has world-wide recognized records in plant hydraulics and stress physiology (<http://www1.montpellier.inra.fr/ibip/bpmp/>) (Shahzad Z *et al.*, 2016, *Cell* 167:87; Rodrigues *et al.*, 2017, *PNAS* 114: 9200, Tang *et al.*, 2018, *Nat. Commun.* 9: 3884, Prado *et al.*, 2019, *Plant Cell*, 31:417). The project will be developed in the frame of a French-German ANR-DFG project in close collaboration with the group of Prof. Erwin Grill (Technical University Munich, Germany).

The overall project will use *Arabidopsis thaliana* to elucidate how water homeostasis is achieved through tissue-specific effects of ABA and communication between roots and leaves. The post-doctoral researcher will investigate how the different hormone sensitivities and actions of ABA on root and guard cell hydraulics are realized. The work will include a detailed molecular analysis of prototypic ABA signaling modules targeting aquaporins. Plants expressing deregulated signaling components will be prepared and tissue-specific ABA-induced phosphorylation signatures will be determined by proteomics. ABA-dependent water transport in these materials will be measured using techniques already available in the group.

The position is open for at least 2 years to citizens from all nationalities. Gross salary is between € 2,500 and € 3,500 monthly according to experience. We are seeking a highly motivated and independent scientist with a strong background in plant molecular physiology. Previous experience in cell signaling and/or protein phosphorylation will be appreciated.

Applications including a CV, a description of previous research experience and names and addresses of three possible referees should be submitted preferentially before July 1st, 2019, through the CNRS web portal at:

<https://emploi.cnrs.fr/Offres/CDD/UMR5004-CECABA-006/Default.aspx?lang=EN>

The position will remain open until it is filled. Please contact Dr. Christophe Maurel (christophe.maurel@cnrs.fr) for specific enquiries.