Postdoctoral Researcher Position at the CBGP (UPM-INIA) (CBGP-Severo Ochoa Centre of Excellence Research Program)

Postdoctoral position in plant biology: Mechanisms of plant tolerance to viruses by virus-induced flowering time regulation.
Madrid, Spain

Project Summary: The transition from vegetative to reproductive growth is critical in plant life, as it allows the production of seed and determines plant fitness. Plants flower in response to different internal and external cues. Flowering time has been comprehensively studied in *Arabidopsis thaliana* but its regulation in response to pathogen infection has not been analysed. We are studying the role of flowering genes in plant-virus interactions. The hypothesis is that the expression of floral regulators is altered through virus pathogenesis mechanisms, changing plant development and resulting in tolerance. To define the series of events resulting in virus-induced flowering time regulation, the successful candidate will study i) the expression kinetics of key flowering time regulators in virus-infected plants, ii) the effect of virus infection on mutants in the flowering and RNA silencing pathways and iii) determine the transcriptomic landscape in virus-infected plants. These results will significantly contribute to understand a new and exciting field of research, the interface between plant development and plant-pathogen interactions. The research project is a collaboration between the **"Plant-virus interaction and co-evolution**" and **"Epigenetic regulation of agronomic traits**" groups, led by **Fernando García-Arenal** and **Pedro Crevillén**, respectively. For further information on the groups visit their web pages: http://www.cbgp.upm.es/index.php/en/scientific-information/interactions-of-plants-with-environment-ipm/plant-virus; http://www.cbgp.upm.es/index.php/es/informacion-cientifica/lineas-de-investigacion-de-jovenes-investigadores/epigenetic-regulation

RESEARCHER PROFILE
Postdoctoral researcher
MAIN RESPONSABILITIES
Expression analyses of flowering time regulators in virus-infected plants. Phenotypic analysis of mutants in the flowering and RNA silencing pathways. Transcriptomic analysis of virus-infected plants by NGS techniques. Glass house related work of plant materials required for the project. Periodic laboratory meetings. Manuscript preparation and publishing. Presentation of work in international conferences.
SPECIFIC OFFER REQUIREMENTS (E.g.: Applications should be contain a detailed CV and two recommendation letters, educational level required, etc.)
Applications must include a detailed CV and the name of at least two scientists to provide references.
REQUIRED QUALIFICATIONS
The successful applicant should hold a doctoral degree or equivalent qualification in Plant Biology. A record of publications in a related field is desirable. Fluency in English is required.
ELIGIBILITY CRITERIA
We seek candidates with a background in plant development and/or plant-pathogen interactions with a solid foundation in genetic analyses and molecular biology techniques. The ideal applicant should have demonstrated experience in gene expression analyses and RNA biology. Previous experience working with Arabidopsis is desirable. It is expected that the candidate will have good communications skills and the ability to work independently.

APPLICATION: Applications should be sent to Fernando García-Arenal (fernando.garciaarenal@upm.es) and Pedro Crevillén (crevillen.pedro@inia.es) **before September 20, 2019**