

Job opportunities for Young Scientists in Spain FPI Severo Ochoa-Program at CBGP (UPM-INIA)

The Spanish “Ministerio de Economía, Industria y Competitividad” has published the **2017 FPI** call. This FPI program aims the incorporation of doctoral students (four years contract) to research centers in Spain to carry out their Doctoral Thesis. **The Centro de Biotecnología y Genómica de Plantas (CBGP, UPM-INIA), recently awarded as [Centre of Excellence Severo Ochoa \(SO\)](#), offers in the frame of its SO-PhD program 3 FPI research positions** for young motivated scientists. The CBGP SO-PhD positions are associated to the following research areas:

- **Improving Plant Response to Biotic Stress (SEV-2016-0672-17-1)**
This program aims to improve our current knowledge on the defenses of plants against pathogens and pests, and on the trade-offs between defense, growth and reproduction. The research projects will include the deep study of interactions representing different organisms (e.g., viruses, bacteria, fungi and mites) and different lifestyles (e.g., mutualistic endophytes vs. pathogens, necrotrophs vs. biotrophs), and how the interaction is modulated by the environment. Analysis will be from the molecular to the population and ecosystem levels.
- **Plant Adaptation to Environmental Changes (SEV-2016-0672-17-2)**
This research program aims gaining a deeper understanding of the molecular, genetic, epigenetic and transcriptional and translational regulation of plant acclimation and adaptation to environmental stresses. This gained understanding will result in the identification of the genetic, hormonal and metabolic determinants responsible for the adaptation of plants to a changing environment. This program will contribute to face the challenge of adapting crops to increased climatic variability and secure the future progress of crop improvement.
- **Engineering Plant Nutrition (SEV-2016-0672-17-3)**
This research program aims to develop new tools and approaches that will allow further improvement in crop yield and quality while increasing nutrient efficiency and reducing nutrient losses from crop management systems. Better symbiotic association between plant and rhizobium will improve the growth and nitrogen and mineral economy of the plants associated with these microorganisms. The accomplishment of these challenges involves the application and development of novel synthetic biology tools, the use of new cell biology techniques, the generation of gene regulatory networks models and new genomic data on natural variation of beneficial microorganisms, and the determination of the impact of root architecture and development in these processes.

Researchers enrolled under the frame of this FPI Program will be hired as Postdoctoral researchers at the CBGP (one year) if they complete their PhD in three years.

CBGP offers modern and fully equipped facilities to carry out state of the art research in plant molecular biology and agronomic science, and a unique environment to work (www.cbgp.upm.es).

Interested person should send his/her **CV and a motivation letter** to: so.cbgp@upm.es. **The deadline for submission is October 11th.**

[More information about the FPI call.](#)

About the Centro de Biotecnología y Genómica de Plantas (CBGP, UPM-INIA)

The Centro de Biotecnología y Genómica de Plantas (CBGP) is a joint research centre of the Universidad Politécnica de Madrid (UPM) and the Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA). CBGP (UPM-INIA) has been recently recognized by the Spanish Research Agency with the “Severo Ochoa Center of Excellence” award, which acknowledges the Center’s cutting-edge research, scientific leadership and impact at global level, as well as its active collaboration in the social and business environment.

The strategic objectives of the CBGP (UPM-INIA) are the generation of fundamental knowledge on the genetic and molecular bases of key biological and physiological processes in plants and plant-interacting organisms, and on genomics of plants and plant-interacting organisms. The Centre also aims to develop new computational Biology technologies for the functional analysis of plants/microorganisms.

CBGP (UPM-INIA) scientists are grouped into three main Research Areas/Themes: Plant Development (7 groups); Interactions of Plants with Environment (9 groups) and Biotechnology and Bioinformatics (5 groups; see Scientific Information). CBGP has attracted talented scientists since its foundation, including 11 Tenure-track positions and 3 ERC starting grants. CBGP has a remarkable Translational Biology activity in the innovation ecosystem of the International Campus of Excellence of Montegancedo-UPM. This activity has resulted in the foundation of CBGP based spin-offs enterprises and the development of new products/processes for the bioeconomy productive sectors.