Offer Juan de la Cierva contract

Dr. Oñate and Pernas Labs at CBGP

The groups of Dr. Oñate and Dra. Pernas at CBGP (Centro de Biotecnología y Genómica de Plantas UPM-INIA/CSIC) are seeking highly motivated early-career postdoctoral researchers with a strong interest and background in Plant Developmental Biology, Molecular Biology, Genetics, Biochemistry, and Bioinformatics to apply for a Juan de la Cierva Fellowship. The successful candidate/s will join an active research team working at the interface of plant development, molecular genetics, and crop improvement.

Our laboratory:

The overall goal of our laboratory is to advance our understanding of the mechanisms that integrate environmental and nutritional signals into plant growth, using *Arabidopsis* as a model species and tomato as a crop of major agronomic importance. Recently, we identified an E3 ubiquitin ligase encoding a protein with high biotechnological potential for the development of crops better adapted to environmental and nutritional stresses (Carrera-Castaño et al., *The Plant Cell*, 2026). We aim to develop biotechnological strategies based on this E3 ligase to improve tomato performance under carbon/nitrogen (C/N) stress conditions associated with elevated atmospheric CO_2 and limited nitrogen availability. Using gene-editing approaches, we will characterize the function of this E3 ligase, investigate its interaction with hormonal signalling pathways in *Arabidopsis* and tomato, and assess the conservation of the underlying regulatory networks. Ultimately, this research will contribute to the development of crop varieties with improved productivity and nitrogen-use efficiency under future climate conditions.

Call dates: 12 November – 03 December 2026

Who can apply: Researchers who obtained their PhD between 01/01/25-31/12/26.

-We are looking for candidates with a PhD in Biotechnology, Agricultural engineering, Biology or Biochemistry, and related fields.
-Candidates with a strong background in Plant Molecular and Developmental Biology or Plant Abiotic and Nutritional Stress Biology, particularly those with experience in crop research, are strongly encouraged to apply.

More information about the groups and publications:

-GROWTH AND STRESS RESPONSES DURING EARLY PLANT DEVELOPMENT (https://www.cbgp.upm.es/index.php/es/informacion-cientifica/growth-and-stress-responses-during-early-plant-development)
-ROOT DEVELOPMENTAL TRAITS ASSOCIATED WITH PLANT ADAPTABILITY TO EXTREME ENVIRONMENTAL CONDITIONS (https://www.cbgp.upm.es/index.php/es/informacion-cientifica/root-developmental-traits-associated-with-plant-adaptability-to-extreme-environmental-conditions)

If you are interested: Contact Dr. Luis Oñate (luis.onate@upm.es) or Dra. Mónica Pernas (pernas.monica@inia.csic.es), by e-mail, including a motivation letter also indicating your experience (1 page approx) and a CV.