

#MSCA

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CANDIDATES ARE WELCOME  
TO SEND EXPRESSIONS OF INTEREST

DEADLINE JUNE 30



The **Biological Research Centre of Galicia** ([MBG-CSIC](#)) offers to researchers at post-doctoral level an opportunity to carry out joint applications to the **Marie Skłodowska-Curie Actions – Individual Fellowships** ([MSCA-IF](#)) both for European and Global fellowships.

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The Biological Research Centre of Galicia (MBG-CSIC) is one of the 120 research centres belonging to the largest research public institution in Spain – the **Spanish National Research Council** ([CSIC](#)). The MBG-CSIC offers you a great research place to develop studies on genetic improvements in agro-forest crops to make them more sustainable in order to be more tolerant to biotic and abiotic stresses. Thus, the MBG-CSIC's main goal is to improve the sustainability of the agro-food sector in Europe.

## Support all the way through the application process

The experienced CSIC team will offer you support all the way through the application process; from now until the deadline of the proposal submission (September 9th), providing preparation and expert revision to develop a coherent and relevant research project.

## Deadline for Expressions of Interest

Thus, if you are interested in applying to an Individual Fellowship jointly with the MBG-CSIC, send an email to the project supervisor. In case you need further information, please contact us at [pedro.peon@csic.es](mailto:pedro.peon@csic.es)

The deadline for Expressions of Interest is

**Tuesday, June 30th at 12:00h (Brussels time)**

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# Project opportunities at MBG-CSIC

## Genetics, Genomics and Evolution of Flowering Time and Reproductive Development in Legumes

Supervisor: **Marta Santalla** | Group: **Plant Genetics Development**

The regulation of flowering by environment has a major influence on plant yield, and is important for adaptation in natural and agricultural settings, but is poorly understood at the molecular level in most species. This project aims to use induced genetic variation and transcriptome analysis to define new genes and genetic mechanisms regulating flowering in legumes, a major crop group. It will explore the molecular links between flowering and developmental processes, and examine its significance in domestication. This should significantly extend our understanding of how architecture, flowering, seed-dispersion and yield are regulated by the environment, and address several agronomic issues.

Contact: [msantalla@mbg.csci.es](mailto:msantalla@mbg.csci.es) | More info: [Group Webpage](#)

## Study of Endophytic fungi-*Brassica* Plants Interaction for Sustainable Agriculture

Supervisor: **Pablo Velasco** | Group: **Genetics, Breeding and Biochemistry of Brassica Crops**

We propose a project to deal with the identification of new endophytic fungi species previously isolated from *Brassica oleracea*, focused on molecular and histological study of the root colonization process as well as analysing the beneficial biological effects of fungus-*Brassica* interaction: promotion of plant growth, increased resistance to pests and diseases (e.g. *Mamestra brassicae* and *Xanthomonas campestris*) and increased tolerance to abiotic stresses (e.g. cold) by greenhouse and field assays.

Contact: [pvelasco@mbg.csci.es](mailto:pvelasco@mbg.csci.es) | More info: [Group Webpage](#)

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# Project opportunities at MBG-CSIC

## Circadian Clock and Plant Defense

Supervisor: **Marta Francisco** | Group: **Genetics, Breeding and Biochemistry of Brassica Crops**

Today, one of the challenges facing the global agricultural research systems is promote more sustainable and environmentally friendly agriculture without losing productivity. Hence, knowledge in plant temporal coordination for maximal responsiveness under herbivory pressure may provide an efficient way to maximize metabolic efficiency and to improve plant fitness. Thus, a project proposal is offered to investigate the circadian clock role on plant defense in Brassica crops. Using metabolomics approaches, we aim to elucidate key plant metabolites regulated by the clock and involved in the defense against biotic threats to be used for future implementation of pest management strategies.

Contact: [mfrancisco@mbg.csci.es](mailto:mfrancisco@mbg.csci.es) | More info: [Group Webpage](#)

## Bioinformatics Applied to Maize Populations

Supervisor: **Pedro Revilla** | Group: **Maize Genetics and Breeding**

We have gathered large matrices of phenotypic data from diverse maize mapping populations on response to biotic (corn borer) and abiotic (cold) stresses. Those populations have been genotyped with molecular markers (SNP, SSR). Genotypic and phenotypic data have been analyzed separately for each individual experiment. The postdoc, as expert in bioinformatics, will develop and apply meta-analysis tools to jointly analyze marker associations across populations with different inbreeding rates using the already gathered phenotype and genotype data.

Contact: [previlla@mbg.csci.es](mailto:previlla@mbg.csci.es) | More info: [Group Webpage](#)

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