

## Company Description

BC3 is a Research Centre on the causes and consequences of climate change. Led by one of the most recognized scientists in the Climate Change field -Prof. Maria José Sanz, we produce multidisciplinary knowledge to support decision making towards sustainable development at the international level. With a multidisciplinary team, connected to the main scientific institutions, networks and socio-economic agents, for a decade, our contribution to research of climate change and to the science-policy interface puts us in a unique position to offer knowledge, tools, new methodologies and cross-cutting proposals, that we lead towards action in a collaborative framework with stakeholders, to design and help implement policies aimed at sustainable development.

## Information

 **Deadline:** 2024-09-30  
 **Category:** Academia  
 **Province:** Bizkaia

 **Country:** Basque Country  
 **City:** Leioa

## Company

BC3 Basque Centre for Climate Change



## Main functions, requisites & benefits

### Main functions

The Basque Centre for Climate Change (BC3), offers a full-time Pre Doctoral researcher position to support the research activities in the context of the European Research Council (ERC) project GorBEEa (ID: 101086771), led by Dr. Ainhoa Magrach. This is a 5-year research project funded by the ERC that will be developed at the 'Global change impacts on ecosystem functioning' lab, and within the framework of the Terrestrial Ecosystems Research Line (RL3). About the Project: This position is part of the ERC Consolidator Grant GorBEEa "Understanding biodiversity-ecosystem function and biodiversity-stability relationships across spatial and organizational scales" led by Ainhoa Magrach. The project seeks to understand the drivers of functional stability at different levels of organization, to understand the feedback loops that enable biodiversity to be maintained. GorBEEa combines multiple disciplines, from the use of theoretical network developments to predictive models, experimental approaches and empirical observations integrated in a framework to predict the consequences of different perturbations for natural communities and to provide input for future policy actions aiming at the conservation of functional landscapes. To this end, the project used plant and pollinator communities and their interactions as model system. For more information on the project, click here. Job Description: The applicant will work on the effects of honeybee introduction for plant and pollinator abundances, their interaction frequencies as well as the composition and functionality of wild bee gut microbiomes. The Pre Doctoral Researcher will work collecting and analyzing data on plant and pollinator interactions from Gorbea Natural Park to investigate the role of biodiversity in maintaining ecosystem functioning and stability. The Pre Doctoral Researcher will participate in the analysis of the gut microbiome composition and functional diversity of the wild pollinator species *Bombus pascuorum* and how this composition changes through a time depending on the diversity of floral resources consumed by individuals of this species, as well as how it is impacted by the introduction of managed honeybee hives. Generally, the researcher will support the PI and the rest of the team to achieve the scientific objectives of the project, publish and disseminate project findings. Key Responsibilities: To sample species (plants, insects) and ecosystem functions Laboratory work: Sorting and process samples, ID, DNA isolation, handling samples for sequencing, etc. To analyse and visualize ecological and genomic data To write manuscripts and disseminate results To develop experimental design and analyses to study microbiomes and metagenomes to characterize bacterial and fungal communities in wild pollinator guts. To apply molecular biology expertise in a lab-based setting and integrate traditional microbiology with bioinformatic and genomics analyses. To develop expertise in pollinator microbial communities and contribute new knowledge and ideas to this area of research. To develop and apply bioinformatics tools and approaches to identify communities, relevant taxa and associations. To contribute to written and oral communication, including peer-reviewed manuscripts, blog posts, outreach through social media, and the public. To archive data and maintains databases and contribute to budget management. To support the organization of project meetings and conferences across the project.

### Requisites

**Main Requirements /Skills:** Candidates who have completed a MSc/master's degree in a relevant field (e.g. Biology or Environmental