Instituto Universitario de Investigación Biocomputación y Física de Sistemas Complejos Universidad Zaragoza

Miguel Campos Cáceres

He studied Evolutionary Biology at the University of Seville and is currently doing his PhD thesis at the Escuela Politécnica Superior de Huesca, focusing on the genomics and evolution of *Brachypodium*. He has collaborated with Kew Gardens and the Joint Genome Institute. He joined BIFI for its focus on biocomputing, essential for handling large volumes of genomic data and supercomputing in his research.



Researcher profile

He is an R1 researcher and is currently doing his PhD thesis on the genomic evolution of polyploid plants, focusing on the *Brachypodium* complex. He studies how polyploidization affects gene structure and expression, using pangenomic and phylogeographic approaches to analyze genetic variation and ecological adaptation. His research has applications in crop improvement and biodiversity conservation.

Importance of his research

His research on polyploid plants explores how polyploidization affects

genomic structure and ecological adaptation, Importance of his investigation. His research on polyploid plants explores how polyploidization affects genomic structure and ecological adaptation, which is key to addressing climate change. The findings have applications in breeding crops more resistant to adverse conditions such as drought, and their focus on pan-genome genomics and transposable elements provides advanced tools for research and biotechnology.

