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

Ramón Hurtado

He graduated in Pharmacy from the University of Granada and completed a doctoral thesis in molecular biology and enzymology of trypanosomatids at the 'López-Neyra' Institute of Parasitology and Biomedicine. As a postdoctoral researcher, he worked in Leeds, London and Dundee, where he specialised in carbohydrate-processing enzymes and learned protein crystallography. In 2009, he obtained a position as a senior researcher at the University of Zaragoza (BIFI), where he runs his own laboratory and has established himself as an independent scientist.



Researcher profile

He is an ARAID researcher R4 (according to EURAXESS), focusing on the study of glycosyltransferases, glycosylhydrolases and carbohydrate-binding proteins associated with human diseases. He uses protein crystallography, together with enzymology and inhibition studies, to investigate the molecular mechanisms of enzymes involved in the synthesis, modification and degradation of glycoconjugates. In addition, he seeks to elucidate the reaction coordinates and molecular mechanisms using transition state analogues. These studies are key to the design of new drugs with therapeutic applications.

Importance of his research

His research focuses on innovative tools in glycobiology, studying the of mechanisms glycosylation in such diseases as cancer and infections. He analyses key enzymes and develops nanobodies, contributing to new antibodies and approach enables therapies. This therapeutic molecules to be converted into new drugs, improving the diagnosis and treatment of various diseases, especially cancer and fungal diseases.

