Lucía del Pino Molina, PhD

Short Bio.

I am a postdoctoral researcher at the Center for Biomedical Network Research on Rare Diseases (CIBERER) in Spain, in the Immunology Department at La Paz University Hospital. I am also part of the Lymphocyte Pathophysiology in Immunodeficiencies group, IdiPAZ, at the same hospital.

I studied Biology at the Complutense University, where I also obtained a Master's Degree in Immunology Research. In 2012, I began my PhD training in the Immunology Department at La Paz University Hospital in Madrid, working on the project "Intracellular Signaling and Epigenetic Profile of B Lymphocytes in Common Variable Immunodeficiency" under the supervision of Dr. Eduardo López Granados. During my PhD training, I completed two short internships: one at the Chromatin and Disease Group headed by Dr. Esteban Ballestar in Barcelona, and another at the Primary Immunodeficiencies Diseases Lab guided by Dr. M. van der Burg in the Department of Immunology at Erasmus MC (Rotterdam).

I defended my thesis in 2017, PhD in Biochemistry, Molecular Biology and Biomedicine at the Complutense University. Afterward, I completed another short stay with Dr. M van der Burg at Erasmus MC. Upon returning, I continued my work with the Lymphocyte Pathophysiology in Immunodeficiencies group, in the Immunology department at La Paz University Hospital. During the initial period of my postdoctoral research, I focused on studying B cell deregulation in antibody deficiencies. In 2020 our group was admitted to the Center for Biomedical Network Research on Rare Diseases (CIBERER) in the thematic area of "Rare Monogenic Diseases of the Immune System: Diagnosis, Therapies, and Functional Studies."
My career as a biomedical researcher in Immunology, from my master's project to my role as a principal investigator, has focused on unraveling the molecular bases of Inborn Errors of Immunity (IEI). I began by working on the most common symptomatic antibody deficiency, CVID, studying the deregulation of B cells in terms of intracellular signalling and DNA methylation. Since then, I have applied the knowledge and the functional assays that I previously developed to other PIDs with altered B and T cell compartments, as well as secondary antibody deficiencies due to B-cell depleting and/or modulating treatments (BCDT). In 2022 I received a competitive private grant as principal investigator for the study of B cell reconstitution after BCDT and a competitive publicly funded project to start a new line of research that implements gene editing strategies for the study of IEI.