

### **Research Group Description (Lymphocyte Immunobiology)**

This multidisciplinary research group integrates complementary expertise in **tissue, cellular, and molecular immunology** to address fundamental and translational questions in immune regulation, inflammation, and immune-mediated disease. The group brings together research lines spanning barrier tissues, lymphoid and non-lymphoid organs, and systemic immune responses.

Research in **tissue immunology** focuses on mucosal immune responses, tissue-resident lymphocytes, cancer immunology, and mechanisms of liver injury and inflammation. **Cellular immunology** lines investigate immune cell adhesion, immune synapse formation, intracellular signaling, and the physiopathology of T cells, B cells, and innate lymphoid cells. At the **molecular level**, the group studies immunogenetics, and immunomedicine, lamins in immune function, and cytoskeletal and signal-transduction pathways underlying immune cell activation and differentiation.

By combining experimental, molecular, and computational approaches, the group provides a coherent framework to understand immune function across scales and to support translational advances in immunopathology, cancer, and precision immunology.

The group is involved in two higher academic Aneca-certified fully international postgraduate training programs supervised by the Complutense University ([www.ucm.es](http://www.ucm.es)): a Master's degree in Immunology and a PhD program in Biomedical Research