

AVAILABLE POSITIONS

Principal Investigator	Blagoje Soskic
Institute of Affiliation	Human Technopole

PROJECT INFO	
Title of the proposed project:	Genetic and regulatory determinants of altered B cell function in immune diseases
Short description of the project	This PhD project will investigate how immune-mediated diseases reshape B cell phenotype and antibody secretion through genetic and regulatory mechanisms. The focus will be on identifying how changes in chromatin state, transcriptional regulation, and RNA metabolism alter B cell function in pathological contexts. The candidate will integrate multimodal genomics datasets, including transcriptomics, chromatin accessibility, and RNA processing profiles. Computational analyses will be combined with CRISPR-based perturbations to identify causal regulators driving dysfunctional antibody responses. Particular emphasis will be placed on linking regulatory variation to functional outcomes, such as altered plasma cell differentiation and antibody production.
Main research area for the project	Immunology
Second research area for the project	Computational biology
3 key words for the project	B cells, genomics, immune disease

LAB INFO	
Main topic/s of the lab	Immunogenomics, B cells, immune interactions
Short description of the lab activity	The Soskic Group focuses on the molecular, cellular, and genetic mechanisms underlying immune effector functions, with a particular emphasis on B cell biology and antibody diversification. We aim to understand how gene regulatory networks control B cell differentiation and activation, how antibody class switching decisions are made, and how genetic variation shapes these processes to influence immune responses and susceptibility to autoimmunity.
Recent bibliography	https://link.springer.com/article/10.1038/s44320-026-00207-8 https://www.nature.com/articles/s41467-023-38389-6 https://www.nature.com/articles/s41588-022-01066-3
Group composition	3 postdocs, 1 specialist, 2 PhD students, 1 Msc student
Institutional page link	https://humantechnopole.it/en/research-groups/soskic-group/