

Filipa Simões

Dr Filipa Simões is a Group Leader and BHF Fellow at the Institute of Developmental and Regenerative Medicine and Department of Physiology, Anatomy and Genetics, University of Oxford, and a Hugh Price Fellow at Jesus College. Her group investigates how cardiac microenvironments regulate immune cell behaviour, with a particular focus on macrophage identity, function and plasticity during tissue injury and repair. By integrating genomics, spatial transcriptomics, in vivo models and advanced in vitro systems, her research defines the cellular and molecular signals that coordinate inflammation, regeneration and fibrosis in the heart, with broader relevance to tissue scarring across organs.

Dr Simões trained in Microbiology and Genetics at the University of Lisbon and completed a PhD in Biochemistry at the University of Coimbra, undertaken at Oxford's Weatherall Institute of Molecular Medicine. Her doctoral work identified molecular cues controlling cardiovascular differentiation during embryonic development. As a postdoctoral researcher, she defined functional cardiac subpopulations within the developing and regenerating epicardium and later demonstrated that macrophages directly deposit collagen during heart repair, challenging established views on the cellular origins of fibrosis.