Immunotherapies have transformed the landscape of cancer treatment across a wide range of malignancies. Responses, especially complete and durable ones, are nevertheless only observed in a limited fraction of patients. The development of these treatments builds on more than one hundred years of basic research in immunology. Under the premise that further fundamental research in the cancer immunology field will provide insights into how to make immunotherapies more efficient, our group studies the underlying principles that determine the susceptibility of tumours to natural or therapy-driven cancer immunity. In doing so, we have uncovered key cellular and molecular inflammatory mediators whose targeting offers promising therapeutic avenues to enhance the efficacy of immune-based therapies (Bonavita et al Immunity 2020, Pelly et al Cancer Discovery 2021). The aim of this PhD project will be to examine how these pathways regulate the tumour inflammatory landscape and impact cancer immunity. We welcome applications from individual with a strong academic track record with previous laboratory research experience and/or with bioinformatics skills.

University of Manchester entry: September 2022