

Disrupting Immune Responses to Reverse Fibrosis

Project Description

Project duration:	PhD
Description:	<p>Intestinal fibrosis is a significant complication affecting over 35% of patients with Inflammatory Bowel Disease (IBD), including Ulcerative Colitis (UC) and Crohn's Disease (CD). Chronic inflammation within the intestinal tract triggers fibroblast overproduction of collagen, leading to luminal narrowing and obstruction. Despite advances in IBD treatment, the incidence of stricture formation remains high, indicating that current therapies may not adequately address the fibrotic process.</p> <p>This research aims to elucidate the specific immune pathways that drive intestinal fibrosis in IBD. By understanding these mechanisms, we can develop novel inhibitory therapies to halt or even reverse the progression of fibrosis, improving the quality of life for patients with IBD.</p>
Expected outcomes and deliverables:	<p>This project will be undertaken at UQ (Mater Research Institute) within the Translational Research Institute (TRI) which is a collaborative building that incorporates over 1200 research scientists and students. TRI also provides an exceptional research environment with access to state-of-art facilities including flow cytometry, microscopy and a strong network of research support professionals. There is support for PhD students, through UQ as well as Mater Student Committee (sMater). The honours student will learn a range of techniques, in particular, flow cytometry, histology, Confocal Microscopy and pre-clinical animal work. There is a potential of extending the honours project into a PhD project.</p>
Suitable for:	Highly motivated individual with an interest in immunology, with an interest in pursuing a PhD.
Primary Supervisor:	A/Prof Sumaira Hasnain
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