



Project Summary

Knowledge exchange of IP-MS method at KU Leuven

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I am undertaking a PhD which aims to identify new markers in the blood of children with rare rheumatic diseases called myositis and systemic sclerosis, called 'autoantibodies'. Known autoantibody markers are already used by doctors to help with diagnosis and prognosis. Unfortunately, about 40% of patients with childhood myositis and about 50% with childhood systemic sclerosis do not have a known autoantibody marker. It is likely these patients have autoantibodies in their blood that have yet to be discovered. My project involves using and adapting highly specialised laboratory techniques to try and find new autoantibodies. This funding will allow me to will travel to the Bossuyt laboratory in Belgium to learn a new technique called 'immunoprecipitation- mass spectrometry'. This is an improved version of a laboratory method already in use in Bath. It is better than our current technique as it is faster, highly accurate and does not use radioactivity. 'Immunoprecipitation-mass spectrometry' has already been shown to able to find new autoantibodies in adult patients with the same diseases I am interested in. I will use the immunoprecipitation-mass spectrometry to analyse patient samples as part of my PhD. I will also teach it to other members of our research group so it can be used for a range of different projects.