Grants Awarded

Bath Institute for Rheumatic Diseases
Supporting arthritis research, education and patient engagement

Project Summary

Characterisation of the immune cell populations in psoriatic arthritis and ankylosing spondylitis using single cell RNA sequencing (follow on application)
Prof Mark Lindsay - £7300.00

Comparing the contents of individual immune cells to identify new drug targets in psoriatic arthritis and ankylosing spondylitis.

Although there are a range of drugs that can be used to treat inflammatory joint diseases, there are still a significant proportion of patients whose symptoms are not well controlled. This is particularly the case with those individuals that have psoriatic arthritis and ankylosing spondylitis. Changes in the number and/or types of immune cells are thought to be a major driver of disease state in these conditions. Despite their importance, the difficulty in obtaining large numbers of these immune cells has prevented a comparison across these rheumatic diseases. To address this question, we propose to measure the contents of thousands of individual immune cells from each disease type and use this information to compare to healthy individuals. In doing so, we hope to identify new and/or disease-specific immune cell populations. Such findings could provide the basis for the development of novel drug targets.