



Project Summary

Identifying novel pathogenic molecular pathways and therapeutic targets in systemic sclerosis

Dr John Pauling - £9900.00

Systemic sclerosis (also known as scleroderma) is a poorly understood disease in which the body's tissues (skin and other organs) stiffen because of excessive scar tissue formation. The effects of the disease lead to significant functional disability, impair quality of life and can result in early death. This project shall build on existing research and attempt to identify new treatment targets for this devastating disease.

This project shall build on existing avenues of research in the field of systemic sclerosis that are already underway at the RNHRD and University of Bath. We have already collected skin samples from people affected by systemic sclerosis and healthy controls. The people who have provided these precious samples have given us consent to continue undertaking research on the samples in the future. Having identified cell pathways that might be important in systemic sclerosis, we shall undertake work on skin fibroblasts (the scar tissue forming cells) to see whether blocking specific molecular pathways might be helpful at reducing the formation of scar tissue proteins.

We hope this work could help us better understand the causes of systemic sclerosis and develop new methods for treating this dreadful disease.