WTDTP Projects for September 2022

Project Reference: T12/39

Project Title: **Investigating the genetics of progressive pulmonary fibrosis in multi-ancestry populations**

Theme(s): Cross-Theme Project - Themes 1 and 2

Primary Supervisor: Dr Richard Allen (University of Leicester)

Secondary Supervisor(s): Prof Louise Wain (University of Leicester)

Department: Health Sciences

Project Summary: Idiopathic pulmonary fibrosis (IPF) is a chronic disease where the lungs become increasingly scarred. This leads to a reduced quality of life and is eventually fatal however not all individuals experience the same form of the disease. Some individuals will experience a rapid decline in lung function and short survival times whereas others may experience a relatively stable form of the disease. Understanding the underlying biological mechanisms that drive disease progression will help in the development of effective targeted treatments. Preliminary work in European individuals suggests the differences in disease progression may be in part due to genetics.

Through large scale statistical analyses, this project will extend these analyses to investigate whether genetics can explain the difference in disease progression in different ancestry groups and whether there are any genetic variants associated with disease progression in related lung diseases.