



**Application number/Title:** 27844 Interstitial lung disease and Idiopathic pulmonary fibrosis, quality of life and physical activity

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**Keywords provided by the Applicant PI to describe the research project:**

Chronic, exercise, idiopathic-pulmonary-fibrosis, interstitial-lung-disease, life, quality

**Application Lay Summary:**

Chronic lung disease, including interstitial lung disease and Idiopathic pulmonary fibrosis, lead to serious reduction in quality of life, physical activities, and pulmonary function. These changes can be, partially helped by a comprehensive rehabilitation program but there is lack of studies in general and in interstitial lung disease, in particular. The aim of the proposed research is to measure physical activity and sedentary behavior in patients with chronic lung disease in general. This will inform and guide a feasibility study of a rehabilitation program tailored specifically to interstitial lung disease. Chronic disease, including interstitial lung disease and Idiopathic pulmonary fibrosis, impose quality of life and productivity restrictions on patients. With very limited pharmacological treatment and high mortality and morbidity rates, these diseases lead to high health care expenses, lower productivity, and early death. This research will help in creating a tailored rehabilitation program, with the eventual aim being to improve quality of life. The large scale data provided by Biobank will identify the level and type of physical activity in people with chronic lung disease in general and also specifically in those with interstitial lung disease and Idiopathic pulmonary fibrosis. We will look at records of physical activity and the amount of time patients are not physically active, using fitness activity device measurements. We will also be interested in what the patients? own recording of physical activity and rest show and how the different measurements compare. We require data (not samples) for the full cohort. We will then identify subgroups from the cohort for analysis of lifestyle variables. We will initially focus on individuals with a diagnosis of interstitial lung disease and Idiopathic pulmonary fibrosis and we will seek to compare this with data from patients with

other, more common chronic lung diseases, as disease comparisons. Our analysis will therefore include comparisons with Chronic Obstructive Pulmonary Disease (COPD), Asthma, Cystic Fibrosis (CF), Bronchiectasis and Rheumatological disease that affects the lung.