

## **CGA/19/23 - Do neutrophil extracellular traps promote a dysregulated phenotype in lung resident mesenchymal stromal cells**

Central to the development of lung diseases are white blood cells called neutrophils which contribute to lung damage by releasing 'webs' of DNA called neutrophil extracellular traps (NETs). Too many NETs kill healthy cells within the lung and have been linked to increased disease. The lung also contains cells called mesenchymal stromal cells (MSCs) which normally help repair and maintain lung function, however, in many lung diseases, the behaviour of MSCs changes from protecting the lung to instead, damaging it. The factors responsible for this change are unclear. This study will establish the relationship NETs have on the function of MSCs and whether they are responsible for the altered MSC behaviour seen in lung disease.