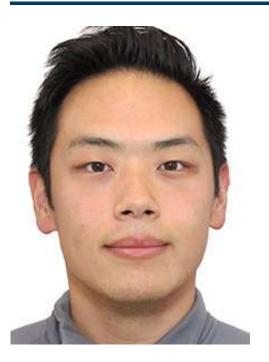


## Centre for Heart Lung Innovation Research in Progress (R.I.P.)



Gene expression profiles of interstitial lung disease: a systematic review and metaanalysis

Daniel He PhD Candidate

Dr. Scott Tebbutt Dr. Chris Ryerson

Monday, June 8<sup>th</sup>, 2019 9:30– 10:30 a.m. ZOOM Virtual Seminar

"Fibrotic interstitial lung diseases (ILDs) are a group of >200 diseases characterized by excessive deposition of extracellular matrix in the lung interstitium, resulting in decreased oxygen uptake into the blood. Numerous studies have generated gene expression profiles of individual ILD subtypes through the use of high-throughput 'transcriptomics' technologies measuring the entire genome, identifying numerous molecular changes that may be representative of the pathophysiology of the specific ILD. However, a consensus on aberrant molecular processes that differ between ILD subtypes has yet to be determined; transcriptomics studies are limited by small sample sizes due to the high processing costs associated with sequencing technology. To address this gap in knowledge, we have screened 5,337 publications and identified 33 relevant studies to conduct our meta-analysis. Our preliminary analysis of the extracted data has identified 47 differentially expressed genes across 13 studies examining transcriptomic changes in the ILD subtype idiopathic pulmonary fibrosis (IPF)."

This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada



a place of mind



