Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

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

Phenotyping of the Long COVID Airways

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Monday, Dec 5th, 2022
9:00 – 10:00 a.m.

Gourlay Conference RM 103
Zoom Video Conference
(Meeting ID: 693 1997 7044; Passcode: 030679)

"Many people experience symptoms long after their initial SARS-CoV-2 infection. The continuation of these symptoms >=3 months is considered "long COVID". Our group has begun work phenotyping the airways. We performed a systematic review which determined that pulmonary imaging abnormalities are prevalent, and correlated with the prevalence of shortness of breath. Moreover, many imaging abnormalities do not show a significant decrease over time. Additionally, we performed single-cell RNA sequencing on airway samples (bronchial brushes and bronchoalveolar lavage), which allows us to determine that there are differences in both immune and epithelial cell populations among long COVID. Gene expression also differed between the two. Finally, the single-cell data was also mapped to the SARS-CoV-2 transcriptome, which allows us to verify whether SARS-CoV-2 mRNA remains in the airway. No mRNA of the virus was found in our patient samples, revealing that residual mRNA is likely not the cause of these symptoms."

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