

## RESEARCH INSTITUTE FOR FUNDAMENTAL SCIENCES

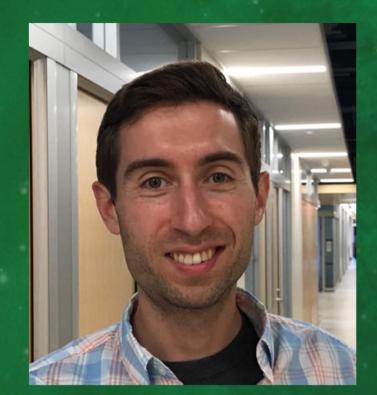


Frontiers of Science

## Biological Sciences Seminar Series

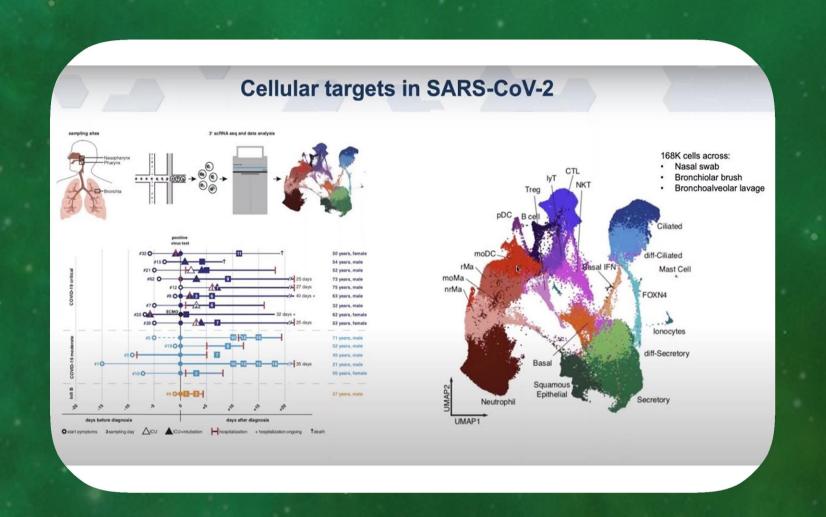
## Single-Cell Biology of Barrier Tissues and Covid-19

Virtual Venue: April 15 2021, 19:00 - 20:00 (GMT +3), Zoom Meeting ID: 998 7093 5364



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Our lab is focused on understanding the principles of how inflammation drives sensing, adaptation and memory formation by essential or resident cell types in barrier tissues. We utilize a technique known as single-cell RNA-sequencing which allows us to understand the individual characteristics of each cell. In this talk, I will discuss some of our recent studies utilizing single-cell genomics to comprehensively map the cell types, subsets, and states that compose human barrier tissues such as the skin, gut, and airway. I will specifically discuss our findings related to predicting the potential cellular targets of SARS-CoV-2 in the nasal mucosa, and our ongoing efforts to understand distinct outcomes in Covid-19 patients based on sampling the nasal mucosa. We have identified that a specific subset of cells in the nasal mucosa appears to be targeted by SARS-CoV-2, and are now working to understand whether this factor, or the way that surrounding cells respond, influence the course of Covid-19 disease. I will also discuss more broadly how these local interactions in the nose impact the organism on a larger scale.

**YouTube**Live Stream:

https://www.youtube.com/c/TUBITAKTBAE

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