# The Biological and Biomedical Joint Seminar Series

(Hosted by the departments of Molecular & Cellular Biology, Chemistry & Biochemistry, Cellular & Molecular Medicine, and Plant Sciences)

## *"Using single-cell genomics to understand lung biology"*


**Darren Cusanovich, PhD**

**Research Assistant Professor**
**Cellular & Molecular Medicine**
**The University of Arizona**


**Tuesday April 20th, 2021**
**Zoom Meeting @ 11AM**

**Hosted By: Andrew Paek (MCB)**

Single-cell genomics allows characterization of genome function in complex tissues at unprecedented resolution. These relatively new techniques have already lead to the discovery of novel cell types, better understanding of cell type distributions in diverse tissues, and revised models of cell type differentiation. Nonetheless, existing techniques have limitations in the genomic features that can be measured, assay cost, and the number of samples that can be processed. Our group develops new single-cell genomic assays addressing these limitations and applies them to understand lung development and aging in the context of diseases such as bronchopulmonary dysplasia (BPD), obesity, and asthma. This seminar will describe our work to improve existing techniques and some of our initial insights into the transcriptomic and epigenomic consequences of disease.

Zoom Link: https://arizona.zoom.us/j/85848818129

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