

## **Department of Anatomy and Cell Biology**

Hosted by Dr. Dieter Reinhardt

## "Pressure-Driven Cell Motility in a 3D Extracellular Matrix"

## Ryan Petrie, PhD Drexel University



It is now clear that an individual cell can change how it moves in response to the material surrounding it. My lab is interested in understanding how the structure of the three-dimensional (3D) extracellular matrix dictates the molecular and physical mechanisms driving cell motility. We recently discovered cells use intracellular pressure to power their movement in highly cross-linked 3D matrices. Using a variety of biochemical, biophysical and live cell imaging approaches, the Petrie lab aims to understand how this intracellular pressure is controlled by actomyosin contractility in response to 3D matrix structure.

Wednesday, March 28, 2018 11:30 am

> Strathcona Anatomy Building 3640 University Street Room 2/45

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