

DEPARTMENT OF PHYSICS

Fall 2017 seminar series

MECHANOSENSATION AND THE PRIMARY CILIUM: DEFINITION OF AN INTERDISCIPLINARY PROBLEM

**Prof. Andrew Resnick
Department of Physics
Cleveland State University**

Wednesday, October 25th, 2017

3:20 pm

Ayer Hall 19

Our laboratory primarily focuses on how cells in your kidney sense and respond to fluid flow. The hypothesized sensor, the primary cilium, is a ubiquitous protruding hair-like structure that has been shown to be an 'organizing center' for a large number of regulatory pathways. Our studies show how fluid flow, in itself, can regulate cell and tissue biology and may reveal new methods of cell cycle control and potential breakthroughs in in vitro tissue engineering.