

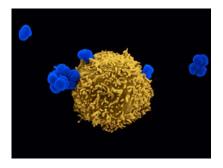
## Barbara Vivash Award in Molecular Genetics

**Seminar and Award Presentation** 

2015-2016 Recipient:

Dr. Ryan Gaudet

HHMI Fellow of the Helen Hay Whitney Foundation Yale University



## Non-Classical Immunity: Recognition and Restriction of Microbes by Cells of Non-Immune Origin

Much of our current preoccupation with vertebrate host defense lies with specialized immune cells in conferring protective immunity to infection. What this view largely ignores, however, is an increasing appreciation for the role played by non-immune cells in this process. Using genome-wide interrogative methods, we reveal the presence of novel defense networks operative in epithelial cells, the frontline sentinels for microbial infection. One pathway, mediated by the protein TIFA, enables innate immune sensing of intracellular bacterial growth. Other pathways, induced by local interferon, act in a cell-autonomous manner to restrict bacterial replication. Our work highlights the fundamental and often unappreciated role of non-immune cells in resisting microbial infection.

Host: Dr. Leah Cowen

Date: Monday June 26<sup>th</sup>, 2017

**Time:** 2:00PM

**Place:** Medical Sciences Building, Room 4171, 1 King's College Circle