## Department of Anatomy & Cell Biology Seminar Series

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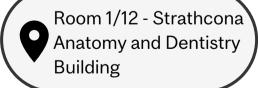
## How One Eukaryotic Cell Invades Another: Dissecting Invasion by Apicomplexa

The phylum Apicomplexa includes several of the most prevalent and important human eukaryotic pathogens, such as Plasmodium spp., the causative agent of malaria, Toxoplasma gondii, the causative agent toxoplasmosis. These parasites can only grow inside a host cell, having evolved to overcome the challenge of gaining entry. To enter a host cell, the ~6000 species in this phylum deploy a remarkable and conserved machinery consisting of cytoskeleton elements and specialized secretory organelles from their anterior, apical end. To date, the means by which the many steps of invasion are accomplished are essentially unknown, but their elucidation would be of tremendous interest for both the discovery of novel cell biology, and the ability to interfere with infection by medically relevant parasites. My future lab will build upon my postdoctoral work using spatial resolution to study cellular processes. Our goals, therefore, are to use molecular and biochemical tools coupled with advanced imaging techniques to achieve subnanometer resolution of the structures involved in invasion and determine the processes driving Apicomplexa entry.

Join us in room 1/53 after the seminar for an opportunity to meet the speaker over a pizza lunch!



Wednesday, Apr. 19, 2023 11:30am - 12:30pm



Hosted by: Joaquin Ortega, Ph[

