The Taylor Lab is interested in the intercellular spread of neuroinvasive viruses and how spread impacts pathogen evolution and pathogenesis. Neuroinvasive viruses, including Herpes Simplex virus and West Nile virus, preferentially infect the cells of the nervous system, transmitting viral particles between neurons. Using these connections, viral infection invades the central nervous system resulting in severe disease and death. We study the events of virion transmission within neurons utilizing a cohort of fluorescent fusions to viral and cellular proteins in live-cell imaging to capture the events of virion transport, egress and infection. This talk will focus on our developments in quantify axon-to-cell spread of HSV-1 and Pseudorabies virus using both in vitro and in vivo neuronal circuits as well as the interplay between competing viral infections.

Upcoming Seminar:

Friday, December 12  (Postponed)
Charles Gray, Department of Cell Biology and Neuroscience, Montana State University

All are welcome. Refreshments will be served.