The Hughes Science Pipeline Project presents

Distinguished Women in Science: A Lecture Series

Food, Sex, and Smell: The Neurogenetics of Innate Behavior

by Leslie Vosshall Robin Chemers Neustein Professor of Neurogenetics and Behavior at The Rockefeller University, and HHMI Investigator.

2 April 2013 Lehman Auditorium

The long-term goal of work in my laboratory is to understand how behaviors emerge from the integration of sensory input with internal physiological states. My collaborators and I use a genetic approach to study sexual behavior in the fly and blood-feeding behavior in the mosquito. Both of these behaviors are strongly influenced by olfactory cues encoded--by pheromones in the case of fly sexual behavior and by human body odor in the case of the mosquito. Understanding how these sensory cues drive innate behavior has intrinsic interest from a neurobiological perspective as well as important public health implications because the attraction of mosquitoes to humans causes the spread of deadly infectious diseases.