



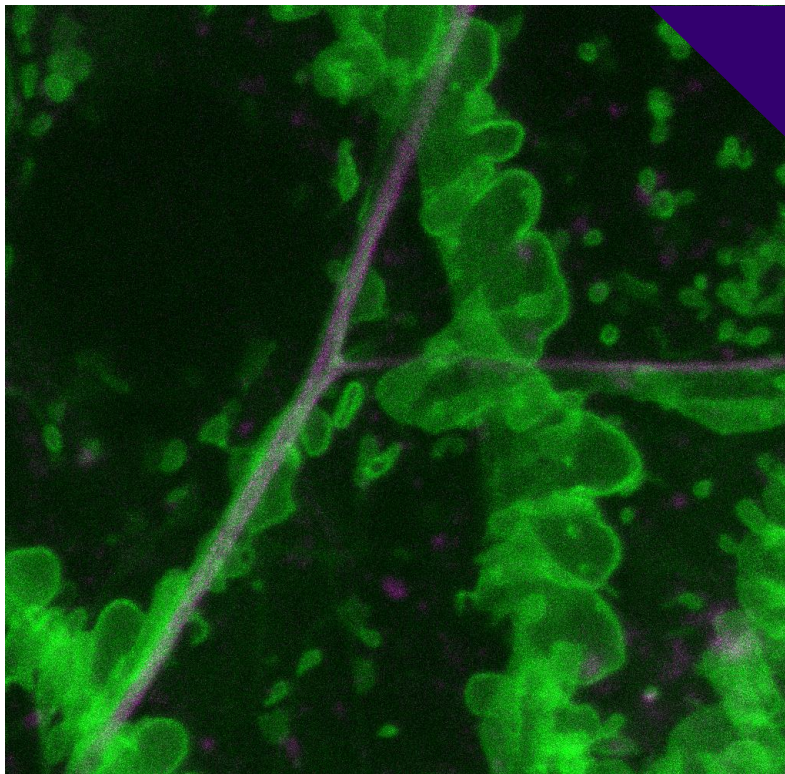
Biology Seminar

By: Dr. Jay Parrish

University of Washington | Associate Professor, Department of Biology

<http://theparrishlab.com/>

Environmental control of somatosensory neuron development and function



Monday, October 28, 2019 | 12:00pm
HCK 132 Refreshments at 11:45am

My laboratory's long-term goal is to understand how environmental signals shape somatosensory neuron (SSN) structure and function. SSNs shape our experience of the world, allowing for perception and discrimination of pain, touch, pressure, and movement, and are a focal point of a growing human health crisis. Nearly twenty million Americans suffer from peripheral neuropathies, and one in three individuals in the U.S. will suffer from chronic pain. Understanding key control points for SSN development and function therefore is of paramount importance for therapeutic intervention in this health crisis. To this end, my lab

has pioneered use of the *Drosophila* larval peripheral nervous system as a platform for identifying environmental signals influencing SSN development. Over the last several years we have focused on three interrelated questions: How do epidermal signals influence the form and function of SSNs? How do environmental signals influence growth control of SSNs? What are the molecular determinants of mechanosensitivity? In this seminar I'll present our recent progress addressing these questions, in particular focusing on epidermal control of somatosensory neuron development, and discuss our plans for extending these studies.

