DEPARTMENT OF BIOLOGY | UNIVERSITY of WASHINGTON

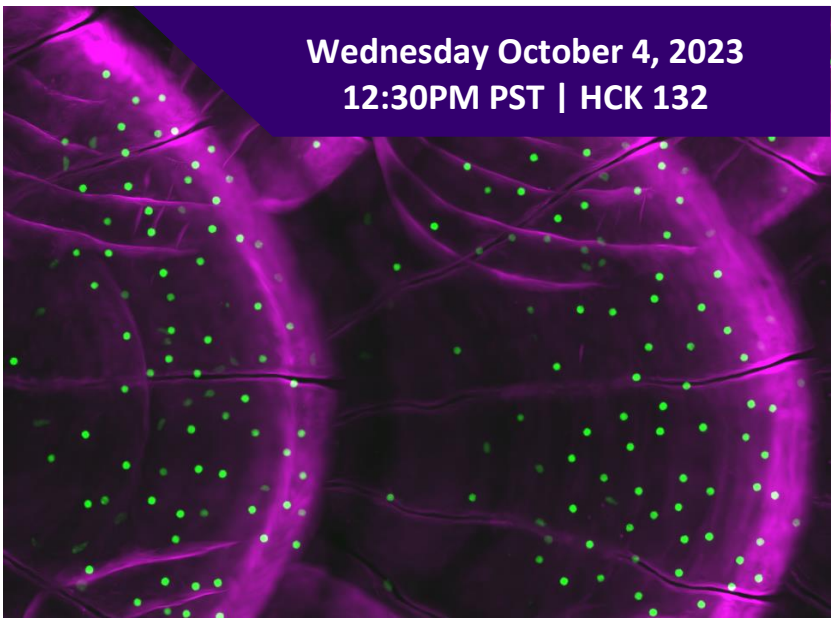
Biology Seminar

Speaker: Jeff Rasmussen, Ph.D.

University of Washington | Assistant Professor, Department of Biology

https://jraslab.org/

Building and repairing the skin: Insights from zebrafish



Epithelial organs adopt precise structures during development that must be rapidly repaired in response to injury. My lab uses zebrafish skin as a model system to understand the molecular and cellular basis of epithelial organ development and repair. Skin contains a heterogeneous mixture of cell types—including stem cells, sensory cells, and immune cells—that together bestow the organ with its remarkable durability and touch sensitivity. In this talk, I will highlight the recent work of two teams of researchers in the lab investigating interactions between skin cell types. In the first project, we are using the imaging and genetic advantages of zebrafish to study the development of specialized mechanosensory cells from skin stem cell progenitors. In the second project, we are applying several novel injury paradigms to understand the responses of skin-resident immune cells to tissue damage. Our long-term goal is to integrate these studies with disease models that affect skin health, such as diabetes.

Seminar Speaker Host: David Perkel