DEPARTMENT OF BIOLOGY | UNIVERSITY of WASHINGTON

Biology Seminar

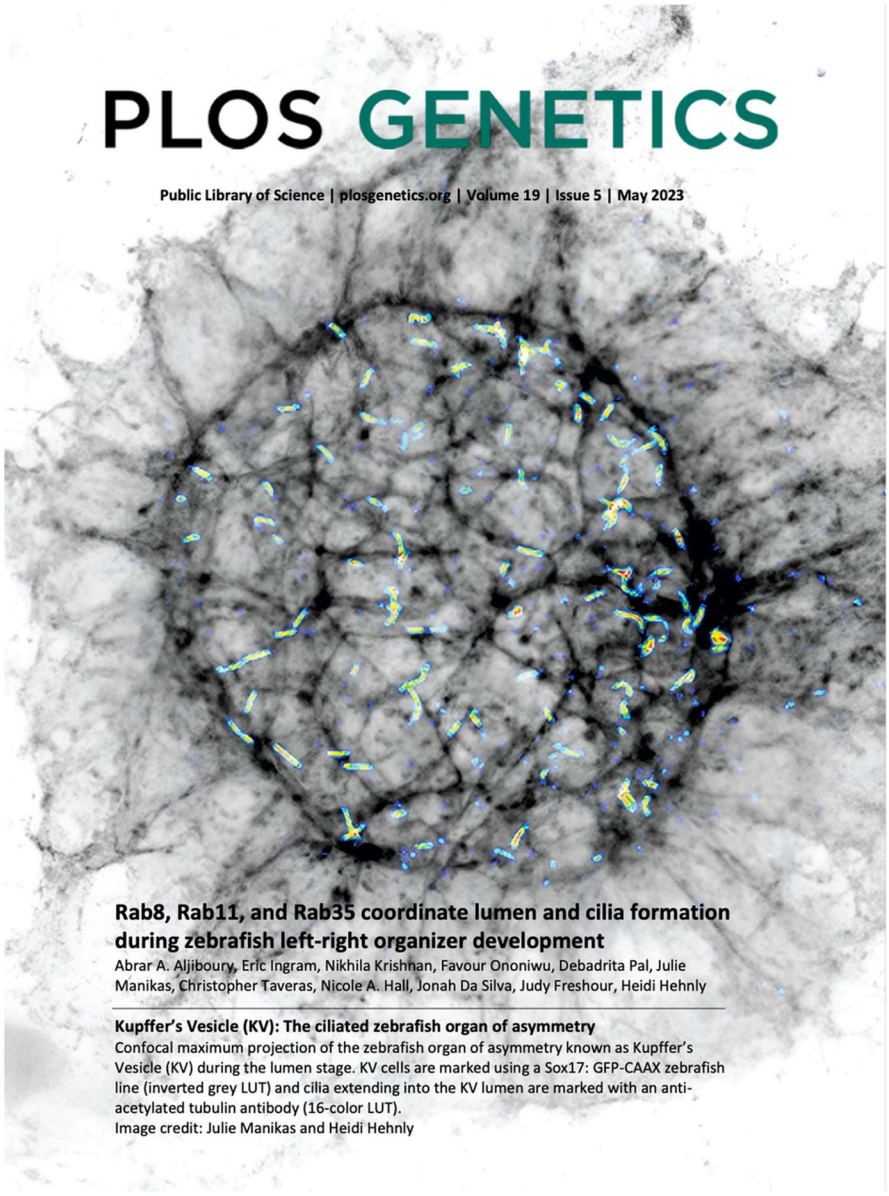
Speaker: Heidi Hehnly, Ph.D.

Syracuse University | Associate Professor | Biology Department

www.hehnlylab.com

Understanding the temporal and spatial cellular dynamics of making a Left-Right Organizer

Monday Dec. 9, 2024 | 12:00 PM PST | HCK 132



The Hehnly Lab investigates how cellular and intracellular mechanisms establish the Left-Right Organizer (LRO) in vertebrates, a critical structure for body axis formation. Using zebrafish as a model, the lab explores how motile and non-motile cilia within the LRO generate fluid flow or potentially sense it, impacting asymmetric organ development. Open questions include how cells differentiate to form motile versus non-motile cilia and the roles these cilia play in development. Through live imaging, gene expression profiling, and cytoskeletal analysis, the lab aims to reveal spatial and temporal cellular events essential for LRO maturation, ultimately informing models of ciliated tissue development.

Seminar Speaker Host: Eric Peterman