

MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Spring Quarter 2024 – CRN 48450

Friday Seminar – 12:10-1 p.m.

“Genome-wide screens reveal regulators of neutrophil sensitivity and control of degranulation.”

Research Bio:

Sean Collins, Ph.D. did his undergraduate degree in Mathematics at Stanford. He changed fields to do a Ph.D. in Biology at UCSF, where he worked with Jonathan Weissman, where he studied mechanisms of amyloid fiber assembly and approaches for large-scale genetic interaction maps in yeast. Dr. Collins did his postdoc with Tobias Meyer at Stanford, where he started studying cell migration, chemotaxis, and signal transduction. Dr. Collins was awarded a Helen Hay Whitney Foundation fellowship. He started his independent lab at UC Davis in 2014. Dr. Collins won an NIH New Innovator Award in 2017 and was also named a Sidney Kimmel Foundation Kimmel Scholar, and he was named a Hellman Fellow. Dr. Collins lab focuses on mechanisms of cell migration, chemotaxis, and degranulation in neutrophils.

Publications

Yin C, Heit B. “Armed for destruction: formation, function and trafficking of neutrophil granules”. *Cell Tissue Res.* 2018 Mar;371(3):455-471. doi: 10.1007/s00441-017-2731-8. Epub 2017 Nov 29. PMID: 29185068.

Lundgren SM, Rocha-Gregg BL, Akdoğan E, Mysore MN, Hayes S, **Collins SR.** “Signaling dynamics distinguish high- and low-priority neutrophil chemoattractant receptors”. *Sci Signal.* 2023 Oct 3;16(805):eadd1845. doi: 10.1126/scisignal.add1845. Epub 2023 Oct 3. PMID: 37788324; PMCID: PMC10680494.

May
10



Sean R. Collins, Ph.D.

Associate Professor
Microbiology and Molecular Genetics
College of Biological Sciences
University of California, Davis

May 10, 2024
12:10 – 1 p.m.
GBSF Auditorium

Medical Microbiology
and Immunology
School of Medicine

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We hope to see you there!