

**Tkach, Colleen**

---

**From:** Inform  
**Subject:** EM: KECK SCIENCE SEMINAR ANNOUNCEMENT 11/28

---

**From:** Soto, Lauran

## KECK SCIENCE DEPARTMENT SEMINAR

*"Major Membrane Makeovers to Maintain Mitochondrial Magnificence"*

Zachary Wilson, PhD

Postdoctoral fellow

Department of Biochemistry, University of Utah

Tuesday, November 28, 2023

Burns Lecture Hall

12:15-1:15 PM

**ABSTRACT:** Mitochondria are essential for cell metabolism, viability, and longevity, and the deterioration of mitochondrial health is linked to a host of metabolic disorders and age-related neurodegenerative diseases. Thus, it is important to determine the mechanisms cells use to preserve the functional health of mitochondria. Recently, we discovered novel structures emerging from mitochondria, called mitochondrial-derived compartments (MDCs), that form in response to multiple cellular stress conditions and also form in old-aged cells. In my talk, I will present our current model for how MDCs form and will present evidence that MDCs are a mitochondrial remodeling pathway that dramatically rearranges only the outer mitochondrial membrane to robustly sequester membrane and proteins into large, spherical compartments that are subsequently degraded. From this research, we have proposed that one functional role of MDCs is to create a membrane-enriched trap that removes excess proteins from the mitochondrial surface.

Find additional seminar information here: <https://www.kecksci.claremont.edu/seminars/>

Thank you,

Lauran Soto - Administrative Assistant (she/her)

The Department of Natural Sciences, Pitzer and Scripps Colleges

W.M. Keck Science Department, Claremont McKenna College

925 N. Mills Ave, Claremont, CA 91711

Office Phone: (909) 621-8489