

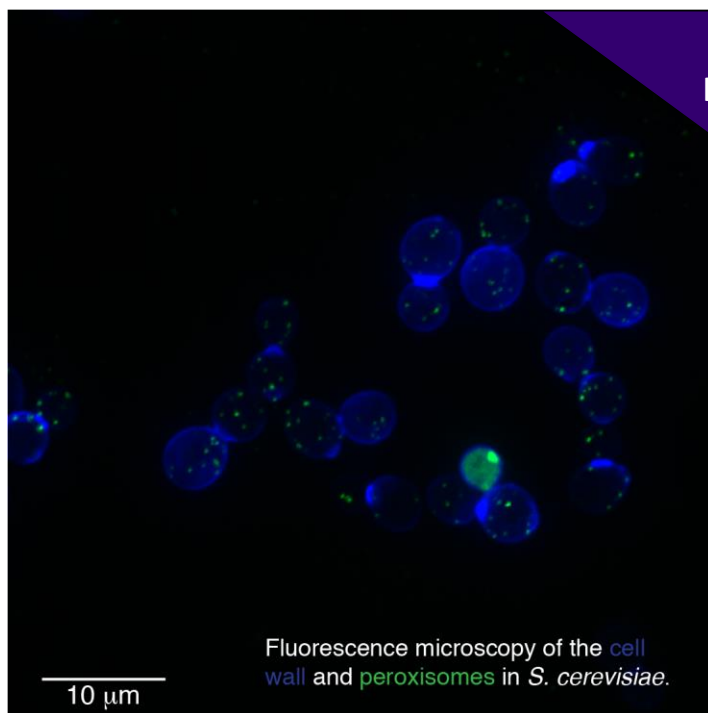


Faculty Search Biology Seminar

Speaker: **Brooke Gardner**

University of California, Berkeley | Postdoctoral Researcher, Department of Molecular & Cell Biology
<http://mcb.berkeley.edu/labs/martin/people.php>

Investigating the role of AAA-ATPase motors in peroxisome biogenesis



Wednesday, March 14, 2018 | 12:45pm
HCK 132 Refreshments at 12:30pm

One of the defining features of eukaryotic cells is the presence of membrane-bound organelles. These organelles allow for compartmentalization and specialized chemical environments, but present new challenges of targeting, segregation, and formation. The peroxisome is an understudied organelle that represents a unique system in which to understand how an organelle can be made “from scratch” using approximately 35 dedicated Pex proteins. I am currently investigating the energy-dependent steps of peroxisome biogenesis by focusing on the two AAA-

ATPase Pex proteins, Pex1 and Pex6. Mutations in Pex1 and Pex6 cause the majority of Peroxisome Biogenesis Disorders in humans; therefore understanding Pex1/Pex6’s substrates, mechanism of substrate processing, and role in peroxisome matrix protein import will deepen our understanding of the peroxisome in both health and disease.

