

Department of Biological Sciences Seminar Series

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**Monday,
October 8**

4:10 pm

1220 MRBIII

Tea Time

3:45

MRBIII Lobby

Not all Dynamin-Related Proteins are alike: The unique architecture of Vps1

The Dynamin-Related Proteins (DRPs) catalyze membrane remodeling events throughout the cell, by self-assembly into helical structures. How the DRP assemblies are tailored to their cellular targets remains unclear. Crystal and cryoEM structures of the yeast DRP Vps1 reveal a unique helical assembly that is more open and flexible than the structures formed by dynamin, the prototypical DRP. Comparison of the subunit interfaces in Vps1 with those present in dynamin reveals adaptations that are essential for Vps1 function *in vivo*, highlighting the structural flexibilities inherent in DRP self-assembly.