
Seminar 2016

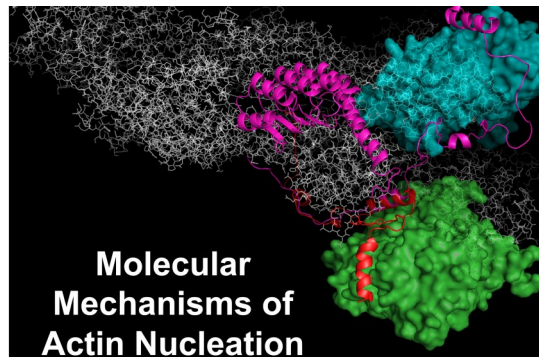


Qinghua Wang

Verna and Marrs McLean
Department of Biochemistry
and Molecular Biology
Baylor College of Medicine
Houston, Texas

Molecular Mechanisms of Actin Nucleation

Actin is one of the most abundant and conserved eukaryotic proteins. Actin nucleation, defined as the formation of actin oligomers from G-actin monomers, is the rate-limiting step for de novo actin assembly in many fundamental cellular processes. In cells, actin nucleation is precisely and tightly regulated through a diverse set of actin nucleators. However, due to their fleeting nature, actin nuclei have long eluded structural investigation. Our lab has developed a novel double-mutant strategy, which allows the capture of actin nuclei in action. In the seminar, I will discuss the molecular mechanisms of actin nucleation based on the crystal structures and functional studies of three eukaryotic tandem-actin-binding nucleators.



Friday September 9, 2016

2:30 PM

Laufer Center Lecture Hall 101

Host: Jin Wang