

Cell cycle regulation of morphogenetic behavior

Eukaryotic cells undergo drastic rearrangements in response to their local microenvironment. These morphogenetic changes are required for many cell biological activities, including the cell shape changes associated with cell motility and migration. Dynamic changes occur in cytoskeletal architecture between interphase and mitosis, and animal cells exhibit additional morphogenetic phenomena as they differentiate and exit the cell cycle. Traditionally, simultaneous examination of cell cycle state and cell behavior has been challenging, due to a lack of live cell cycle biosensors. For this reason, it has been difficult to unravel the relationship between cell cycle state and execution of morphogenetic behavior. However, recent advances in both imaging and cell cycle state biosensors have facilitated re-examination of cell cycle regulation during morphogenesis, the central theme of this subgroup.

Saturday December 1, 2017 1:30 – 5:30 PM

Exciting talks from:

Mingwei Min (Sabrina Spencer) UC Boulder Laura Buttitta Univ. Michigan Ann Arbor Stefano di Talia Duke University B. Duygu Özpolat Marine Biological Laboratory Deirdre Lyons Scripps Christina Cota (Brad Davidson) Swarthmore College Cortney Bouldin Appalachian State University Benjamin Martin Stony Brook University Lance Davidson University of Pittsburgh Jessica Feldman Stanford Wolfgang Keil (Shaham & Siggia) Rockefeller David Q. Matus Stony Brook University Emily Summerbell (Adam Marcus) Emory/Winship Cancer Institute Andrew Ewald Johns Hopkins

