Buzz Baum

Title: Cortical stiffening and polar relaxation

Abstract:

As cells progress through mitosis they undergo profound changes in cytoskeletal organisation and cell shape. These include cell rounding upon entry into mitosis, positioning of the metaphase spindle with respect to cortical cues, anaphase polar relaxation and cell division. These changes need to be coupled to the cell cycle machinery. I will discuss the molecular, cellular and physical mechanisms driving the changes in the actin-based cortex that underlie these events, and will explore the importance of mitotic rounding for both normal and cancer cells dividing in a tissue context.