Current Topics in Cytoskeletal Organization

MCB 529 GB1 (CRN #55937) Spring 2011
Wednesdays, 4 - 6 pm – CLSL B124
Martha Gillette, Bill Brieher

- Cytoskeletal elements in prokaryotes and eukaryotes
- Structural and dynamical organization
- Cytoskeleton and cell polarity, cell migration
- Small GTPases, auxiliary proteins
- Dendritic filopodia
- Nuclear actin
- Cytoskeletal plasticity in neuronal spines
- Cytoskeleton and long-term potentiation
- Cytoskeleton and transcriptional regulation
- Actin and cell signaling
- Actin and cancer

Human Osteosarcoma cells- GFP actin: showing change in cell shape and actin fibre distribution with AFM cantilever induced stress. (Daniel Fletcher: Combined atomic force microscopy and side-view optical imaging for mechanical studies of cells)