



Research In Progress Seminar

**Tuesday, May 16,
2017
3:30PM**

**Location: CCBS Conference
Room, 2622 Biological
Sciences 3**

Speaker:

Leo Lagunes,
Developmental and Cell
Biology (Lee Bardwell
and German Enciso
Labs)

Talk Title:

Investigation of Multisite
Protein Phosphorylation

Abstract:

Protein phosphorylation is an important mechanism that regulates protein activation. Phosphorylation can affect a protein's enzymatic activity, location, stability, or interactions with other proteins and DNA. Interestingly, many phosphorylated proteins are multisite proteins, meaning that they are phosphorylated on more than one site. However, why multisite phosphorylation is so widely used is not well understood. Furthermore, determining which particular sites or combination of sites have downstream regulatory effects is a challenging task. This talk will focus on a combination of mathematical modeling and experimental analysis to better understand how multisite phosphorylation affects protein activation. We will discuss a mathematical model, assuming variable phosphorylation dynamics at each site, and experimental measurements of the kinetic parameters that determine the rate of phosphorylation and activation of cJun (a transcription factor in the JNK pathway).

Questions:

Please contact Naomi Carreon at:
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