

"Specificity of the Beta adrenergic signaling in cardiac myocytes: role of phosphodiesterases"

The presentation will address the concept that β 1 and β 2 adrenergic signals in the heart are defined by the interaction and regulation of distinct phosphodiesterases type 4 (PDE4) isoenzymes. We will provide data that different PDE4s function distal to the two receptors modulating different biological effects. We will demonstrate that the PDE4 isoform, PDE4B, functions in cardiac myocytes in a restricted compartment associated with the β 1-A and the Cav1.2 channel, whereas PDE4D controls cAMP in multiple compartments. We will review data documenting that the β 1AR/PDE4D complex at the plasma membrane plays a role in generating β antagonist signals.

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Tuesday, March 19, 2013 4:00 pm GBSF Auditorium (Rm. # 1005) Host: Kevin Xiang: <u>ykxiang@ucdavis.edu</u> Light refreshments will be served.