UC DAVIS HEALTH | SCHOOL OF MEDICINE

Department of
Physiology and Membrane Biology

Distinguished Lecture Series in Physiology

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"Rad in the heart: from L-type channel modulation to cardiac function and adaptation"

L-type calcium channels (LTCC) in the heart contribute to electrical and contractile function. L-type calcium channels are tightly regulated to maintain calcium homeostasis. The LTCC is a macromolecular hub that integrates multiple signaling pathways including protein kinase A and Ca^{2+}-calmodulin kinase II. RAD (gene name *RRAD*) is a member of the RGK family of monomeric pseudo-G-proteins. RAD binds to pore-forming CaV1.2 and auxiliary CaVbeta2 subunits. This lecture will describe our work identifying Rad as a key contributor to regulation of myocardial LTCC function. We will describe structure - function relationships of Rad and the LTCC. We show how Rad regulates heart function in health and in disease models whereby manipulation of Rad serves as a calcitrope to restore structure and function in animal and human myocardium.

Thursday, January 18, 2024
GBSF and Zoom
12 p.m.

January
18

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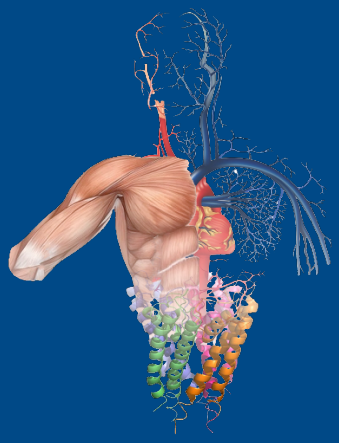

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