



The Department of Pharmacology

Proudly Presents the Seminar Series:

Frontiers in Pharmacology

"Multiple Roles for Protein Acetylation in Heart Failure"

Acetylation of nucleosomal histone tails is an important epigenetic mechanism for the regulation of gene expression. Additionally, proteomic studies have revealed that thousands of proteins in all cellular compartments are subject to reversible lysine acetylation, and thus it is becoming clear that this post-translational modification will rival phosphorylation in terms of biological import. Acetyl groups are conjugated to lysine by histone acetyltransferases (HATs) and removed from lysine by histone deacetylases (HDACs). Recent studies have shown that pharmacologic agents that alter lysine acetylation by targeting HDACs, or by inhibiting acetyl-lysine "reader" proteins, are efficacious in pre-clinical models of heart failure. I will highlight these findings, and discuss a non-genomic mechanism for the control of diastolic dysfunction and heart failure with preserved ejection fraction (HFpEF) by HDACs.

Timothy McKinsey, PhD

Associate Professor & Associate Division

Head for Translational Research

Director, Consortium for Fibrosis Research & Translation

Department of Medicine, Division of Cardiology

University of Colorado Denver - Anschutz Medical Campus

Tuesday, February 21, 2017

4:00 pm

GBSF Auditorium

(Rm. # 1005)

Light refreshments will be served.

Host : Julie Bossuyt

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