RMB CVRC Seminar

The Robert M. Berne Cardiovascular Research Center Presents

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AMPK – regulating energy homeostasis at the cellular and whole body levels

The AMP-activated protein kinase (AMPK) is activated by cellular energy stress (signalled by increases in the AMP:ATP and ADP:ATP ratios), by glucose starvation (signalled by lack of binding of the glycolytic intermediate fructose-1,6-bisphosphate (FBP) to FBP aldolase), and by several hormones that regulate whole body energy balance (e.g. ghrelin) usually via the Ca2+-CaMKK2 pathway. Once activated, AMPK attempts to restore energy balance at the cellular level by promoting catabolic pathways (especially mitochondrial biogenesis and homeostasis) while inhibiting anabolic pathways, and at the whole body level by promoting food intake and other effects. Defects in the AMPK system are now implicated in many human disorders, including heart disease, Type 2 diabetes and cancer.

Thursday, September 26th, 2019
11:00 AM-12:00 PM
MR5 3005

Hosted by: Zhen Yan, PhD
Refreshments Served