Research Interest

The overall goal of the Gamble Laboratory research program is to investigate how the central mammalian clock integrates environmental and molecular signals into robust behavioral and physiological rhythms. Recently, several important studies have implicated circadian clocks in regulating metabolic function. One of the primary projects in our lab is to investigate the role of glycogen synthase kinase 3 (GSK3), an established modulator of insulin sensitivity, in regulation of the circadian clock. Specifically, we plan to define the role of circadian regulation of GSK3 in maintaining energy balance. The results of our research may have important implications for GSK3 in metabolic deficiencies common in metabolic syndrome, environmentally-induced obesity, and aging.

Publications

- 2012
- 2011
- 2010
- 2009
- Pre 2009


Dyssynchrony in Mice. Int J Obesity, in press.


