

The University of Hong Kong
Department of Psychology

Departmental Seminar

***Serotonergic modulation of circadian phase,
seasonal depression and stress hormones***

Date: December 13, 2012 (Thursday)

Time: 11:30 a.m. – 12:30 p.m.

Venue: Social Sciences Chamber, 11/F, The Jockey Club Tower,
Centennial Campus, HKU

Speaker: Professor Gary Pickard
Professor of Neuroscience,
University of Nebraska-Lincoln

The biological clock located in the hypothalamus is entrained to the day/night cycle via input from intrinsically photosensitive retinal ganglion cells (ipRGCs). IpRGCs express serotonin receptors on their axonal terminals and serotonergic afferents to the clock modulate retinal input. Altered serotonergic neurotransmission alters entrainment during short day (winter-like) conditions resulting in a highly dampened daily corticosterone rhythm. Mechanisms underlying the dampened corticosterone rhythm are under investigation and some evidence suggests that conflicting temporal cues sent to the adrenal may contribute to the reduction in corticosterone secretion.