

## CONFERENCE

### **Circadian disruption by bisphenol A and saturated fat: A view from the NPY neuron.**

**Denise D Belsham**, PhD, Professor of Physiology, Medicine, OB/GYN  
University of Toronto, Canada

FECHA: Miercoles 15 de Enero, 11:00hrs

LUGAR: Auditorio Mario Caiozzi.

Facultad de Ciencias Químicas y Farmaceuticas .

Sergio Livingstone 1007. Independencia. Santiago

**Biography:** Denise is a Professor of Physiology, Medicine, and Ob/Gyn at the University of Toronto, Canada. She has over 25 years of neuroendocrine research in obesity, circadian rhythms, and reproduction. She developed an array of over 250 clonal neuronal cell models from the hypothalamus, now in over 600 labs worldwide. Currently, is the President of the Pan American Neuroendocrine Society. Recently, she was awarded the “Sustained Excellence in Graduate Teaching and Excellence” for her contributions towards the careers of the over 125 trainees from her laboratory.

**Abstract:** Research indicates that common dietary components, such as high fat and high sugar diets, as well as chemicals in plastics, food contaminants, and other prevalent household items, may be major contributors to the rise in the rates of obesity around the world. Diets high in fat or sugar have been shown to alter circadian clock function. Bisphenol A (BPA), a ubiquitous, environmental endocrine disruptor, is considered an obesogen. Its role in the hypothalamic control of energy balance, however, remains largely unexplored. As disruption of the circadian clock is tightly associated with metabolic consequences, she will discuss how BPA and the saturated fatty acid palmitate affects the components of the molecular circadian clock in the feeding-related neurons of the hypothalamus and the impact to the development of metabolic disorders, including obesity and Type 2 diabetes. This presentation discusses her recent findings concerning the influence of nutrients and endocrine disrupting chemicals, in particular the fatty acid palmitate and bisphenol A, on molecular circadian rhythms in neuropeptide Y-expressing hypothalamic cell models.