

HOW DOES HYPERTENSION IMPAIRS NEURO- VASCULAR COUPLING?

Dr. HELENE GIROUARD
ASSISTANT PROFESSOR
DEPARTMENT OF PHARMACOLOGY,
FACULTY OF MEDICINE,
UNIVERSITÉ DE MONTREAL
Monday, April 16th ,2012
LECTURE: 10:00 AM - 11:00 AM

ENGINEERING CENTER
ROOM EC 1112
10555 WEST FLAGLER STREET
MIAMI, FL 33174



Abstract: Neurovascular coupling is the dynamic link between neuronal energy needs and local blood supply. The potential repercussions of dysfunctional regulation of neurovascular coupling are extremely important since small reductions in cerebral blood flow result in major deficits of neuronal functions and render the brain more vulnerable to ischemia. Neurovascular coupling is impaired in aging and many pathologies such as hypertension. Hypertension is a multifactorial condition that involves humoral and mechanical components. New data in humans and different mice models will be presented and the role of humoral and mechanical parameters on neurovascular coupling impairment will be discussed with an emphasis on the astrocytovascular communication.

Biography: Dr Girouard completed her PhD in cardiovascular physiology in 2002 at the Université de Montreal under the supervision of Dr J. de Champlain, a specialist in the field of hypertension. She then pursued with two fellowships both on the study of neurovascular coupling regulation: one at the Weill Medical College of Cornell University with Dr C. Iadecola and a second one at the University of Vermont with Dr Mark T. Nelson. She is now assistant professor at the department of pharmacology of the Université de Montreal and the director of the neurovascular pharmacology laboratory. The research interests of Dr Girouard are the study of the mechanisms underlying cerebrovascular regulation in health and diseases such as hypertension. The main objective of her research is to find therapeutic targets to protect the brain in vascular diseases. She published 23 papers as well as 55 abstracts mostly in the field of hypertension and cerebrovascular regulation.

Contact: bmeinfo@fiu.edu; 305-348-6717

Map: <http://campusmaps.fiu.edu/> (Other campuses/ - Engineering Center)