



Phosphatases in Neuroscience

**Satellite Meeting for 42nd SFN on Friday, October 12, 2012
8:30 a.m. to 6:00 p.m.**

**The Inaugural Satellite Meeting on “Phosphatases in Neuroscience”
of the 2012 Society for Neuroscience (SFN) meeting will be held
in New Orleans, Louisiana, USA.**

Pan-American Building, Bayou Room, 11th floor, 601 Poydras Street, New Orleans, LA

The focus of this exciting SFN 2012-New Orleans satellite meeting will be on the cell biology, pharmacology and electrophysiological analyses of phosphatase function in various neuronal processes, including various disease states. Strong basic science and disease-related translational research will be presented at the meeting, including discussions on transgenic animal models and cutting-edge fluorescence imaging methods.

Phosphorylation is a fundamental regulatory mechanism for many biological processes, including those in neurons. Defective phosphorylation leads to dysfunctional cell signaling and can become a catalyst for neuronal dysfunction and cell death. Transient phosphorylation is produced by the coordinated and reciprocal action of protein kinases and protein phosphatases. Kinases and phosphatases thus play critical roles in normal neuronal physiology and are important targets in pathophysiology of central nervous system. Kinases have received the most attention in research, however.

The phosphatase field is less developed because of the lack of specific inhibitors, as well as a vast number of regulatory proteins (~100) functioning to modulate substrate

specificity and/or targeting phosphatases to distinct cellular micro-domains to limit substrate specificity and increase catalysis efficiency. Moreover, the traditional view that phosphatases are mainly passive in counteracting kinase action has been proven false. Phosphatase activities are tightly regulated and can initiate many physiological and pathological processes. For example, the activity and/or activation of protein phosphatase-1 (PP1), a prototype of protein phosphatases, is critical for the induction threshold of long term potentiation (LTP) and depression (LTD). For this reason, we have launched the inaugural Phosphatase in Neuroscience meeting to explore this developing field, and better understand the phosphatase role in both normal and diseased function of the central nervous system.

Poster Submission: Please send the word file of the poster abstract to: hxia@lsuhsc.edu after registration.

Speakers:

Provisional Program

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8:15-8:30	Registration
8:30-8:45	Welcome and Introduction
8:45-9:15	Angus Nairn (Yale): Beyond the Dopamine Receptor: Role and Regulation of Serine/Threonine Protein Phosphatases
9:15-9:45	Nick Bazan (LSU): PP2A is Targeted by Neuroprotectin D1, a Key Cell Survival Messenger and Modulator of Neuroinflammation
9:45-10:15	Johannes Hell (UC Davis): Structural and Functional Aspects of PP2A Binding to the L-type Calcium Channel Cav1.2
10:15-10:30	Coffee break
10:30-11:00	Hugh Xia (LSU): Regulation of PP1 by Inhibitor-2 and its Signaling Role in Homeostatic Synaptic Plasticity
11:00-11:30	Roger Colbran (Vanderbilt): Spinophilin-PP1 Interactome in Adult Striatum: Novel Interactions with CaMKII
11:30-12:00	Isabelle Mansuy (Switzerland): Protein Phosphatases in Epigenetic Regulation of Memory
12:00-12:45	Lunch
12:45-1:45	POSTER
1:45-2:15	Rick Huganir (Johns Hopkins): Role Regulation of AMPA Receptors by Protein Phosphorylation
2:15-2:45	Mark Dell'Acqua (U. Colorado): Regulation of Synaptic Plasticity and AMPA Receptor Subunit Composition by AKAP150-anchored Calcineurin

2:45-3:15	Stefan Strack (Iowa): Mitochondrial PP2A Regulates Synapse Formation, Plasticity, and Learning and Memory
3:15-3:30	Coffee break
3:30-3:45	Short talk 1
3:45-4:00	Short talk 2
4:00-4:15	Short talk 3
4:15-4:30	Short talk 4
4:30-5:00	Paul Lombroso (Yale): The Role of STEP in Neuropsychiatric Disorders
5:00-5:05	Conclusion / More Coffee

Our program will also include a poster session. Graduate students, postdoctoral fellows and junior investigators applying to the meeting will be selected from the submitted poster abstracts to present short-talks.

Link to online Registration: [LSUHSC Foundation](#)

Conference Location: The meeting will be held in the Pan-American Life Center located in 601 Poydras Street in New Orleans. It is located in central business district (CBD), only blocks away from the French Quarter and Convention Center.

Hotel Accommodations: A block of rooms has been reserved at a discount rate at the La Quinta Hotel in the French Quarter within walking distance of many shops, restaurants, and tourist attractions. However, the number of rooms is limited; participants are encouraged to contact the hotel or call 800-642-4239 and give group code **0983grrefz**. For more information on the hotel, please visit their [website](#).

For more tourist information on the New Orleans metropolitan region, please see the [Louisiana Tourism Office website](#).

We look forward to seeing you in New Orleans on October 12, 2012!

Sponsored by the Neuroscience Center of Excellence and Department of Cell Biology and Anatomy of the LSU Health Science Center in New Orleans