

*Sponsored by the Neuroscience Center of Excellence  
and the Stanley S. Scott Cancer Center*

## **Chancellor's Award Lecture in Neuroscience and Medicine**



### **Mathematical Oncology: Petri Net Modelization, a New Tool for Dissecting Cell Signal Mapping in Medicine**

*Novel Approach for the Integration of Multi-Signaling Based  
on Modelization and Mapping into Discovery and Clinical  
Development of Targeted Therapies*

**Pierre Braquet, D. Pharm., D. Sc.**  
Chief Executive Officer  
Onco-Logics, Inc.  
Paris, France

- Focusing on signaling pathways and their regulation and coordination of the flow of information.
- Analysing how deregulation of signal pathways plays a critical role in cancer.
- Modelizing these processes using mathematical tools to help in the understanding of the pathways involved in cell signaling.
- Analysing cellular networks by developing innovative methodologies including new mathematical techniques such as Petri Nets.
- Describing Petri Net, a graphical and mathematical modeling tool

Dr. Pierre Braquet is D. Pharm, D. Sc. in organic chemistry (asymmetric synthesis – computerized determination of conformers), engineer in IT and operation research. He worked with professor E.J. COREY (Nobel prize) in Harvard who succeeded in the full synthesis of the 20 asymmetric carbon spirononane ginkgolide B. He also cooperated with professor Sir John VANE in London (Nobel prize) on nitric oxide and endothelin. He collaborated in the 80's with Prof. Nicolas Bazan on the discovery of transcriptional regulation of PAF, discovery of neuroprotection by ginkgolide PAF antagonists in experimental stroke and the identification of PAF receptors at the synapse and intracellularly. His scientific work has resulted in more than 50 patents & 850 publications. He received major scientific awards: "Prix Galien" for pharmaceutical research in 1988, the EBRA award at the Royal Society (London). In September 2001, Dr. Pierre Braquet was selected by the American Society for Information Science & Technology as one of the most quoted authors in Pharmacology during the past two decades (see ASPET site or <http://isihighlycited.com/>).

**4:00 p.m. — March 11, 2010  
Room 563, 5th Floor, CSRB**

For More Information, Contact Zevie Davis: [zdavis@lsuhsc.edu](mailto:zdavis@lsuhsc.edu)