

**Programa do 1º. Encontro do CLUBE BRASILEIRO DAS PURINAS: SINALIZAÇÃO PURINÉRGICA E IMPLICAÇÕES TERAPÊUTICAS**

**Program of the 1. Meeting of the Brazilian Purine Club “Purinergic signaling and therapeutic implications”**

**23/08/2010**

16:00 – 18:00 h Registration

18:00 h Opening Ceremony

**18:15 – 19:00 h Opening conference:** Dr. Geoffrey Burnstock - Autonomic Neuroscience Centre, Royal Free and University College Medical School, London, UK: The struggle to establish purinergic signalling and the current explosion of interest.

19:00 h – Cocktail

**24/08/2010**

Morning session

**8:15 – 9:00 h Conference:** Dr. Pablo J. Schwarzbaum - Instituto de Química y Físicoquímica Biológicas, Universidad de Buenos Aires, Buenos Aires, Argentina: Cell volume regulation mediated by P receptors.

**9:05 - 10:25 h Symposium: Ectonucleotidases and purinergic signalling**

Chair-person: Dra. Ana Maria Battastini (Instituto de Ciências Básicas da Saúde, UFRGS)

- Dr. Ana Maria Battastini (Instituto de Ciências Básicas da Saúde, UFRGS): Knock-down of ecto-5'- nucleotidases / CD73 suppresses tumor growth in a rat glioma model

- Dr. Carla Denise Bonan (PUCRS): Ectonucleotidases and adenosine deaminase in zebrafish: characterization and toxicological implications.

- Dr. José Roberto Meyer Fernandes (ICB, UFRJ): Ecto-nucleoside triphosphate diphosphohydrolases in protozoa parasites: looking for a function.

- Dr. Maria Rosa Schetinger (Centro de Ciências Naturais e Exatas, UFSM): NTPDase and 5'-Nucleotidase activities in physiological and disease conditions: new perspectives for human health.

10:30 h Coffee break

**11:00 – 11:55 h**

**Symposium: Purinergic receptors and immune system**

Chair-person: Dr. Robson Coutinho-Silva (IBCCF-UFRJ)

- Dr. Robson Coutinho Silva (IBCCF-UFRJ): Purinergic signaling and innate immunity: implications in the defense against intracellular parasites.
- Dr. Luís Carlos Crocco Afonso (ICEB, UFOP): The role of ectonucleotidases and adenosine production in the infection by Leishmania parasites.
- Dr. Alice Teixeira Ferreira (Depto. de Biofísica, UNIFESP): Action of ATP and analogs on murine hematopoietic cell differentiation.

12:00 Lunch

Afternoon session

**14:00 – 14:45 h Conference:** Dr. Gary Weisman - Department of Biochemistry, University of Missouri, Columbia, MO, USA: P2Y2 nucleotide receptors mediate neuroinflammatory and neuroprotective responses.

**14:50 – 16:10 h Symposium: Purinergic signalling in the nervous system**

Chair-person: Dr. Henning Ulrich (IQ, USP)

- Dr. Henning Ulrich (USP): Implications of purinergic receptors in neuronal differentiation.
- Dr. Benedito Honório Machado (FMRP, USP-RP): Purinergic modulation of synaptic transmission in the nucleus tractus solitarius of rats.
- Dr. Ana Lúcia Ventura (UFF): Nucleotide signaling and the development of the avian retina.
- Dr. Maria José da Silva Fernandes (Depto. de Neurologia/Neurocirurgia, UNIFESP): Purinergic P2 receptors are up-regulated in the hippocampus of patients with temporal lobe epilepsy associated with hippocampal sclerosis.

16:30 h Coffee break

**17:00 - 18:00 h Poster session**

**18:15 – 19:00 h Conference:** Dr. Peter Illes, Rudolf-Boehm-Institute for Pharmacology and Toxicology, University of Leipzig, Germany: P2X7 receptors of cortical astrocytes in rodent cell cultures and brain slice preparations; identification and functional roles.

20:00 h Dinner

**21:00 h Annual Assembly of the Brazilian Purine Club**

25/08/2010

Morning session

**8:15 – 9:00 h Conference** Dr. Rodrigo Cunha - Institute of Biochemistry, Faculty of Medicine University of Coimbra, Portugal. Adenosine receptors define salience of information in neuronal circuits and control neurodegeneration and memory impairment in animal models of brain disease.

**9:05 - 10:25 h Symposium: Neurotransmission and development.**

Chair-person: Roberto Paes de Carvalho (UFF)

- Dr. Roberto Paes de Carvalho (UFF): Adenosine as a signaling molecule in the developing retina.
- Dr. Lisiane Porciúncula (Instituto de Ciências Básicas da Saúde UFRGS): Caffeine and memory.
- Dr. Guido Lenz (IB, UFRGS): Role of the P2X7 receptor in glioblastoma cell biology and pathology.
- Dr. Patrícia Castelucci (ICB, USP): Effects of the intestinal inflammation, obesity and malnutrition on the P2X receptors and enteric nervous system.

10:30 h Coffee break

**11:00 – 12:00 h Symposium: Young Scientists (Abstracts selected for oral presentations)**

- Camila Marques da Silva, Mariana Martins Chaves, Vanessa Figliuolo, Bartira Rossi-Bergman, Robson Coutinho-Silva. Pyrimidine coupled P2Y receptors as a new target on *Leishmania amazonensis* amastigotes elimination.

Speaker: Camila Marques da Silva (IBCCF-UFRJ)

- Renato Socodato, Rafael Brito, Karin Calaza, Roberto Paes de Carvalho. Developmental regulation of neuronal survival by adenosine in the in vitro and in vivo avian retina depends on a shift of signaling pathways leading to CREB phosphorylation or dephosphorylation.

Speaker: Renato Socodato (UFF)

- Elizandra Braganhol, Filip Kukulski, Sébastien A. Lévesque, Michel Fausther, Elise G. Lavoie, Fariborz Bahrani, Fethia Ben Yebdri, Jean Sévigny, Ana Maria Oliveira Battastini. Extracellular nucleotides control IL-8 and MCP-1 secretion in U251MG glioma cell line.

Speaker: Elizandra Braganhol (ICBS-UFRGS)

- Camila Marques da Silva, Mariana M. Chaves, Robson Coutinho Silva, Marilia Zaluar Passos Guimarães. P2X2 and P2X7 pore formation is inhibited by colchicine: a possible mechanism for its anti-inflammatory actions.

Speaker: Marilia Zaluar Passos Guimarães (ICB-UFRJ)

12:05 – 12:50 h Conference:

**12:05 – 12:50 h Conference:** Dr. Francesco Di Virgilio – Dept. of Experimental and Diagnostic Medicine, University of Ferrara, Ferrara, Italy: Key role of purinergic signalling in cell fusion.

**12:50 h Closing Ceremony**

**13:30 h Lunch**