

❖ 2ª Reunião da Sociedade Portuguesa de Neurociências
19 e 20 de Outubro, 1995

Local: Estoril

Comissão Organizadora:

- J. Alexandre Ribeiro
- Ana M. Sebastião
- Alexandre de Mendonça
- Rodrigo A. Cunha

Programa:

19th October

8:30 - Registration

9:00 - 9:05 - Opening of the Meeting

SESSION I - Neurotransmission and Ion channels

Chairmen: L. M. Rosário and E. P. Duarte

Lecture

9:05 - 10:05 - *On the role of striatal adenosine A_{2A} receptor*

P. J. Richardson

Oral Communications

10:05 - *Facilitation of [³H] GABA release from hippocampal synaptosomes by the A_{2a} adenosine receptor agonist CGS 21680*

R. A. Cunha and A. M. Sebastião

10:20 - *2MeSATP acts as a P2x purinoceptor agonist in bovine chromaffin cells: effects on [Ca²⁺]_i and catecholamine secretion*

A. R. Tomé, E. Castro and L. M. Rosário

10:35 - *Control of Ca²⁺ influx and membrane potential by Ni²⁺- and DPC-sensitive non-selective cation channel in pancreatic β-cells*

A. M. Silva, R. M. Barbosa, L. M. Rosário and R. M. Santos

10:50 - *The noradrenergic antinociceptive action elicited from the caudal ventrolateral medulla is conveyed by a dysynaptic spinal afferent pathway relaying in the A5 cell group. An immunocytochemical fine structural study*

I. Tavares, D. Lima and A. Coimbra

11:05 - *Desensitization of bladder sensory fibers with intravesical capsaicin in humans with detrusor hyperactivity*

F. Cruz, M. Guimarães, C. Silva, M. E. Rio, M. Reis and A. Coimbra

11:20 - 11:45 - Coffee break

SESSION II - Hypoxia/ischaemia and stroke

Chairmen: J. M. Ferro and C. R. Oliveira

11:45 - *Oxidative stress, hypoxia or ischaemia-like conditions increase the release of endogenous aminoacids by distinct mechanisms in cultured retinal cells*

A. C. Rego, M. S. Santos and C. R. Oliveira

12:00 - *Interactions between adenosine and GABA during hypoxia in the rat hippocampus*

A. M. Sebastião, R. Lucchi and J. A. Ribeiro

12:15 - *Long-term prognosis of first-ever lacunar strokes - a hospital-based study*

A. V. Salgado, J. M. Ferro and A. Gouveia-Oliveira

12:30 - 14:00 - Lunch

14:00 - 16:00 - Poster Presentation

16:00 - 16:30 - Coffee break

16:30 - 18:30 - Poster Discussion in the lecture room

Chairmen: R. A. Cunha, A. de Mendonça and P. Correia de Sá

Session I - Neurotransmission

- *Regulation and subcellular localization of nitric oxide synthase in rat brain synaptosomes*
S. A. Cardoso, M. C. Lopes and A. P. Carvalho
- *Glutamate receptor agonists stimulate Ca^{2+} -dependent and Ca^{2+} -independent release of [3H]D-aspartate in cultured chick retina cells*
P. F. Santos, C. B. Duarte and A. P. Carvalho
- *Differential release of adrenaline and [Leu⁵]-enkephalin from intact and permeabilized chromaffin cells*
I. Ladeira, G. Baltazar, A. P. Carvalho and E. P. Duarte
- *Pathways of extracellular adenosine removal at the rat innervated hemidiaphragm*
M. T. Magalhães-Cardoso, R. A. Cunha and J. A. Ribeiro
- *Adenosine originated from the catabolism of adenine nucleotides facilitates Ach release from the rat motor nerve endings*
M. A. Timóteo, P. Correia-de-Sá and J. A. Ribeiro
- *The oxidative deamination in human cystic artery*
I. V. Figueiredo, A. Martinez-Coscollá, M. D. Cotrim, C. A. Fontes-Ribeiro, J. Pereira, L. Silveira, A. M. Silvério Cabrita, T. R. A. Macedo and M. M. Caramona

Session II - Ion channels and currents

- *Two types of class A Ca^{2+} channels are coupled to catecholamine and enkephalin release in bovine chromaffin cells*
G. Baltazar, I. Ladeira, A. P. Carvalho and E. P. Duarte
- *-Conotoxin GVIA modifies the affinity of 1,3-dipropyl-8-cyclopentylxanthine for the adenosine A1 receptor at the rat neuromuscular junction*
M. G. B. Lobo, M. A. Timóteo and J. A. Ribeiro

- *-Agatoxin-IVA inhibits the excitatory effect of adenosine agonists on $^{45}\text{Ca}^{2+}$ uptake by synaptosomes*
M. L. Gonçalves and J. A. Ribeiro
- *Effects of adenosine A1 receptor activation on the voltage sensitive calcium channels (VSCCs) in the hippocampus and in the striatum of the rat: a comparative study*
A. F. Ambrósio, J. O. Malva, A. P. Carvalho and M. C. Carvalho
- *FURA-2 calcium signals from hippocampal CA1 neurons*
M. E. Quinta, C. M. Matias, J. A. Cravino and P. J. Cabrita
- *Development in vitro of chick embryo retina cells: activity of glutamate receptors, voltage sensitive calcium channels and enzymatic markers of cellular structures*
A. Capela, A. Cristóvão and A. P. Carvalho
- *A sodium dependent potassium current in immature and mature CA1 neurones*
A. I. Santos and P. F. Costa

Session III - Neuronal damage

- *Influence of ageing on adenosine A₁ receptor modulation of cholesterol and phospholipids in rats*
E. Fonseca, M. D. Constantino and J. A. Ribeiro
- *Influence of oxidative stress on acetylcholinesterase activity and on [³H]choline uptake in rat brain synaptosomes: effects of aluminum*
M. F. C. S. Bastos, M. S. Santos and C. R. Oliveira, A. P. Carvalho
- *Glutamate cytotoxicity in PC12 cell line. Protective effect of α -tocopherol*
C. Pereira and C. Oliveira
- *Ca^{2+} -influx through NMDA and kainite receptor-associated channels in chick retina*

cells correlates with subsequent neuronal cell death

I. L. Ferreira and A. P. Carvalho

Session IV - Pain

- *Differential depression by morphine of spinal c-fos induction by thermal noxious stimulation of the skin*

S. Cunha, S. Rebelo, S. Correia, D. Lima and A. Coimbra

- *c-fos expression in the rat spinal cord following noxious bladder stimulation can be used as a model to study the effect of intravesical capsaicin on bladder sensory fibers*

A. Avelino, F. Cruz, D. Lima and A. Coimbra

- *Some Neuropharmacological properties of the Tilia europea aqueous extract in animal models*

C. Cavadas, I. V. Figueiredo, A. Proença da Cunha, M. M. Caramona, T. R. A. Macedo, C. A. Fontes Ribeiro and M. D. Cotrim

18:45 - General Meeting of the Society

20:00 - Banquet

20th October

SESSION III - Neuronal plasticity I

Chairmen: A. Castro-Caldas and A. M. Sebastião

Lecture

9:00 - 10:00 - *Mechanisms underlying synaptic plasticity in the CA1 region of the hippocampus*

G. Collingridge and Z. I. Bashir

Oral Communications

10:00 - *Endogenous adenosine modulates long-term depression in the hippocampus*

A. de Mendonça, Z. I. Bashir and J. A. Ribeiro

10:15 - *Activation of high-affinity kainite receptor induces influx of Ca^{2+} and glutamate release in CA3 hippocampal synaptosomes*

J. O. Malva, A. P. Carvalho and C. M. Carvalho

10:30 - *Changes in the kinetics of sodium currents in maturing CA1 hippocampal neurons*

P. F. Costa

10:45 - 11:15 - *Coffee break*

SESSION IV - Pain

11:15 - *The role of the spinofugal system in pain processing*

D. Lima, A. Avelino, A. Almeida, I. Tavares and A. Coimbra

11:30 - *Distribution of superficial and deep dorsal horn afferent fibers in the rat dorsal reticular nucleus*

A. Almeida, I. Tavares, D. Lima and A. Coimbra

11:45 - *Structural characterization by the Golgi method of marginal (lamina I) neurons in the cat spinal cord*

V. Galhardo, D. Lima and A. Coimbra

12:00 - *A multivariate study of headache associated with different types of acute strokes*

J. M. Ferro, T. P. Melo, V. Oliveira, A. V. Salgado, M. Crespo, P. Canhão and A. N. Pinto

12:15 - 14:00 - *Lunch*

SESSION V - Neuronal plasticity II

Chairmen: P. F. Costa and D. Lima

Lecture

14:00 - 15:00 - *Distributed training rescues the long term potentiation and the memory deficits of mice mutant for the cAMP-responsive element binding protein*

A. Silva

Oral Communications

- 15:00 - *Development of GABAergic transmission in the immature rat hippocampal CA1 area*
C. Nunes Filipe, F. C. Ribeiro and P. F. Costa
- 15:15 - *High-intensity/high-frequency motor nerve stimulation potentiates the tonic facilitatory action of adenosine on Ach release from rat hemidiaphragm preparations*
P. Correia-de-Sá, M. A. Timóteo and J. A. Ribeiro
- 15:30 - *The use of a lexical route for oral repetition by illiterate aphasics with severe comprehension defects*
A. Castro-Caldas and A. Reis
- 15:45 - *Chemical sensory deafferentiation by capsaicin prevents HPA activation by noxious stimulation or acupuncture, but not that due to emotional stress*
B. Pan, J. Castro-Lopes and A. Coimbra
- 16:00 - *Chaotic activity in EEG signals from 'Petit Mal' epileptic patients*
A. Andrade, C. Silva, E. Ducla-Soares, I. R. Pimentel, J. P. Foreid and M. J. Moniz Botelho

Lecture

- 16:30 - *Understanding the brain with functional neuroimaging*
M. Ingvar
- 17:30 - Closing