

❖ 7ª Reunião da Sociedade Portuguesa de Neurociências
13-14 de Setembro, 2001

Local: Grande Hotel do Luso

Comissão Científica:

- Arsélio Pato de Carvalho
- Alexandre Mendonça
- Alexandre Ribeiro
- Ana Sebastião
- António Paula Barbosa
- António Soares da Silva
- Caetana Carvalho
- Carlos Duarte
- Deolinda Lima
- José Castro Caldas
- José Castro Lopes
- Luís Cunha
- Maria João Saraiva
- Odete Cruz e Silva
- Tice Macedo

Comissão Organizadora:

- Catarina Resende de Oliveira
- Ana Cristina Rego
- Ana Luísa Carvalho
- António Francisco Ambrósio
- João José Malva
- Paula Agostinho
- Paulo Fernando Santos
- Rodrigo Antunes Cunha

Programa:

12th September

18:00 - 20:00 - Registration

13th September

8:30 - Registration

9:00 - 9:15 - Opening session

9:15 - 10:15 - 1st Plenary Conference

Kainate receptors and synaptic plasticity

G. L. Collingridge

10:15 - 10:30 - Coffee break

Symposium 1 - Synaptic Transmission and Modulation

Chairpersons: D. Lima and J. A. Ribeiro

10:30 - 11:00 - Conference

Adenosine as a dynamic regulator of cholinergic synaptic function

P. Correia-de-Sá

11:00 - 11:30 - Young lecture

Modulation of intracellular free calcium concentration and glutamate release by neuropeptide Y receptors in the rat hippocampus: functional interaction between presynaptic neuropeptide Y1 and Y2 receptors

A. P. Silva

11:30 - 12:30 - Oral Communications

- *Association of PKC γ with GluR4 AMPA receptor subunit in the rat brain*
S. Correia et al.
- *The excitatory action of VIP hippocampal CA1 area is dependent on GABAergic transmission and on both PKA and PKC activities*
D. Cunha-Reis et al.
- *Cross-talk between δ opioid and H1 histamine receptors in chromaffin cells: evidence for*

negative modulation of histaminergic responses involving G_i/G_o proteins and Ca^{2+} fluxes

F. J. Deus et al.

- *Transient decays of hippocampal mossy fiber calcium and zinc signals evoked by tetanic stimulation*

C. M. Matias et al.

12:30 - 14:00 - Lunch

14:00 - 15:30 - Poster session (Symposia 1 and 2)

Symposium 1

- *Evidence that ecto-adenosine deaminase regulates tonic A_{2A} -receptor facilitation of electrically evoked [3H]-acetylcholine release from the rat myenteric motoneurons*

M. Araújo et al.

- *Effect of BDNF on the expression of ionotropic glutamate receptors in cultured hippocampal neurons*

R. F. Carvalho et al.

- *Effect of *Passiflora edulis* Sims. flavonoids on benzodiazepine modulatory sites of $GABA_A$ receptor complex in rat brain*

M. Coleta et al.

- *Effect of acetylcholine on adenosine release at the carotid body*

S. V. Conde et al.

- *Expression of NMDA receptors during development of chick embryo retina cells*

A. J. Cristóvão et al.

- *Different transduction systems operated by adenosine A_{2A} receptors in the hippocampus of aged rats*

R. A. Cunha et al.

- *Nociceptive facilitation from the medullary dorsal reticular nucleus: effects of local manipulation upon the response capacity of spinal cord wide dynamic range neurons*
C. Dugast et al.
- *Tonic activation of excitatory A_{2A} -adenosine receptors attenuate neuromuscular titanic fading induced by tubocurarine*
M. Faria et al.
- *Regulation of AMPA receptor activity by PKA in cultured retinal neurons: effect of excitatory dopamine receptors and inhibitory metabotropic glutamate receptors*
A. R. Gomes et al.
- *Vascular reactivity of mesenteric vessels from DPSPX-hypertensive rats*
M. Morato et al.
- *Ecto-AMP deaminase activity attenuates A_{2A} -receptor-mediated facilitation of [3 H]-acetylcholine release by shunting ATP catabolism from adenosine formation at the rat neuromuscular junction*
L. Oliveira et al.
- *GABA_B receptor immunoreactivity in brain neurons expressing c-fos induced by noxious cutaneous stimulation*
M. Pinto et al.
- *Suppression of K^+ conductance by droperidol reduces excitability of spinal sensory neurons*
B. V. Safronov et al.
- *Serotonergic response in the ex vivo and the post-mortem human uterine artery*
S. A. Silva et al.

Symposium 2

- *Linkage study between the GABA_A β2 and GABA_A γ2 subunit genes and schizophrenia*
A. M. Ambrósio et al.
- *Caracterização molecular do gene CACNA1A em famílias e doentes com Enxaqueca*
J. Coelho et al.
- *Identificação de uma família brasileira com a ataxia espinocerebelosa tipo 6 (SCA6)*
T. Matamá et al.
- *Criação de um modelo transgénico no nematode Caenorhabditis elegans para estudo da doença de Machado-Joseph*
C. Santos et al.

Symposium 2 - Neurogenetics/Neurodegenerative Diseases

Chairpersons: A. de Mendonça and M. J. Saraiva

15:30 - 16:30 - Oral Communications

- *Mutação missense no gene CACNA1A provoca SCA associada a enxaqueca hemiplégica familiar*
I. Alons et al.
- *Association of carbachol o-methyltransferase genetic polymorphism with Parkinson's disease - a sexual dimorphism effect*
L. Breitenfeld et al.
- *The role DRG11 in the development of the nociceptive circuitry from the periphery to the spinal cord dorsal horn*
S. Rebelo et al.
- *Função e padrão de expressão do gene MJD1-like em C.elegans*
C. Santos et al.

16:30 - 16:45 - Coffee break

16:45 - 17:15 - Young lecture

Travelling with the poly(A)-binding protein2: a voyage between the nucleus and the cytoplasm

A. Calado

17:15 - 17:45 - Conference

Ursodeoxycholate protection in neurodegenerative conditions

C. M. P. Rodrigues

18:00 - 19:00 - SPN General Meeting

20:00 - Dinner

14th September

9:15 - 10:15 - 2nd Plenary Conference

Genes, diet and the pathogenesis of neurodegenerative disorders

M. P. Mattson

10:15 - 10:30 - Coffee break

Symposium 3 - Neuronal Networks

Chairpersons: A. Castro Caldas and J. Castro Lopes

10:30 - 11:00 - Conference

New techniques illustrating effective and anatomical connectivity in-vivo and even related fMRI

C. Weiller

11:00 - 11:30 - Young lecture

The visual system as a model to bridge the gap between cells and networks: mechanisms of visual motion perception

M. Castelo-Branco

11:30 - 12:00 - Young lecture

Pain-induced immediate reorganization of spinal and thalamic somatosensory neural networks

V. Galhardo

12:00 - 12:30 - Conference

Autonomic networks: anatomical data and functional perspectives

H. Sequeira

12:30 - 14:00 - Lunch

14:00 - 15:30 - Posters (Symposia 3 and 4)

Symposium 3

- *Brain afferents to the medullary dorsal reticular nucleus in the rat. A retrograde and anterograde tracing study*
A. Almeida

Symposium 4

- *Neurotoxicity caused by prion and beta-amyloid peptides*
P. Agostinho et al.
- *The influence of comedication on lamotrigine concentrations in patients submitted to V-EEG*
A. M. Almeida et al.
- *AMPA receptor-mediated neurotoxicity in cultured hippocampal neurons: involvement of nitric oxide*
I. M. Araújo et al.
- *Rat plasma and brain lamotrigine concentration profiles*
M. M. Castel-Branco et al.
- *Can insulin have a neuroprotective effect in diabetic rat brain synaptosomes under oxidative stress conditions?*

A. I. Duarte et al.

- *Cell death in neural models - an undergraduate perspective*

A. Eufrásio et al.

- *Effect of antioxidants against reactive oxygen species, caspases activation and DNA fragmentation induced by staurosporine in cultured retinal cells*

J. Gil et al.

- *Evaluation of mitochondrial respiratory chain involvement in neuronal ceroid lipofuscinosis*

M. M. M. Grazina et al.

- *Huntington's disease - clinical correlation with redox status parameters*

C. Januário et al.

- *Effects of dopamine oxidation upon red blood cells: influence of manganese ions*

C. H. R. Marinho et al.

- *Reduction of [³H]acetylcholine release induced by A β -peptide. Involvement of metabolic dysfunction*

J. B. Melo et al.

- *Retinospheroids mitochondrial respiratory chain response to peroxynitrite*

C. F. Mendes et al.

- *Involvement of mitochondrial cytochrome C release and oxidative stress in cell death mediated by selective activation of AMPA receptors in cultured hippocampal neurons*

N. M. Monteiro et al.

- *Can we extrapolate data obtained from other tissues to brain?*

P. Moreira et al.

- *Cell death induced by cocaine, amphetamine and heroine is associated with changes in intracellular dopamine*
T. Oliveira et al.
- *Identification and functional characterization of kainite receptors in rat macrophages and microglia*
P. C. Pinhero et al.
- *Role of mitochondria on cytotoxic effects induced by H₂O₂ - a comparative study on ρ⁺ and ρ⁰ NT2 cells*
A. C. Rego et al.
- *Post-glutamate receptor events triggered by excitotoxic stimuli in cultured retinal neurons*
A. E. Santos et al.
- *Cytotoxicity induced by amyloid β peptide fragment 25-35 - a comparative study in neuronal and mixed cultures*
A. P. S. Vieira et al.
- *Mechanism of the oxide and 3,4 dihydroxyphenylacetic acid synergistic inhibition of respiratory chain of rat brain mitochondria*
C. Nunes and J. Laranjinha

Symposium 4 - Neurotoxicity and Neuroprotection

Chairpersons: C. M. Carvalho and O. Cruz e Silva

15:30 - 16:30 - Oral Communications

- *The role of Ca²⁺-calmodulin-dependent Ser-Thr phosphatase on amyloid - β mediated toxicity*
S. M. Cardoso et al.
- *Iron and oxidative stress in neurodegeneration*
C. Januário et al.

- *Familial amyloid polyneuropath: RAGE-dependent triggering of neuronal inflammatory and apoptotic pathways*
M. M. Sousa et al.
- *Parameters for evaluation of aluminium neurotoxic action*
V. S. Silva et al.

16:30 - 16:45 - Coffee break

16:45 - 17:15 - Young lecture

AMPA and kainate receptors: two players in $[Ca^{2+}]_i$ changes and neuronal degeneration

A. F. Ambrósio

17:15 - 17:45 - Conference

Signalling mechanisms in neuroprotection by neurotrophins

C. B. Duarte

18:00 - Closing session