

❖ 10ª Reunião da Sociedade Portuguesa de Neurociências

23-26 de Maio, 2007

Local: Ofir

Comissão Organizadora:

- Maria João Saraiva
- Mónica Sousa
- Deolinda Lima
- Vasco Galhardo
- Amélia Tavares
- José Castro-Lopes
- Paulo Correia de Sá

Programa:

1st Portuguese-Brazilian Colloquium on Neurochemistry

23rd May

14:00 - Registration Desk Opens

15:00 - 17:00 - **Symposium - From Purines to Neurotrophins and Neuropeptides: Pathways for Neuromodulation and Neuroprotection**

Chair: João Malva, Roberto Pães-de-Carvalho

15:00 - 15:20 - *Neuromodulation and Neuroprotection by Adenosine Receptors: from A₁ to A_{2A} Receptors*

Rodrigo Cunha

15:20 - 15:40 - *Neuroprotection by Guanosine Glutamate Excitotoxicity*

Diogo Souza

15:40 - 16:00 - *Adenosine A_{2A} Receptors and Chronic Stress in the Hippocampus*

Luísa V. Lopes, Bruno Fontinha, Ana Rita Costenla, Vasco Souza and Ana M. Sebastião

16:00 - 16:20 - *Nucleotide P_{2Y} Receptor-mediated Cell Proliferation in the Developing Retina*

Ana Ventura, Guilherme R. França, Patrícia H. C. Nunes Isis M. Ornelas and Rodrigo C. C. Freitas

16:20 - 16:40 - *Purinergic Dynamics at Myoneural Synapses: Origin, Metabolism and Beyond*

Paulo Correia-de-Sá, Margarida Duarte-Araújo, Teresa Magalhães-Cardoso, Miguel Faria, M. Alexandrina Timóteo, Laura Oliveira

16:40 - 17:00 - *Signaling by Adenosine and Nitric Oxide in the Developing Retina: Pathways to Survival or Cell Death?*

Roberto Paes-de-Carvalho, Renato E. S. Socodato, Telmo A. Mejía-García and Cristiane R. Magalhães

17:00 - 17:30 - Coffee break

17:30 - 17:50 - *Neuromodulation by Neurotrophic Factors Requires Cross-talk with Adenosine A_{2A} Receptors*

Ana Sebastião, Maria José Diógenes, Paula A. Pousinha, Catarina C. Fernandes, António Pinto-Duarte, Bruno Fontinha, Catarina A Gomes, Sylvie Duflo, Sandra H. Vaz, Sofia S. Ferreira, Natália Assaife-Lopes and J. Alexandre Ribeiro

17:50 - 18:10 - *IL₄ and Retinal Ganglion Cell Survival*

Elizabeth Araújo

18:10 - 18:30 - *Neuroprotection by BDNF*

Carlos Duarte, R. D. Almeida, B. J. Manadas, J. R. Gomes, C. V. Melo, P. Fernández

18:30 - 18:50 - *Muller Glia Trophic Support Peripheral and Central Neurons*

Ricardo Reis, Maurício e Castro Cabral-da-Silva, Vítor Resende, Rosália Mendez-Otero, Fernando Garcia de Mello, Jeremy SH Taylor

18:50 - 19:10 - *Neuroprotection by Bile Acids: Genes and Cellular Pathways*

Ramalho RM, Solá S., Steer CJ, Cecília Rodrigues

19:10 - 19:30 - *Protective Role of HSF₁ in the Central and Peripheral Nervous Systems*

Santos SD, Maria João Saraiva

19:30 - 19:50 - *Neuropeptide Y in Neuroprotection and Neurogenesis-tool for Brain Repair?*

*João Malva, Ana P. Silva, Sara Xapelli, Raquel Ferreira, Liliana Bernardino
and Fabienne Agasse*

10th Meeting of the Portuguese Society for Neurosciences

24th May

8:30 - Registration Desk Opens

9:30 - 10:30 - Introduction and Plenary Lecture

Imaging Pain

Irene Tracey

10:30 - 11:00 - Coffee break

11:00 - 12:30 - **Symposium I - Pain**

Chair: Armando Almeida

Co-chair: José Manuel Castro Lopes

11:00 - 11:30 - *Role of the Vanilloid Type I Receptor in Vesical
Hyperactivity*

Keynote Speaker: Paulo Diniz

11:30 - 12:00 - *Dissection of the Components for PIP₂ Activation and
Thermosensation in TRP Channels*

Keynote Speaker: Romon Latorre

12:00 - 12:15 - *Attenuation of Neuropathic Pain by a Viral Vector
Targeting Noradrenergic Input to the Dorsal Reticular
Nucleus*

Isabel Martins

12:15 - 12:30 - *A Mathematical Model for Windup*

Paulo Aguiar

12:30 - 14:00 - Lunch

14:00 - 15:30 - **Symposium II - Behaviour**

Chair: Marta Moita

Co-chair: Amélia Tavares

14:00 - 14:30 - *Stress Beyond the Hippocampus*

Keynote Speaker: Nuno Sousa

14:30 - 14:50 - *Remembering Makes Memories Fragile: The Cellular Basis of Reconsolidation*

Rosalina Fonseca

14:50 - 15:10 - *Neurodynamical Correlates of Emotional Behaviour*

Sequeira Henrique

15:10 - 15:30 - *Fabry Disease: Further Characterisation of the Knockout*

Lorena Rodrigues

15:30 - 16:00 - Coffee break

16:00 - 17:30 - **Symposium III - Purine Receptors**

Chair: Rodrigo Cunha

Co-chair: Paulo Correia-de-Sá

16:00 - 16:30 - *Control of Neurodegeneration by Adenosine A_{2A} Receptors: Possible Involvement of More Than One Mechanism*

Keynote Speaker: Nelson Rebola

16:30 - 16:50 - *Neuronal Localization of the Glial Cell Line-Derived Neurotrophic Factor (GDNF) Receptor in the Rat Striatum - Tight Interaction with Adenosine A_{2A} Receptor ($A_{2A}R$) in the Modulation of Glutamate and Dopamine Release*

Catarina Gomes

16:50 - 17:10 - *Modification of ATP/ P_2 Receptor Signalling in the Hippocampus of Streptozotocin-induced Diabetic Rats*

João Duarte

17:10 - 17:30 - *A_{2A} Receptors Mediate a Positive Feedback Mechanism Facilitating Adenosine Outflow at the rat Myenteric Plexus*

Margarida Araújo

17:30 - 19:00 - **Poster Session I**

- *Learning Impairments induced by Chronic Inflammatory Pain in the Rat*
M.Pais-Vieira, D. Lima V. Galhardo
- *Thalamocortical Global Dynamics of Behavioral Transitions in a Rat Model of Persistent Peripheral Neuropathic Pain*
H. Cardoso-cruz, P. Aguiar, D. Lima, Vasco Galhardo
- *Pain Behaviour in an Experimental Model of Osteoarthritis in Rats*
Joana Ferreira-Gomes, Sara Adães, José M Castro-Lopes
- *Mu Opioid Receptors Modulate Nociceptive Processing in the Thalamus of Monoarthritic Rats*
Neto F. L., Potes C. S., Pozza D., Castro-Lopes J. M.
- *Role of Antinociceptive and Pronociceptive Supraspinal Centres in the Differential Nociceptive Activation of NK₁ and GABAB-Expressing Spinal Cord Neurons During Secondary Hyperalgesia*
A. R. Castro, D. Lima, I. Tavares
- *Gene and Pharmacological Manipulation of Opioid Medullary Dorsal Reticular Neurons in the Monoarthritic Rat*
M. Pinto, F. Tschudy, M. Sousa, S. Wilson, D. Lima & I. Tavares
- *Diabetic Neuropathy Induces Spontaneous Spinal Neurons Hyperactivity: A C-FOS Study*
Morgado C., Tavares I.
- *Assessment of Blood Pressure and Acute Pain Perception After Angiotensin II Administration in the Caudal Ventrolateral Medulla*
J. Marques-Lopes, M. Morato, D. Pinho, T. Sousa, S. Oliveira, I. Tavares, A. Albino-Teixeira

- *Hyperalgesia Associated with Chronic Inflammatory Pain is Lower in Hypertensive Than in Normotensive Rats*
Dora Pinho, Manuela Morato, José Marques-Lopes, Marta Couto, Isaura Tavares, António Albino-Teixeira
- *Effects of Environmental Enrichment on Behavior of Rats Postnatally Exposed to Cocaine*
Magalhães A., Tavares M. A. and L. de Sousa
- *Cognitive Deficits in a Spatial Learning Task in the Morris Water Maze Are Present at AGR Extremes in Male Wistar Rats*
Franky A, Bessa JM, Oliveira M, Cerqueira JJ, Sousa N.
- *"Cognitive-Enrichment" Selectively Reverses Stress-Induced Memory Impairments*
Cerqueira JJ, Taipa R, Pêgo JM, Almeida OFX, Gonçalves O, Sousa N
- *Transthyretin Is Important for Spacial Memory Formation*
João Carlos Sousa, Fernanda Marques, Eduardo Dias Ferreira, João Cerqueira, Nuno Sousa, Joana Almeida Palha
- *Motor Phenotype and Brain Pathology in a Transgenic Mouse Model of Machado-Joseph Disease*
Silva-Fernandes A, Costa MC, Costa C, Maciel P
- *MBalanced IL-10 Production Alters Emotional Behavior*
A. R. Mesquita, M. Correia-Neves, A. G. Castro, J. Pedrosa, J. A. Palha and N. Sousa
- *Chronic Stress Induced Anxiety-Like Behavior Does Not Correlate with Structural Changes in Pyramidal Neurons of Basolateral Amygdala*
P. Morgado, J. M. Pêgo, J. Cerqueira, O. F. X. Almeida, N. Sousa
- *Chronic Stress Associated Anxiety Correlates Withmorphological Changes in Bed Nucleus of Stria Terminalis but not Amygdala*
J. M. Pêgo, P. Morgado, J. Cerqueira, O. F. X. Almeida, N. Sousa

- *Evidence for a Hippocampus to Prefrontal Cortex Progression of Stress Induced Deficits*
Cerqueira JJ, Dias Ferreira E, Almeida OFX, Costa RM, Sousa N
- *Human Wayfinding in Stroke Patients: a Search for Neural Correlates*
M. van Asselen, R. P. C. Kessels, A. Postma
- *Activation of A₁ Receptors by Endogenous Adenosine Regulates the Negative Interaction Between M₁ and M₂ Muscarinic Autoreceptors at the Rat Motor Endplate*
Laura Oliveira and Paulo Correia-de-Sá
- *Adenosine A₁ Activation Attenuates Cannabinoid CB₁ -Dependent Inhibition of GABA Release From Rat Hippocampal Nerve Terminals*
Vasco C. Sousa, J. Alexandre Ribeiro, Ana M. Sebastião
- *A₁ Adenosine Receptors Do Not Influence the Inhibitory Action of CB₁ Receptors Upon Synaptic Transmission*
André Serpa, Ana M. Sebastião, Joaquim A. Ribeiro
- *The BDNF Modulator Effect on [³H] GABA Uptake in Hippocampal Nerve Terminals Is Enhanced by Adenosine A_{2A} Receptor Activation*
Sandra H. Vaz, Joaquim A. Ribeiro, Ana M. Sebastião
- *Age-Related Modulation of Long-Term Potentiation (LTP) by Brain Derived Neurotrophic Factor (BDNF)*
Maria José Diógenes, Bruno Miguel Fontinha, Ana Rita Costenla, Joaquim Alexandre Ribeiro, Ana Maria Sebastião
- *Acute BDNF Effect Upon Long-Term Potentiation: Modulation by Endogenous Adenosine A_{2A} Receptor Activation*
Bruno M. Fontinha, Ana M. Sebastião, J. Alexandre Ribeiro
- *Cross-Talk Between A_{2A} and TRKB Receptors: Increase in TRKB Expression and its Translocation to Lipid Rafts*
Assaife-Lopes N, Pereira D.B., Ribeiro J.A., Chao M. V., Sebastião A. M.

- *Effect of Adenosine A_{2A} Receptor Activation at the Rat Diaphragm Neuromuscular Junction*
Paula A. Pousinha, Ana M. Sebastião and Joaquim A. Ribeiro
- *Adenosine Promotes [³H] GABA Uptake by Hippocampal Synaptosomes Through the Activation of A_{2A} Receptors Which Restrains PKC Inhibition of Gat₁*
Ana Sofia Ferreira, Sandra H. Vaz, J. Alexandre Ribeiro, Ana M. Sebastião
- *TControl of Mitochondrial Function Is Involved in the Ability o Adenosine A_{2A} Receptors to Prevent the Synaptotoxicity Caused by - Amyloid Peptides*
Paula M. Canas, Carla G. Silva, Ricardo J. Rodrigues, Catarina R. Oliveira, Rodrigo A. Cunha
- *Activation of Adenosine A_{2A} Receptors and TRKB Receptors Enhance Adenosine Transport Uptake Activation Mediated by the Equilibrative Nucleoside Transporter ENT₁ in Astrocytes Primary Culture*
Sylie Duflot, Sandra H. Vaz, Ana M. Sebastião and J. Alexandre Ribeiro
- *Enhanced Tonic Activation of P₂X Receptors is Correlated with Cholinergic Nerve Hiperactivity in Obstructed Human Bladders*
M. Silva-Ramos, M. Faria, M. Duarte-Araújo, V. Cavadas, T. Magalhães-Cardoso, J. M. Lafuente-de-Carvalho, P. Correia-de-Sá
- *Pharmacological Profile of P₂ Receptors Involved in Inhibition of Noradrenaline Release in Rat Brain Cortical Slices*
Clara Quintas, Diogo Pestana, Jorge Gonçalves, Glória Queiroz
- *P₂ Receptors Involved in the Regulation of Cortical Astrocyte Proliferation*
Diogo Pestana, Clara Quintas, Jorge Gonçalves, Glória Queiroz

- *Influence of Microglia on Astrocyte Proliferation Induced by Nucleotides*
Diogo Pestana, Clara Quintas, Jorge Oliveira, Jorge Gonçalves, Glória Queiroz
- *High-Glucose Affect the $[Ca_{2+}]_i$ Changes Induced by Purinergic Receptor Activation in Retinal Cells*
Gabriel Costa, Tiago Pereira, Francisco Ambrósio e Paulo Santos
- *GABA Release Induced by Metabotropic Glutamate Receptors Inamacrine Cells of the Chicken Retina*
Calaza K. C., Guimarães-Sousa E. M., de Mello F. G., Guardino P.F.
- *BDNF Differentially Regulates the Expression, Delivery and Activity of AMPA and NMDA Receptor Subunits in Cultured Hippocampal Neurons*
Margarida V. Caldeira, Carlos V. Melo, Daniela B. Pereira, Ricardo Carvalho, Susana S. Correia, Donald S. Backos, Ana Luísa Carvalho, José A. Esteban and Carlos B. Duarte
- *New Truncated Isoforms of AMPA Receptor Subunits Generated by Alternative Splicing: Characterization and Functional Relevance*
Joana S. Ferreira, André R. Gomes, Ana Paternain, Juan Lerma, Carlos B. Duarte and Ana Luísa Carvalho
- *Rafficking of AMPA Receptors: Unveiling the Role of Cortactin*
Catarino T., Duarte C.B., Kapus A. & Carvalho A. L.
- *In Vivo Neuroprotective Effects of Acetyl-L-Carnitine Against MDMA Induced Neurotoxicity at the Mitochondrial Level*
Alves E., Binienda Z., Gonçalves A., Faria R., Fernandes E., Carvalho F., Summavielle T.
- *Long-Term Effects of Chronic Cocaine Exposure During Adolescence on Dopaminergic System of Wistar Rats*
Cecília J. Alves, Teresa Summavielle, Liliana de Sousa, Pedro R. R. Monteiro

- *Insulin Increases Excitability by Inhibiting an ERG K⁺ Current in N₁E-115 Neuroblastoma Cells*
Lima PA, Alves FM, Vicente MI, Costa PF
- *Characterization of the Reconstituted Pore Module of KVLM, a Voltage-Gated K⁺-Selective Channel From Listeria Monocytogenes*
José S. Santos, Sergey M. Grigoriev, Maurício Montal
- *Insulin Increases Excitability by Reducing a Slow Delayed Rectifying K⁺ Current in Rat Ca₁ Pyramidal Hippocampal Neurons*
Alves FM, Costa PF, Lima PA
- *Galantamine Inhibits a Slowly Inactivating K⁺ Current in Differentiated Neuroblastoma N₁E-115 Cells in a Bell-Shaped Dose-Dependent Manner*
Vicente M.I., Costa P. F. and Lima P. A.
- *Dynamic and Interacting Profiles of Oxygen and Nitric Oxide in the Hippocampus*
Ana Lêdo, Rui M. Barbosa, João Laranjinha
- *Real Time in Vivo Measurement of Nitric Oxide Using Microelectrodes in the Ca₁ and Ca₃ Regions in the Rat Hippocampus*
Cátia F. Lourenço, Ricardo M. Santos, Michelle L. Stephens, François Pomerleau, Greg A. Gerhardt, João Laranjinha and Rui M. Barbosa
- *What is the Human Nucleus Accumbens? An Anatomical and MRI Comparative Study*
Lucas Neto L., Oliveira E, Correia F, Gonçalves Ferreira A
- *Stereotactic Anatomy of the Human Locus Coeruleus*
Fernandes P., Regala J., Gonçalves Ferreira A
- *Neuronal Production in Vitro From Embryonic Stem Cells*
Beckman E, Abranches E & Henrique D

- *Characterization of Olfactory Bulb Interneuron Diversity by Genetic Fate Mapping*
Renata Brito, Jennie Close and Gord Fishell
- *Pre-Apoptosis as an Early Event in Neural Stem Cell Differentiation*
M. M. Aranha, M. Vecchi, S. Solá, C. M. P. Rodrigues
- *Plastic Changes of the Dopaminergic System in the Adult Avian Retina: Role of PACAP*
M. C. F. de Mello, I. Henze, P. F. Gardino, R. Fleming and F. G. de Mello
- *A Possible Role for Adenosine Receptors Underlying the Development and Plasticity of Retinotectal Pathways*
Campello-Costa P., F. B. Maia, A. T. Gomes, P. Oliveira-Silva, R. Paes-de-Carvalho, C. A. Serfaty
- *Different Combinatorial Code Defined by DRG₁₁ LMX_{1B} and TLX₃ is Required for the Development of Subpopulations within the Superficial Spinal Dorsal Horn*
Rebello S, Reguenga C, Lopes C, Pereira C, ANDreson D and Lima D
- *Essential and Distinct Roles for CDC₄₂ and RAC₁ in the Regulation of Schwann Cell Biology and PNS Myelination*
Yves Benninger, Tina Thurnherr, Jorge A. Pereira, Sven Krause, Dominik Herzog, Xunwei Wu, Anna Chrostek-Grashoff, Klaus-Armin Nave, Robin J. M. Franklin, Dies Meijer, et al.
- *Role of Integrin-Linked-Kinase (ILK) and its Associated Proteins in the Myelination and Remyelination of the Nervous System*
Jorge Pereira, Yves Benninger, Ana F. Gonçalves, Tina Thurnherr, Reinhard Fässler, Dies Meijer, Ueli Suter and João B. Relvas
- *Neurodevelopment Milestone Abnormalities in Rats Exposed to Stress in Early Life*
A. R. Mesquita, J. M. Pêgo, T. Summavielle, P. Maciel, O. F. X. Almeida and N. Sousa

- *Gender-Dependent Effects of Prenatal Exposure to Methamphetamine in the Rat Optic Nerve*

Pedro Melo, Maria Dolores Pinazo-Duran and Maria Amélia Tavares

19:00 - 21:00 - General Assembly

25th May

9:30 - 11:00 - **Symposium IV - Development**

Chair: Isabel Palmeirim

Co-chair: Carlos Duarte

9:30 - 10:00 - *Neurogenesis: From Embryos to Stem Cells*

Keynote Speaker: Domingos Henrique

10:00 - 10:20 - *Gestational Kinetic Evolution of Astrocytes and Neuronal Cells in the Spinal Cord of Curly-Tail/Loop Tail Mice Mice with Myelomeningocele. A Topographical Study*

Joaquim Reis

10:20 - 10:40 - *Becoming Ganglion or Bipolar Cells in the Zebrafish Retina*

Marta Vitorino

10:40 - 11:00 - *Shared Mechanisms During Neural and Tracheal Morphogenesis in Drosophila Melanogaster*

Sofia Araújo

11:00 - 11:30 - Coffee break

11:30 - 13:00 - **Symposium V - Regeneration**

Chair: Ana Paula Pêgo

Co-chair: Mónica Sousa

11:30 - 12:00 - *Remyelination as a Regeneration Paradigm*

Keynote Speaker: João Relvas

12:00 - 12:20 - *Bidirectional Neuron-Microglia Signaling Plays Role in Survival*

Sukalyan Chatterjee

12:20 - 12:40 - *Insulin Neuroprotection Against Oxidative Stress Is Mediated by AKT and GSK-3 Signalling Pathways and Changes in Protein Expression*

Ana Duarte

12:40 - 13:00 - *Molecular Mechanisms of the Preventive Effects of Glycoursodeoxycholic Acid on the Bilirubin-induced Release of Cytokines by Astrocytes*

Adelaide Boralho

13:00 - 14:30 - Lunch

14:30 - 16:00 - **Symposium VI - Neural Circuits**

Chair: Miguel Castelo-Branco

Co-chair: Vasco Galhardo

14:30 - 15:00 - *Neural Mechanisms of Action Learning*

Keynote Speaker: Rui Costa

15:00 - 15:20 - *The Relationship Between Afferents and Their Target Neurons Examined in the Thalamocortical Projection in Cat Area 17*

Nuno Costa

15:20 - 15:40 - *The Olfactory-Dependent Circuit of Courtship*

Maria Luísa Vasconcelos

15:40 - 16:00 - *The Role of Visual Area HMT/V₅ in Triggering Perceptual Decision Under Ambiguous, Conflicting Stimulus Conditions*

Miguel Castelo-Branco

16:00 - 16:30 - Coffee break

16:30 - 18:00 - **Symposium VII - Therapies**

Chair: Ana Cristina Rêgo

Co-chair: Cecília Rodrigues

16:30 - 17:00 - *Transcriptional Regulation of Oligodendrocyte Development by Histone Deacetylases*

Keynote Speaker: Gonçalo Castelo-Branco

17:00 - 17:20 - *A Neurogenic Program Coregulated by the Proneural Factor Mash₁ and BRN Proteins*

Diogo Castro

17:20 - 17:40 - *Tumor Necrosis Factor-Alpha Triggers Differentiation of New Neurons in Neonatal Neural Stem Cells*

Liliana Bernardino

17:40 - 18:00 - *Role of Paracrine Factors Released by Human Umbilical Cord Mesenchymal Progenitors on the Viability, Proliferation and Differentiation of Hippocampal Neurons and Cortical Glial Cells*

António Salgado

18:00 - 19:30 - **Poster Session II**

- *Contactin and Caspr: New Binding Partners for AMPA Receptors*

Sandra D. Santos, Carlos B. Duarte, Ana L. Carvalho

- *Programming Effects of Antenatal Dexamethasone in the Developing Mesolimbic Pathways*

Leão P, Sousa JC, Oliveira M, Silva R, Almeida OFX, Sousa N

- *A_{2A} Adenosine Receptors Postsynaptically Modulate AMPA Receptor Function in the Hippocampus*

Raquel Alice Dias, Catarina C. Fernandes, Joaquim A. Ribeiro and Ana M. Sebastião

- *Interaction Between Cannabinoid and Adenosine Receptors in Long Term Potentiation*

Marco A. Lopes, Joaquim A. Ribeiro, Ana M. Sebastião

- *Endogenous VIP Impairs Long Term Potentiation (LTP) Induced by Theta-Burst Stimulation*

Diana Cunha-Reis, Raquel A. Dias, Joaquim A. Ribeiro, Ana M. Sebastião

- *Functional and Morphological Assessment of a Standardized Rat Sciatic Nerve Crush Injury with a Non-Serrated Clamp Reconstructed with Chitosan and Collagen Membranes Associated to a Cellular System*
MJ Simões, S Amado, S Geuna, AL Luís, JM Rodrigues, JD Santos, Y Shirosaki, MA Lopes, F Fregman, S Raimondo, A Prieto Veloso, PAS Armada-da-Silva, ASP Varejão, AC Maurício
- *Dominant-Negative B₁ Integrin Transgenic Mice Reveal Differential Requirements for B₁ Integrin in CNS and PNS Myelination*
Câmara J, Friedman H, Zambroni D, Feltri MI, Peterson A, EFrench-Constant C
- *Role of Gelsolin in the Myelination and Remyelination of the Peripheral Nervous System*
Ana Filipa Gonçalves, Ricardo Correia, Jorge A. Pereira, David J. Kwiatkowski, Walter Witke, Ueli Suter and João Bettencourt Relvas
- *Transthyretin Enhances Nerve Regeneration*
Carolina Fleming, Maria João Saraiva and Mónica Mendes Sousa
- *Effect of TTR Proteolytic Activity in Neuropeptide Processing and in Neurite Outgrowth*
Márcia Almeida Liz, Carolina Estima Fleming, Ana Filipa Nunes, Maria João Saraiva and Mónica Mendes Sousa
- *Transthyretin-Mediated Decrease of NPY Levels May Play a Role in Nerve Regeneration*
Ana Filipa Nunes, Maria João Saraiva and Mónica Mendes Sousa
- *Interactions Between NPY and BDNF in Neuroprotection Against Excitotoxicity: a Role for Neuron-Microglia Crosstalk?*
Xapelli S., Bernardino L., Ferreira R., Grade S., Silva A. P., Cavadas C., Grouzmann E., Poulsen F., Jakobsen B., Oliveira C. R., Zimmer J. and Malva J. O.
- *NPY Modulates Neurogenesis in SVZ Cell Cultures*
F. Agasse, L. Bernardino, R. Ferreira, S. Grade, B. A. Silva, J. O. Malva
- *Do Astrocytes Modulate Neurodegeneration During Hyperbilirubinemia?*
Ana S Falcão, Sandra Leitão da Silva, Adelaide Fernandes, Ana R Vaz, Rui FM Silva, Maria A Brito, Dora Brites

- *Neuronal Injury by Unconjugated Bilirubin Is Mediated by Nitric Oxide*
Maria A Brito, Ana Rita Vaz, Sílvia Lima, Adelaide Fernandes, Ana S Falcão, Sandra Leitão da Silva, Rui F M Silva, Dora Brites
- *Glutamate Induces Release of Glutathione from Primary Cultures of Rat Astrocytes - A Possible Neuroprotective Mechanism?*
João Frade, Simon Pope, Rui Barbosa, Jenny Pocock, João Laranjinha, Simon Heales
- *Role of GABA and Excitatory Amino Acids on the Expression of Glutamic Acid Decarboxylase in Cultured Chick Retina*
Gardino P. F., Barros P. H. O. C., Calaza K. C. and de Mello F. G.
- *Inhibitors of ERK 1/2 Modulate Adenosine Uptake in Cultures of Avian Retinal Cells*
Rodrigues AS, Ferreira JM and Paes-de-Carvalho R
- *Growth Factors Regulate the Survival and Differentiation of Mice Neural Stem/Progenitor Cells*
Ana Silva, Ana Catarina Oliveira, Jorge Pereira, Catarina R. Oliveira, João Bettencourt-Relvas and A. Cristina Rêgo
- *Neuropeptide Y Increases Cell Proliferation in Rat Retina Cell Cultures: Role of NOS and ERK 1/2 Signalling Pathways*
Ana Rita Álvaro, João Martins, Inês Araújo, Joana Rosmaninho-Salgado, Ana Tellechea, António Ambrósio, Cláudia Cavadas
- *Effects of Direct Cell-To-Cell Contact on the Cell Viability and Proliferation in a Co-Culture System of Human Umbilical Cord Perivascular Cells (HUCPVCS) and Glial Cells*
J. S. Fraga, A. J. Salgado, N. M. Neves, R. L. Reis, N. Sousa
- *Intravenous Delivery of Neural Stem Cells and Mesenchymal Stromal Cells in Demyelinated Mouse Models Improves Functional Recovery*
Catarina Miranda, Ana Filipa Gonçalves and Mónica Mendes Silva
- *Anti-Myelin Antibodies in Patients with Multiple Sclerosis*
Lima, Eduardo; Guimarães, J; Pereira, A M, Bodas, A; Delgado, J, Sá, M J
- *TNFR₁ Mediates Astrocyte Reactivity to Unconjugated Bilirubin*
Adelaide Fernandes, Ana S. Falcão, Ana R. Vaz, Sandra Silva, Rui FM Silva, Maria A Brito, Dora Brites

- *Changes in the Expression of Inflammatory Mediators and Tumoral Markers Following Neurogenic Laryngitis: Therapeutic Trial with Etoricoxib*
Manuel Lima-Rodrigues, Ana Vallefernandes, Nuno Lamas, Artur Vieira, Andrea Cruz, Jorge Pedrosa, António G Castro, Fátima Baltazar, Rui M Reis, Rui Nunes, Armando Almeida
- *Overstimulation of Ca₂₊-Permeable AMPA Receptors Activates the JNK/C-JUN Pathway*
M Vieira, AE Santos, A Burgueiro, MC Lopes, AP Carvalho, CB Duarte and AL Carvalho
- *Neural Mechanisms of Action Learning*
Rui M. Costa
- *Endoplasmic Reticulum Stress Induced by A 1-42 Oligomers Leads to GSK₃-Mediated Tau Phosphorylation*
Rosa Resende, Elisabete Ferreiro, Catarina Resende Oliveira, Cláudia Pereira
- *Neuronal Phospho-S6₅₅ APP is Preferentially Targeted to Neuritic Terminals*
Sandra Isabel Vieira, Sandra Rebelo, Edgar F. da Cruz e Silva and Odete A. B. da Cruz e Silva
- *Different Amyloid Precursor Protein Isoforms Have Distinct Fates*
Ana Gabriela Henriques, Sandra Isabel Vieira, Sandra Rebelo, Sara C. T. S. Domingues, Edgar F. da Cruz e Silva and Odete A. B. da Cruz e Silva
- *Different Combinatorial Code Defined by DRG₁₁ LMX_{1B} and TLX₃ is Required for the Development of Subpopulations within the Superficial Spinal Dorsal Horn*
Rebelo S, Reguenga C., Lopes C, Pereira C, Anderson D. and Lima D.
- *Astroglial Glutamate Uptake Under Alzheimer's Disease Conditions*
Matos M, Oliveira CR, Agostinho P
- *Apoptosis and Cleavage of Tau: Insights from in vivo and in vitro studies*
Rita M. Ramalho, Ricardo S. Viana, Rui E. Castro, Junging Xin, Meredith J. Noetzel, George A. Carlson, Clifford J. Steer, Haren H. Ashe, Walter C. Low, and Cecília M. P. Rodrigues

- *Are Novel Hydroxypyridinone Based Iron-Chelators Potential Candidates for Neuroprotection in Parkinson's and Alzheimer's Diseases?*
Daniela Arduíno, A. Raquel F. Esteves, A. Filipa Domingues, Daniel Silva, M. Amélia Santos, Cláudia Pereira, Sandra M. Cardoso and Catarina R. Oliveira
- *Effect of Statins on Beta-Amyloid-Induced Cortical Neurotoxicity*
Fonseca AC, Resende R, Ferreiro E, Oliveira CR, Pereira C
- *An Improved Transgenic Mouse for the Study of Familial Amyloidotic Polyneuropathy - HTTR V₃₀M/HSF₁-KO: Neuropathological Characterization*
Sofia Duque Santos, Rui Fernandes, Maria João Saraiva
- *Biochemical Markers and Oxidative Stress in Familial Amyloidotic Polyneuropathy*
Macedo B., Pratico D. and Saraiva M. J.
- *Cross-Talk Between Mitochondria and Ubiquitin-Proteasome System in Parkinson's Disease*
A. Filipa Domingues, A. Raquel F. Esteves, Daniela Arduíno, Catarina R. Oliveira and Sandra M. Cardoso
- *Mitochondrial Dysfunction and Cell Toxicity in Parkinson's Disease Models*
Rita Perfeito, Otília Vieira, Ana Luísa Carvalho, Sandra M. Cardoso, Catarina R. Oliveira and A. Cristina Rêgo
- *Lewy Bodies Like Formation in Parkinson's Disease Cybrids*
Raquel F. Esteves, A. Filipa Domingues, Daniela Arduíno, Isabel Nunes-Correia, Cristina Januário, Catarina R. Oliveira and A. Cristina Rêgo
- *Signalling Pathways Involved in Striatal GDNF Up-Regulation Evoked by Conditioned Media from Substantia Nigra Challenged Cultures*
C.P. Fonseca, A. Saavedra, E. P. Duarte, G. Baltazar
- *Increased Formation of Reactive Oxygen and Nitrogen Species and Caspase-3 Activation in Striatal Cells Expressing Mutant Huntingtin*
Márcio Ribeiro, Susana Louros, Maria V. Nascimento, I. Luísa Ferreira, Lisa Ellerby, Catarina R. Oliveira and A. Cristina Rêgo

- *Increased Susceptibility to Apoptotic Cell Death and Changes in Energy Metabolism in Huntington's Disease Cybrids*
I Anna S. Olsson and Peter SandØe
- *Considering Ethics and Animal Welfare in Neurodegenerative Disease Models: The Huntington Example*
I Anna S. Olsson and Peter SandØe
- *Modelling and Gene Silencing of Machado-Joseph Disease*
Alves S., Ferreira I., Régulier E., Dufour N., Hassig R., Auregan G., Brouillet E., Simões S., Pedroso de Lima M. C., Déglon N., Pereira de Almeida L.
- *In vivo Ataxin-3 Aggregation Dynamics in C. Elegans Neurons*
Andreia Teixeira de Castro, Patrícia Maciel and Richard Morimoto
- *Motor Phenotype and Brain Pathology in a Transgenic Mouse Model of Machado-Joseph Disease*
Silva-Fernandes A, Costa MC, Costa C, Maciel P
- *SPG₄ and SPG_{3A} Mutations Affect Spastin or Atlastin Function Causing Autosomal Dominant Spastic Paraplegia in Portuguese Families*
Leonor Miller-Fleming, Carolina Thieleke-Matos, Paula Magalhães, Paula Coutinho, Jorge Sequeiros, Isabel Silveira, J. E. Leal Loureiro
- *Role of CB₁ Cannabinoid Receptors in the Physiopathology of Hippocampal Glucose Homeostasis*
João MN Duarte, Célia Nogueira, Ken Mackie, Catarina R Oliveira, Rui A Carvalho, Rodrigo A Cunha, Attila Köfalvi
- *Biapigenin Affects Mitochondrial Calcium Handling - Is This Relevant for Neuroprotection?*
Bruno A. Silva, Paulo J. Oliveira, Alberto C. P. Dias and João O. Malva
- *Proteomic Profiling of Aluminium-Induced Alterations by Seldi-ToF MS*
Fátima Camões Amador, Krishnan Sriram, James P. O'Callaghan, Odete A. B. da Cruz e Silva and Edgar F. da Cruz e Silva

- *BDNF and NGF Mitigate Transcriptional Dysregulation Induced by 3-Nitropropionic Acid in Cortical Neurons*
Sandra Almeida, Catarina R. Oliveira, A. Cristina Rêgo
- *Chemokines as Immunological Marker of the Clinical Forms in Multiple Sclerosis*
M. Carmo Macário, Paula Laranjeira, Artur Paiva, Fernando Matias, Lúvia de Sousa
- *Blood Cells Change the Production of Inflammatory Mediators in Response to Seizures in Temporal Lobe Epilepsy*
Raquel Ferreira, José M. Morgado, Inês Baldeiras, Teresa Proença, Francisco Sales, Conceição Bento, Artur Paiva, João O. Malva
- *Alcoholism Candidate Gene Polymorphisms and Alexithymia in Alcoholic Outpatients*
M Bicho, P Levy, S Pombo, A Barbosa, F Ismail, N Cardoso
- *Neurophysiological Characterisation of the Prefrontal Cortex Function in Depressed Humans*
Fonseca R. and Leal A.

19:30 - 20:30 - Round Table: Portuguese Neuroscientists Networking

20:30 - Meeting Special Dinner

26th May

9:30 - 11:00 - **Symposium VIII - Neurodegenerative Disorders**

Chair: Odete Cruz e Silva

Co-chair: Catarina Oliveira

9:30 - 10:00 - *Wild-Type Huntingtin Function in BDNF Production and Neuronal Differentiation*

Keynote Speaker: Catarina Ramos

10:00 - 10:20 - *The Alzheimer's Amyloid Precursor Protein Interacts with the Ran Binding Protein RANBPM*

Sara Domingues

10:20 - 10:40 - *Unfolded Protein Response in a Drosophila Model for Retinal Degeneration*

Pedro Domingos

10:40 - 11:00 - *Monitoring Alpha-Synuclein Oligomerization in Living Cells Using Bimolecular Fluorescence Complementation*

Tiago Outeiro

11:00 - 11:30 - Coffee break

11:30 - 12:30 - Plenary Lecture

Molecular Neurobiology of Alzheimer's Disease

Sangram Sisodia

Conclusion