

Programme

December 17, 2015

08.30h Registration

09.15h Opening Session:

Prof. Catarina Oliveira | Coordinator of CNC.IBILI Consortium

Prof. João Ramalho-Santos | President of CNC

09.45h **Special Session:** Helena Machado (*CES- Centre for Social Studies, University of Coimbra*) "Genomics, neurosciences and datasharing: sociological and ethical challenges"

Session I – Neuroscience and Disease | *Chairs: Joana Marques & Elisabete Ferreiro*

10.15h Sofia Ferreira | Role of P2 Receptors in the migration of medial ganglionic eminence-derived interneurons

10.25h Catarina Gomes | Adenosine A2A receptors control microglia remodelling, which parallel gender biases in developmental genesis and treatment of anxiety

10.35h Sofia Alçada-Morais | Adenosine A2A receptors control cortical neurons migration

10.45h António Carvalho da Silva | The Impact of Circadian Clock in the Neurobiology of Alzheimer's Disease, Active vs Inactive Period in 3XTG-AD

10.55h *Coffee Break*

11.20h **Special Session:** Paula de Oliveira (*Center of Mathematics of the University of Coimbra*) "Mathematical models: paving the way for a personalized medicine"?

12.00h *Lunch*

Session II – Metabolism aging and disease | *Chair: Sandra Amaral & Ermelindo Leal*

14.00h Susana Guerreiro | Decrease expression of BMP7 improve the angiogenesis in wound healing

14.10h Madalena Ribeiro | Insulin-induced cartilage degradation in osteoarthritis is associated to defective autophagy

14.20h José Santos Teixeira | Targeting dietary hydroxycinnamic acids to mitochondria: a refined strategy to improve nature

14.30h João Teodoro | The bile acid chenodeoxycholic acid directly modulates metabolic pathways in white adipose tissue in vitro: insight into how bile acids decrease obesity

Session III – New preventive and therapeutic strategies | *Chairs: Rui Nobre & Chantal Fernandes*

14.50h Joana Duarte Neves | Neuropeptide Y mitigates neuropathology and motor deficits in mouse models of Machado-Joseph disease

15.00h Ana Maranhã | New mycobacterial targets for therapeutic intervention: function, structure and beyond

15.10h Patricia Pitrez | The vulnerability of smooth muscle cells derived from hutchinson-Gilford progeria IPSCS to arterial flow shear stress is mediated by metalloproteases

15.20h Lisa Rodrigues | Candida-host interaction: role of purines and adenosine A2A receptors

15.30h Sónia Pereira | Anti-inflammatory intestinal activity of na anthocyanin-rich fraction from portuguese blueberries in comparison to that of 5-Aminosalicylic acid, using colitis rat model

15.50: *Coffee Break*

16.20h **Special Session:** Luís Veríssimo | (*Manhattan Project & Faculty of Social and Human Sciences, NOVA University of Lisbon*) "Are you talking to me?"

Session IV – Neuroscience and Disease | *Chairs: João Lopes & Mário Laço*

17.00h Ana Viegas | MicroRNA modulation targets amyloid- β cascade in Alzheimer's disease

17.10h Ana Plácido | Role of endoplasmatic reticulum stress in Alzheimer's disease-associated endothelial dysfunction

17.20h Sandra Mota | Oxidative stress involving changes in NRF2 and ER stress in early stages of Alzheimer's disease

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9.00h PhD movie 2

10.30h *Coffee-Break*

11.00h **Special Session:** Rui Travasso (*CFisUC, Universidade de Coimbra*) "Using mathematical modelling to understand sprout elongation in sprouting angiogenesis"

Session V - Neuroscience and Disease | *Chairs: Sandra Santos & M^a Joana Pinto*

11.30h Pedro Afonso | BDNF increases surface expression of GluN2B-containing NMDA receptors by a mechanism involving synaptic synthesis/activation of Pyk2

11.40h Sara Oliveira | Carbon monoxide as a metabolic and brain-blood barrier modulator with protective effects after stroke

11.50h Susana Sampaio | The synaptic proteome: a functional and quantitative study

12.00h Mariline Silva | Identification and characterization of a novel microRNA regulated by neuronal activity

12.20h **Special Session:** Paulo Peixoto (*ISR- Instituto de Sistemas e Robótica, Universidade de Coimbra*) "Robotics Meets The Bio World"

13.00h *Lunch*

Session VI - Metabolism Aging and Disease | *Chairs: João Teodoro & Susana Guerreiro*

14.00h Ana Patrícia Marques | Dipeptidyl peptidase IV inhibition prevents adipocyte differentiation and ameliorates fibrosis in adipose tissue of obese mice

14.10h Paula Mota | Spermatogonial stem cell organization in felid testis as revealed by DBA lectin

14.20h Mafalda Bacalhau | Functional genomics analysis to gathering evidence for m.7486 mutation pathogenicity

Session VII – Biotechnology | *Chairs: Ana Luisa Cardoso & Susana Rosa*

14.40h Sandra Jesus | Adjuvant nanocarriers for hepatitis B vaccine

14.50h Pedro Gouveia | Flexible nanofilms coated with aligned piezoelectric microfibers preserve the long-term contractility of cardiomyocytes

15.00h André Soares | RLR1 and RLR2, two novel Arabidopsis thaliana atypical aspartic proteases involved in primary root development and lateral root formation

15.15h *Coffee-Break*

15.45h Poster Session

17.00h Marionet Theatre Performance "Atos de Laboratório" | (*Featuring CNC Researchers*)

17.30h Closing Remarks

20.30h *Dinner*