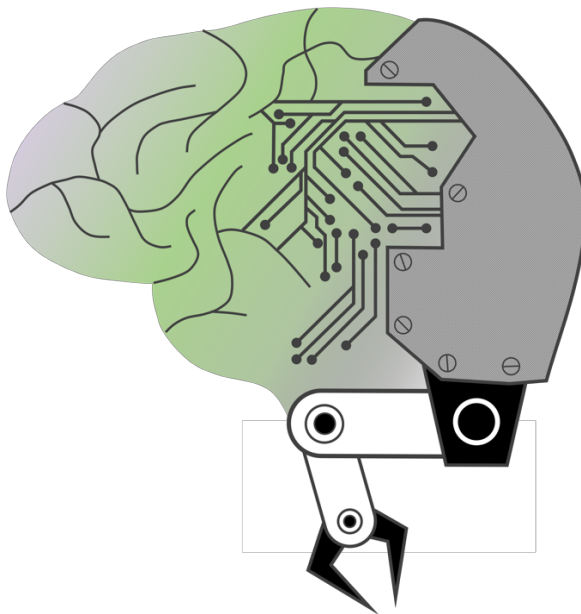

5th Meeting
of the
Mind-Brain College
of the
University of Lisbon

17th Meeting
of
Biomedical
Engineering
IST/FMUL

Tribute to Fernando Lopes da Silva



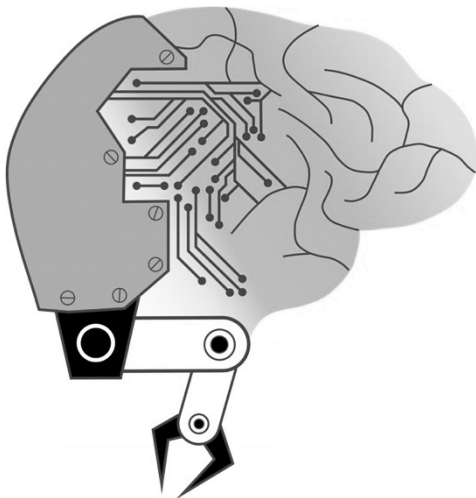
November 12–13, 2019

Reitoria da Universidade de Lisboa

Salão Nobre

5th Meeting of the Mind-Brain College of the University of Lisbon
17th Meeting of Biomedical Engineering IST/FMUL

Tribute to Fernando Lopes da Silva



November 12–13, 2019

Reitoria da Universidade de Lisboa

Salão Nobre

Organizing Committee

Adam Moreira
Catarina Lourenço
Diogo Lourenço
Joana Sequeira Pinto
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João Sanches
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Tribute to Fernando Lopes da Silva

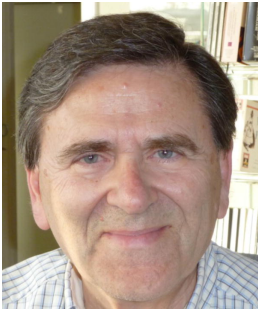


Photo: courtesy of Sofia
Lopes da Silva

Fernando Lopes da Silva (1935-2019) was a notorious neurophysiologist who made pioneering contributions to our understanding of the biophysical basis of electric brain activity and the organization of functional brain networks. Together with the influence of his research in several fundamental and applied fields of neuroscience, he has had a profound impact in the scientific community across the globe through his mentoring of multiple generations of scientists, and also through his active promotion of higher education and science policy in Portugal as well as internationally.

Fernando Lopes da Silva was born in Lisbon in 1935, and received his Medical Degree from the University of Lisbon in 1959. He then moved to London with a Gulbenkian Scholarship (1962-1964), where he trained in Physiology at Mill Hill before becoming a postgraduate student on Engineering and Physics for Physiologists at Imperial College. In 1965, he moved to the Netherlands, where he joined the Brain Research Group at the University of Utrecht, from which he obtained his Ph.D. in 1970. In 1973, he became Head of the Brain Research Group, and in 1980 he was appointed Full Professor of General Physiology at the University of Amsterdam. From 1993 to 2000, he was Director of the Institute of Neurobiology of the University of Amsterdam, and member of the Scientific Directorate of the Graduate School of Neurosciences Amsterdam. Upon his official retirement in 2000, he became Emeritus Professor of the same University, and continued affiliated with the Swammerdam Institute for Life Sciences.

Throughout his remarkable career, which continued well beyond his official retirement and still resulted in work being published after his death, Fernando Lopes da Silva published more than 250 papers in peer-reviewed journals and contributed

chapters to more than 10 books and encyclopedias, among which the famous Handbook “Electroencephalography: Basic principles, clinical applications and related fields”, edited by himself with Ernst Niedermeyer for the first five editions and with Donald L. Schomer for the last two editions. He supervised more than 60 Ph.D. students, as well as a large number of student trainees, from different Universities and Faculties, in the areas of Medicine, Biology, Sciences, and (Bio-medical) Engineering.

In parallel to his scientific endeavours, Fernando Lopes da Silva kept a constant and active participation in the promotion of higher education and research in Portugal. He served as President of the scientific advisory committee at *Fundação para a Ciência e Tecnologia*, and he authored excellent visionary documents on science policy in the country. He used scientific rigor in all his actions and he devoted his time and energy to ensure fairness and transparency in all grant and institution evaluation procedures. He was a truly relentless optimist, always eager to contribute to a better university and research system in Portugal.

Fernando Lopes da Silva received numerous awards and honours, including the degrees of Doctor Honoris Causa from the University of Lisbon, the University of Porto, the University of Helsinki and the University of Rennes. He also received the title of High Officer of the Order of Santiago da Espada, awarded by the President of the Republic of Portugal for outstanding achievements in the field of Science/Art/Literature (2000), and the title of Knight of the Order of the ‘Nederlandse Leeuw’, awarded by the Queen of the Netherlands in appreciation for his achievements in science (2001).

In Lisbon, Fernando Lopes da Silva was the mentor of the creation of the Biomedical Engineering Master and Doctoral Programmes at *Instituto Superior Técnico* (IST) and *Faculdade de Medicina, Universidade de Lisboa* (FMUL), having strongly contributed to laying the foundations for the interdisciplinary research and collaboration between the two institutions. He was an enthusiastic supporter and a key person for the success of the fusion of the “classical” and “technical” universities in Lisbon and the birth of the present *Universidade de Lisboa* (ULisboa), the biggest and best rated in Portugal. He

was member of the Mind-Brain College of ULisboa from the very beginning, where he continuously served at the Advisory Board.

Fernando Lopes da Silva was a mentor and a friend to many of us at ULisboa, and will be deeply missed. We will always think of his immense knowledge, generous wisdom, constructive criticism and caring advice, constantly inspiring us and challenging us to do better. We are extremely grateful to Fernando Lopes da Silva and profoundly honoured for having had the privilege of his friendship.

At this Meeting, we have the great pleasure to be joined by renowned scientists who have enthusiastically accepted to talk about work they have done in close collaboration with Fernando Lopes da Silva, as well as by local colleagues and friends who have worked with him in science as well as in his many different activities at ULisboa. We hope to be able to honour the memory of Fernando Lopes da Silva. We believe he would have enjoyed this meeting.

Patrícia Figueiredo

On behalf of the Scientific Committee

Alexandre Andrade

Ana Sebastião

João Sanches

José Santos-Victor

Patrícia Figueiredo

Programme

November 12

08:45 **Opening of the Secretariat**

09:15 **Opening of the joint meetings and the tribute to Fernando Lopes da Silva**

Arlindo Oliveira, President of Instituto Superior Técnico
Fausto Pinto, Director of Faculdade de Medicina
José Santos Victor, Director of Colégio Mente Cérebro
Sofia Lopes da Silva, representing the family of Fernando Lopes da Silva

10:00 **Oral communications: Session I**

Chairs: Ana Filipa Ribeiro (FMUL); Athanasios Vourvopoulos (IST)

- 01 Adenosinergic system and BDNF signalling in a severe and a mild mouse model of Rett Syndrome | Catarina Miranda-Lourenço, FMUL/iMM
- 02 Alzheimer's disease: Unveiling neuronal miR-124 as a key player in microglial activation | G. Garcia, FFUL
- 03 BOLD-fMRI cerebrovascular reactivity latency and resting-state fluctuations in Small Vessel Disease | Joana Pinto, IST

10:45 **Coffee Break**

11:15 **António Cruz Serra**

Rector of the Universidade de Lisboa

11:30 **Oral communications: Session II**

Chairs: Marcos Díaz Lago (FPUL); Ana Rita Vaz (FFUL)

- 04 Video games and neuropsychological rehabilitation: choose your game-elements wisely | Filipa Ferreira-Brito, FMUL
- 05 Is there any relation between BDNF loss of function and cognitive deficits in phencyclidine-induced mouse model of schizophrenia? | Sara Tanqueiro, FMUL/iMM
- 06 TrkB-ICD fragment impact upon normal physiology | João Fonseca-Gomes, FMUL/iMM
- 07 miR-146a upregulation in mSOD1 astrocytes reverts paracrine microglia activation | Marta Barbosa, FFUL

12:30 **Lunch break**

14:00 **Round Table: “Technological Innovation for Brain Research and Neurological Medical Care”**

Chairs: Eduardo Ducla Soares; Dora Brites; Helder Coelho

14:00 Trends of the biomedical devices industry | Luís Pereira (Medtronic Portugal)

14:20 Medical Robotics: challenges and future | Jorge Martins (IST)

14:40 Interactions between Medicine and Engineering in Neurosurgery | Herculano Carvalho (HSM - CHLN)

15:00 Discussion

15:30 **Oral Communications: Session III**

Chairs: Joana Pejovic (FLUL); Sofia Fernandes (FCUL)

O8 Brain metastases elimination with a peptide-conjugate | Marco Cavaco, FMUL

O9 MiR-335 is downregulated in Parkinson’s disease patients and overexpression attenuates inflammation in experimental models | SR Oliveira, FFUL

O10 Active control as evidence for the sense of ownership in the moving Virtual Hand Illusion paradigm | Victòria Brugada-Ramentol, Champalimaud Center for the Unknown

16:15 **Pitch Session I**

P1 Deregulation of spinal microglia by mSOD1 MN-secretome is prevented by neuronal miRNA-124 modulation

P3 Multi-targeting approach against the molecular landscape of glioblastoma: overcome the blood-brain barrier and target EGFR/PI3K signaling

P5 Cannabidivarin, capsaicin and the modulation of neural stem cells

P7 Fostering adult neural stem cells: adenosine A2AR activation on postnatal oligodendrogenesis in MS

P9 Interplay between cannabinoid and adenosine A2A receptors: actions on postnatal neurogenesis

P11 Impact of head motion on fMRI brain activation maps when using acceleration techniques

P23 Decrease in long-term visual memory performance due to semantic interference is mediated by eye movements during memory encoding

P25 Do not judge a rat by its (forced) swimming: exploring the contradictory affective behavioral effects of chronic adolescent HU-210 exposure

P37 Studies on the role of calprotectin as a mediator of iron-induced inflammation with implications in parkinson’s disease

- P39 Modulation of Subventricular Zone Neurogenesis: Actions of Exercise-Regulated Neurotrophic Factors and Cannabinoid Type 2 Receptor
 - P41 Research on the recently given neuroprotective role to Fluoxetine and Simvastatin - In Vitro study using mice microglia
 - P43 Differences in the secretome inflammatory signature of AD organoids and influence on the inflammatory response of activated and non-activated human microglia
 - P57 B1 field estimation from multi spin-echo MR brain images
 - P59 Holistic processing measures in word recognition: Do they reflect a common underlying mechanism?
- 17:00 **Coffee break and poster discussion (Odd numbers)**

November 13

Symposium in tribute to Fernando Lopes da Silva

09:00 **Opening of the symposium**

Chairs: Patrícia Figueiredo; Alexandre Andrade

Ana Sebastião and João Sanches (Coordination of MEBiom)
 João Pedro Conde and Patrícia Figueiredo (former Coordination MEBiom)
 Teresa Peña and Teresa Paiva (former Coordination MEBiom)

09:45 **“The propagation of epileptic activity: linear, non-linear and indirect measures”**

Jean Gotman | Montreal Neurological Institute, McGill University

10:30 **Coffee break**

11:00 **“Neuro-inspired models of epilepsy: seizure onset mechanisms and active-probing-based diagnosis”**

Fabrice Wendling | SESAME Team (Epileptogenic Systems: Signals and Models), INSERM, Université de Rennes

11:45 **“Stimulating the brain: Is there a binding mechanism between cortical excitability and induced oscillatory pattern generation?”**

Stiliyan Kalitzin | Medical Technology Foundation Epilepsy Institute in The Netherlands (SEIN)

12:30 **Professor Manuel Heitor**

Minister of Science and High Education

12:45 **Lunch break**

14:00 Scientific collaborations of Fernando Lopes da Silva in Lisbon

Chairs: Joaquim Alexandre Ribeiro; Ana Luísa Raposo; Sónia Frota

14:00 From “Modulating systems of hippocampal EEG” to present brain research | Teresa Paiva, FM

14:15 A model of brain rhythms | Agostinho Rosa, IST

14:30 EEG-fMRI of the Resting State | Sónia Gonçalves, Champalimaud Center for the Unknown

14:45 EEG synchronization predicts fMRI activation | Patrícia Figueiredo, IST

15:00 EEG-fMRI of epileptic seizure events | Alberto Leal, Centro Hospitalar Psiquiátrico de Lisboa

15:15 Neuroactivation imaging using a monogenic framework | João Sanches, IST

15:30 Roundtable discussion / questions | All speakers

16:00 Short break

16:15 Pitch Session II

P2 S100B as a crucial player in Multiple Sclerosis neuroinflammation and immunopathogenesis

P4 Neurotoxic astrocytes transdifferentiated from sALS and fALS patients reveal heterogeneous reactive phenotypes and disclose miR-146a as a therapeutic target

P6 The role of tripartite synapse upon A β -mediated synaptic deficits

P8 Free Water fraction quantification in the substantia nigra of patients with Parkinson's Disease

P26 MEF2C a new biomarker of human brain metastasization of breast cancer

P38 Zinc binding alters Tau aggregation and oligomer formation

P40 Enhanced in vitro model of the blood-brain barrier by either shear stress or hydrocortisone

P42 BASHY dye as potential biomarker for demyelinating processes

P44 Breast cancer cells extravasation into the brain: a dynamic trafficking across blood-brain barrier endothelium

P58 Emotion processing during a spontaneous migraine attack: fMRI results from a case study

P60 The impact of schooling in the susceptibility to a visual illusion of size

17:00 Coffee break and poster discussion (Even numbers)

18:00 **Closing of the Joint Meetings**

Symposium in tribute to Fernando Lopes da Silva Speakers

Jean Gotman | *Montreal Neurological Institute, McGill University*

Webpage: <https://www.mcgill.ca/neuro/jean-gotman-phd>



Jean Gotman's research laboratory investigates the mechanisms of generation of epileptic discharges as recorded in the electroencephalogram (EEG) of epileptic patients. His work aims to improve both our understanding of epileptogenesis and our diagnostic techniques. Combining functional imaging techniques (fMRI) and EEG in a novel non-invasive approach, his group studies the brain regions in which abnormal activity is taking place when a discharge occurs. The laboratory also analyzes patterns of High Frequency Oscillations recently discovered in the EEG, which could improve the ability to localize epileptogenic regions and to understand better epileptogenesis.

Fabrice Wendling | *Head SESAME Team (Epileptogenic Systems : Signals and Models), LTSI, UMR Inserm, Université de Rennes*

Webpage: <http://perso.univ-rennes1.fr/fabrice.wendling>



Prof. Fabrice Wendling (PhD) holds a position of Director of Research at INSERM. He is heading the team SESAME: “Epileptogenic Systems: Signals and Models”, LTSI - INSERM U1099, Rennes, France since 2004. He received the Engineering Diploma (1989) from the University of Technology of Compiègne (France) and the Master of Science (1991) in Bio-Engineering from the Georgia Institute of Technology (Atlanta, USA). He obtained the PhD degree (1996) and the Habilitation (2003) from the University of Rennes (France).

Fabrice Wendling has been working in the field of Biomedical Engineering applied to Epilepsy for 20 years in close collaboration with neurologists. He has developed advanced diagnostic methods based on nonlinear dynamics and electrophysiological signal processing. He has always been deeply involved in the search for mechanisms underlying epileptic activity. To this aim, he has developed pioneering models of epileptiform activity specifically adapted to the cellular organization of brain structures involved in partial epilepsies. Some of these models are being used worldwide to analyze epileptic signals. In 2012, he received the award from the French Academy of Science for “outstanding contribution to the processing and modeling of electrophysiological signals in the context of epilepsy”. In 2018, he received the research award from the Rennes 1 Foundation for his research on innovative dense-EEG methods for brain connectivity estimation.

His current scientific projects promote the combination of computational, clinical and experimental approaches to develop novel therapeutic procedures, in particular based on electrical stimulation. In 2019, he received, with Fabrice Bartolomei (Marseille) and Giulio Ruffini (Barcelona), the prestigious ERC-Synergy grant by the European Research

Council for the GALVANI Project entitled “Controlling epileptic brain networks with computationally optimized weak electric fields”.

Stiliyan Kalitzin | *Head of Medical Technology Division & Administrator Medical Technology Foundation Epilepsy Institute in The Netherlands (SEIN)*

Webpage: https://www.researchgate.net/profile/Stiliyan_Kalitzin



Stiliyan Kalitzin has graduated in Nuclear and Particle Physics in 1981 and he received doctoral degree in theoretical physics in 1987. Since October 2000 he is employed by the Dutch Epilepsy Foundation (SEIN) as head of medical physics and medical technology department. Earlier he has worked in theoretical physics, cognitive neuroscience, medical imaging and computer vision. He is an external faculty at the Image Sciences Institute at the University of Utrecht. His recent scientific interests are in dynamic system analysis, models of autonomous generation and termination of epileptic seizures, post-ictal suppression and application to clinical challenges. He is also actively participating in development of algorithms and systems for convulsive seizure detection using data from remote sensors such as video sequences. Dr. Kalitzin is author of more than 150 publications in international journals, book chapters and articles in conference proceedings. Next to his scientific and clinical duties, Dr. Kalitzin supervises research of graduate students and PhD students in biomedical engineering, medical physics and technical medicine.

Teresa Paiva



Teresa Paiva achieved the Medical Degree in 1969. She is Neurologist and Neurophysiologist, by the Portuguese Medical Association since 1975, with the title of European Somnologist since 2012 and the Competence in Sleep Medicine since 2013. She was a staff Neurologist Hospital Santa Maria (1976-2006) and accomplished the PhD Thesis in 1992 and Aggregation in 1997 at the University of Lisbon. Further she has been Associate Professor of Neurology the Medical Faculty of Lisbon (FML) and invited Associate Professor of Biomedical Engineering at Instituto Superior Técnico, 2003-2016. Currently she is Clinical Director of CENC – Sleep Medicine Center, Lisbon since 1983. She published more than 130 scientific papers, she is editor/co-editor of 13 books about sleep, and co-author of 60 book chapters, and supervised more than 70 academic thesis. She is often invited by the media and talks for the general public; she is the promoter of a website for dissemination of sleep knowledge www.isleep.pt. Her fields of interest are Sleep Medicine, Sleep and Society and Sleep and Environment.

Agostinho Rosa



Agostinho Rosa received the E.E., M.Sc. and Ph.D. degrees, as well as his Habilitation, from *Instituto Superior Técnico* (IST), *Universidade Técnica de Lisboa* (UTL) . He is associate professor at the Department of Bioengineering at IST, and the founder of the Evolutionary Systems and BioMedical Engineering Lab (LaSEEB) at the Institute for Systems and Robotics - Lisboa (ISR-Lisboa). His main research interests are in soft computing, signal and image processing for medical applications, and lastly on neuromodulation.

Sónia Gonçalves



Sónia I. Gonçalves received the MSc degree in Physics from the IST, Technical University of Lisbon, and the PhD degree in Biophysics from the Faculty of Sciences, University of Lisbon. During a large part of her career, she worked at the VU Medical Centre, Amsterdam, and her research interests were centered on the biophysics of electro (magneto) brain signal and on the relation between EEG and functional MRI (BOLD) signals. She is currently senior research fellow at the Champalimaud Centre for the Unknown, Lisbon, where she develops novel MR methods for both brain and body imaging, with a focus on cancer research.

Patrícia Figueiredo



Patrícia Figueiredo graduated in Physics and Engineering from Instituto Superior Técnico (IST) at the Technical University of Lisbon, obtained the D.Phil. degree in Neuroimaging from the University of Oxford, and the Habilitation in Biomedical Engineering from the University of Lisbon. She is currently a tenured Assistant Professor at the Department of Bioengineering at IST, and the coordinator of the Evolutionary Systems and Biomedical Engineering Lab (LaSEEB) of the Institute for Systems and Robotics - Lisboa (ISR-Lisboa). During the past ten years, she has been responsible for several national and international research projects in brain imaging, neuroscience and biomedical engineering, and has been the author of over 50 papers in international journals and conferences of high impact in these fields. She has been vice-coordinator of the MSc programme in Biomedical Engineering, and she is currently member of the Executive Committee of the Department of Bioengineering and of the Scientific Council of IST. She is also member of the Executive Board of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB).

Alberto Leal



Alberto Leal obtained his Medical degree from the University of Lisbon in 1989, and the Ph.D. from the same university in 2008. He is currently a Neurologist and Neurophysiologist at the Neurophysiology Unit of *Centro Hospitalar Psiquiátrico de Lisboa*. He develops research in the field of clinical neurophysiology particularly in relation with epilepsy.

João Sanches



João Sanches received the E.E., M.Sc. and Ph.D. degrees from *Instituto Superior Técnico (IST)*, *Universidade Técnica de Lisboa (UTL)*, and the habilitation (*agregação*) in Biomedical Engineering by *Universidade de Lisboa (UL)*. He is associate professor at the Department of Bioengineering at IST, where he is coordinating the Integrated Master Programme in Biomedical Engineering. He is senior researcher and member of the board of directors of the Institute for Systems and Robotics - Lisboa (ISR-Lisboa). His research work has been focused in Biomedical Engineering (BME), namely in biological and medical image processing using statistical signal processing techniques. More than 150 international publications ([ORCID](#) and [Google Scholar](#)) were already produced. He is senior member of the IEEE since 2011, member of the Engineering in Medicine and Biology Society (EMBS), and member of the board of directors of the Portuguese Chapter of the society.

Poster Sessions

Session 1 (12th November – 17:00 to 18:00): Odd numbers

Session 2 (13th November – 17:00 to 18:00): Even numbers

Posters will be displayed during the whole meeting; poster presenters are expected to be at their poster during the respective poster session for discussion.

- P1** Deregulation of spinal microglia by mSOD1 MN-secretome is prevented by neuronal miRNA-124 modulation
Ana Rita Colaço, FFUL
- P2** S100B as a crucial player in Multiple Sclerosis neuroinflammation and immunopathogenesis
Beatriz Soromenho, FFUL
- P3** Multi-targeting approach against the molecular landscape of glioblastoma: overcome the blood-brain barrier and target EGFR/PI3K signalling
Catarina Franco, FCUL/FFUL
- P4** Neurotoxic astrocytes transdifferentiated from sALS and fALS patients reveal heterogeneous reactive phenotypes and disclose miR-146a as a theragnostic target
Catarina Sequeira, FFUL
- P5** Cannabidivarin, capsaicin and the modulation of neural stem cells
Diogo M. Lourenço, FMUL
- P6** The role of tripartite synapse upon A β -mediated synaptic deficits
Joana Gomes, FMUL
- P7** Fostering adult neural stem cells: adenosine A2AR activation on postnatal oligodendrogenesis in MS
Joana M. Mateus, FMUL
- P8** Free Water fraction quantification in the substantia nigra of patients with Parkinson's Disease
Marc Golub, IST
- P9** Interplay between cannabinoid and adenosine A2A receptors: actions on postnatal neurogenesis
Rui S. Rodrigues, FMUL
- P10** Deciphering the role of cholesterol homeostasis in Parkinson's Disease
I. Caria, FFUL
- P11** GABAergic Dysfunction and Cognitive Impairments in Childhood Absence Epilepsy
Carolina Campos Pina, FMUL/IMM
- P12** Small molecule PGC-1 α activators: a novel approach to anti-neurodegenerative therapeutics
Catarina Ranito, FFUL

- P13** Characterization of BDNF signalling in the prefrontal cortex in the neonatal phencyclidine mouse model of schizophrenia
Céline Freitas, FMUL/iMM
- P14** Potential Role of the Neural Stem Cell Secretome in Modulating Neural Injury
C. R. Lopes, FFUL
- P15** Impact of S100 proteins in A β 42 aggregation mechanism
Mariana A. Romão, FCUL
- P16** Relevance of NLRP3 inflammasome in A1 astrocytes – impact of A β -induced toxicity
Mariana Van Zeller, FMUL/iMM
- P17** Meningeal $\gamma\delta$ T cell-derived IL-17 controls synaptic plasticity and short-term memory
Miguel Ribeiro, iMM
- P18** Progressive changes in the adenosinergic and Vascular Endothelial Growth Factor systems in the SOD1G93A mouse model of ALS and the effect of chronic caffeine treatment
Nádia Rei, FMUL/iMM
- P19** Nanoparticle and liposome-based microreactors as reactive oxygen species scavengers in a 3D model of neuroinflammation
Oksana Savchak, FMUL/iMM
- P20** Post-translational oxidative modifications of S100B modulate its novel chaperone activity against amyloid- β aggregation
Romina Coelho, FCUL
- P21** Rescue of ageing-impaired neurogenesis by targeting mitochondria-nucleus crosstalk
Sónia Sá Santos, FFUL
- P22** Unveiling paracrine dissemination and toxicity of neuronal TrkB-ICD via secretome/exosome signalling in Alzheimer's disease
Tiago Costa-Coelho, FMUL/iMM/FFUL
- P23** Decrease in long-term visual memory performance due to semantic interference is mediated by eye movements during memory encoding |
Anastasiia Mikhailova, FPUL
- P24** Impact of head motion on fMRI brain activation maps when using acceleration techniques
A. R. Fouto, IST
- P25** Do not judge a rat by its (forced) swimming: exploring the contradictory affective behavioral effects of chronic adolescent HU-210 exposure
Miguel F. Ferreira, FMUL/iMM
- P26** MEF2C: a new biomarker of human brain metastasization of breast cancer
Sofia Galego, FFUL
- P27** Cingulate-Hippocampal interactions during memory guided choices
Ana Cruz, FMUL/iMM

- P28** How Our Brain Solves Dilemmas
Bárbara Pinto-Correia, FMUL/iMM
- P29** Comparative study of training protocols in neurofeedback
Inês Esteves, IST
- P30** Building-Up New Approach Tendencies in Individuals with High versus Low Fear of Contamination
João Antunes, FMUL/iMM
- P31** Methodological innovations in fMRI-based preoperative mapping and optimization for clinical use
Laeticia Henriques, FCUL
- P32** Study of patho-connectomics using innovative approaches in functional magnetic resonance imaging data analysis
Lucianna Lopes do Couto, FMUL/FCUL
- P33** Hippocampal Time
Marcelo Dias, iMM
- P34** Semantic congruency: An important factor differentiating adolescents and adults' episodic memory abilities
Miguel Ângelo Andrade, FPUL/FMUL
- P35** Emotion and cognition: argumentative multimodality in water conservation and conservation awareness
Priscilla Chantal Duarte Silva, FLUL
- P36** "I Don't Believe in Global Warming": prying into Banksy's mind through a cognitive multimodal approach
Rita de Cássia Bastos Arantes, FLUL
- P37** Studies on the role of calprotectin as a mediator of iron-induced inflammation with implications in parkinson's disease
Ana Rita Prada, CEDOC, FCM
- P38** Zinc binding alters Tau aggregation and oligomer formation
Guilherme G. Moreira, FCUL
- P39** Modulation of Subventricular Zone Neurogenesis: Actions of Exercise-Regulated Neurotrophic Factors and Cannabinoid Type 2 Receptor
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- P40** Enhanced in vitro model of the blood-brain barrier by either shear stress or hydrocortisone
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- P41** Research on the recently given neuroprotective role to Fluoxetine and Simvastatin - In Vitro study using mice microglia
João Malvas, FFUL
- P42** BASHY dye as potential biomarker for demyelinating processes
Maria Vaz Pinto, FFUL
- P43** Differences in the secretome inflammatory signature of AD organoids and influence on the inflammatory response of activated and non-activated human microglia
Ricardo Paiva, IST/FFUL

- P44** Breast cancer cells extravasation into the brain: a dynamic trafficking across blood-brain barrier endothelium
Rita Garcia, FFUL
- P45** Activation of the Unfolded Protein Response in Parkinson's disease
Andreia Neves Carvalho, FFUL
- P46** Ectopic expression of CYP46A1 ameliorates Niemann-Pick Type C cellular phenotype
Maria João Nunes, FFUL
- P47** Impact of NLRP3 inflammasome inhibition in a model of A β -induced toxicity
Diogo M. Dias, FMUL/iMM
- P48** Platinum nanoparticle-based microreactors in mixed neural cultures and subventricular-derived cultures
Filipa F. Ribeiro, FMUL/iMM
- P49** NLRP3 inflammasome inhibition in a model of epileptogenesis in organotypic slices – impact in neurodegeneration and epileptiform activity
Francisco J. Meda, FMUL/iMM
- P50** Cannabinoid and adenosine receptors interact in primary cultures of astrocytes: a functional study
Sandra H. Vaz, FMUL/iMM
- P51** Interaction between BDNF/TrkB signaling and neurogenesis in epilepsy – The basis for the project
Leonor Ribeiro-Rodrigues, FMUL/iMM
- P52** Phenotypic assessment of astrocytes in a model of epileptogenesis in organotypic slices
Mafalda Carvalho, FMUL/iMM
- P53** The impact of BDNF receptor cleavage in Alzheimer's disease-associated Neuroinflammation
Mafalda Ferreira-Manso, FCUL/FMUL/iMM/FFUL
- P54** Targeting cholesterol metabolism in neuroblastoma by acting on HDACs
Rita Mendes de Almeida, FFUL
- P55** Look before you leap: a perspective on the reproducibility of a sporadic Alzheimer's disease model and its impact on neurogenesis
Sara L Paulo, FMUL/iMM
- P56** Cannabinoid action on Rett Syndrome's associated deficits and its effect on post-natal Neurogenesis in a female MECP2-mutant mouse model
Svitlana Zavalko, FMUL/iMM
- P57** B1 field estimation from multi spin-echo MR brain images
AC Freitas, IST
- P58** Emotion processing during a spontaneous migraine attack: fMRI results from a case study
A. Ruiz-Tagle, IST/FMUL

- P59** Holistic processing measures in word recognition: Do they reflect a common underlying mechanism?
António Farinha-Fernandes, FPUL
- P60** The impact of schooling in the susceptibility to a visual illusion of size
Miguel Domingues, FPUL
- P61** Dynamic functional connectivity states measured with fMRI: relationship with EEG alpha power
Afonso Aires, IST
- P62** Effects of a Brain-Computer Interface (BCI) with Virtual Reality (VR)-Training for Stroke Rehabilitation
Athanasios Vourvopoulos, IST
- P63** Psychological dynamic networks in the assessment of patients with a first episode of psychosis - project outline
Bernardo Melo Moura, FMUL
- P64** Impact of circadian shifting on functional brain connectivity
Inês Marques-Morgado, IMM
- P65** Intervention effects in adult processing of relative clauses and control structures?
João Delgado, FPUL/FLUL
- P66** Selective attention to audiovisual communicative cues in infants with Down syndrome. An eye-tracking study
Jovana Pejovic, FLUL
- P67** Memory pruning – an adaptative role for aversive experiences?
Marta Pereira, FPUL
- P68** The Ecological Mind: metaphors we think with
Priscilla Chantal Duarte Silva, FLUL
- P69** Looking for the edge: Emerging segmentation abilities in Down Syndrome
Sónia Frota, Center of Linguistics, School of Arts and Humanities, University of Lisbon
- P70** A method for neuron detection and mapping of mouse brain cross section into a standard space
Saber Sarbazvatan, IST
- P71** Role of SEPTIN5 overexpression on synaptic function and its dependency on S327 phosphorylation
Catarina B. Ferreira, FMUL/iMM
- P72** Optical imaging and their properties based robot control: an important tool to biological tissues characterization
Andrea Antunes, IPC/UFU

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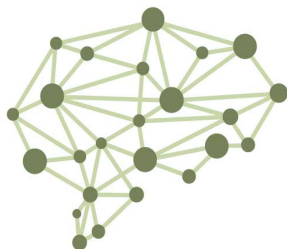
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