

WBME Organization team  
ne2b2.fc.ul.pt

NE2B2 – Biomedical Engineering  
and Biophysics Students Association

Faculty of Sciences of the University of Lisbon

Campo Grande – 1749-016 Lisboa

ne2b2@fc.ul.pt

<http://ne2b2.fc.ul.pt>

Institute of Biophysics  
and Biomedical Engineering

Faculty of Sciences

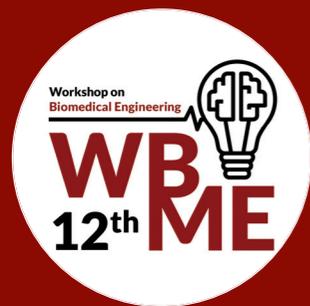
of the University of Lisbon

Campo Grande – 1749-016 Lisboa

Tel. 21 750 01 77

<http://ibeb.fc.ul.pt>

Free Entrance



Faculdade de Ciências  
UNIVERSIDADE DE LISBOA  
DEPARTAMENTO DE FÍSICA

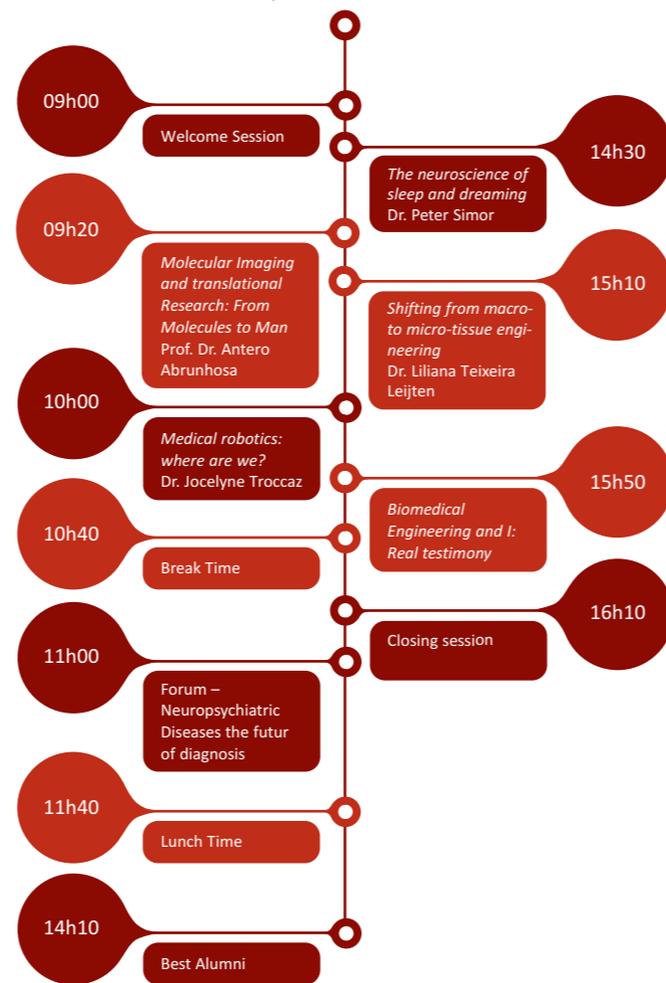


UNIVERSIDADE  
DE LISBOA

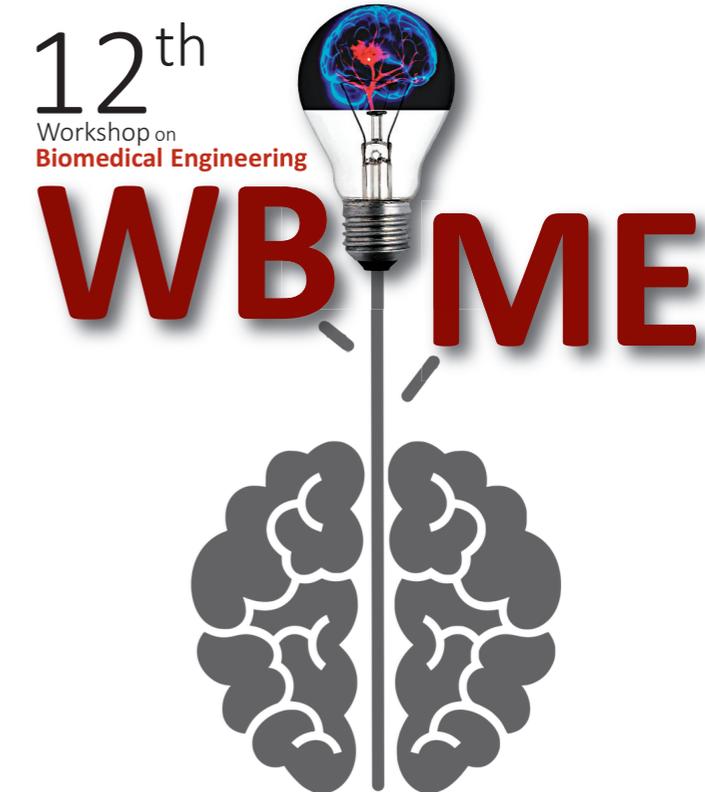
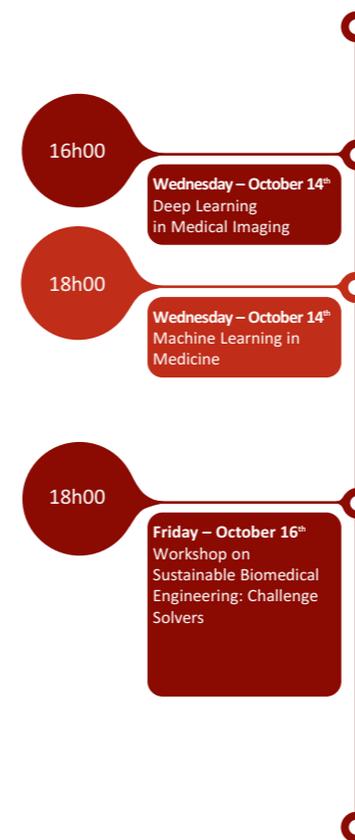


Ciências  
ULisboa

### Program – Lectures Day Saturday – October 10<sup>th</sup>, 2020



### Program – Lectures Day October 14<sup>th</sup> – 16<sup>th</sup>



Lectures Day **OCTOBER 10, 2020**

Workshops **OCTOBER 14 • 16**

## WORKSHOP ON BIOMEDICAL ENGINEERING – – OUR CONCEPT

The main objective of this annual Workshop is to expose students, engineers, scientists and the general community to recent developments in Biomedical Engineering that took place in some of the most distinguished national and international research centers and universities. Due to the great variety of this areas' subjects, each year only a few will be contemplated. In this year of 2020, we decided to acknowledge the areas of nuclear medicine, neurosciences and neuro-engineering, medical robotics and tissue engineering.

As costumery, our 12th edition of the WBME shall include a session about the investigative work of an alumni, selected by contest, focused not only on the work but also his personal experience in the academic medium and a forum called "Neuropsychiatric Diseases: the future of diagnosis" with the contribution of a psychiatric, a neurologist and biomedical engineers.

As a rule, the WBME was held only for one Saturday. This year we plan to extend our event by adding workshops the following week so that students can get rich from it and draw useful tools for their academic and professional career. We hope this event will contribute to open new opportunities for research, from contact with people of the best science universities in the world, in this fascinating area that increasingly has a contribution to improving people's daily lives in terms of Healthcare, for example.

We hope you enjoy your day, On behalf of the organization.



**Medicina Nuclear - Antero Abrunhosa**  
Director of ICNAS (Health Applied Nuclear Sciences Institute)

Antero Abrunhosa had his first degree taken in Biochemistry (1987-1992) and a MSc in Biomedical Engineering (1992-1996) from the University of Coimbra. From 1996 to 2001, he took his PhD under the supervision of Professor Terry Jones at the MRC-Cyclotron Unit, Hammersmith Hospital, London (1996-2001). Antero is the Director of ICNAS (Health Applied Nuclear Sciences Institute), which is a national facility for Molecular Imaging and Translational Research associated to the University of Coimbra. His current research interests include Molecular Imaging with PET/SPECT/MR, Drug Development, Pre-clinical Studies and Clinical Trials.



**Neurosciences – Peter Simor**  
Working at the ELTE Eötvös Loránd University (Budapest) and the University Libre de Bruxelles

Peter Simor is a psychologist with a particular interest in the neurocognitive aspects of sleep and dreaming. During his Ph.D., Peter examined the neuropsychological functions and electrophysiological features of subjects with frequent nightmares (idiopathic nightmare disorder) at the Budapest University of Technology and Economics. Currently, Peter work at the ELTE Eötvös Loránd University (Budapest) and the University Libre de Bruxelles using psychometric tools, behavioral and neuroscientific methods (mainly EEG) to study different aspects of chronotype, sleep EEG oscillations and the role of sleep in emotional and cognitive information processing.



**Medical Robotics – Jocelyne Troccaz**  
Research director at CNRS and working in TIMC-IMAG Laboratory, in Grenoble, France

Jocelyne Troccaz is a research director at CNRS, working in TIMC-IMAG Laboratory, in Grenoble, France. Jocelyne graduated in Computer Science and finished her Ph.D in Robotics in 1986 at Institut National Polytechnique de Grenoble. Since 1998, Jocelyne is a CNRS Research fellow. Jocelyne is specialized in Medical Robotics and Computer-Assisted Medical Interventions. Currently, Jocelyne is coordinating the national excellence laboratory CAMI since 2016, is an IEEE and a MICCAI fellow and a member of the French Academy of Surgery. Jocelyne has received several awards and medals such as the award from the French Academy of Surgery in 2014, silver award from CNRS in 2015 and Chevalier de la Légion d'Honneur in 2016.



**Tissue Engineering – Liliana Teixeira Leijten**  
Assistant Professor at University of Twente and at the Utrecht University, The Netherlands

Liliana Teixeira Leijten graduated in Applied Biology (BSc) at the University of Minho in 2005. Later, she obtained her MSC degree in Biomedical Engineering at the Faculty of Engineering of University of Porto. In 2011, Liliana earned her PhD degree at the University of Twente (Netherlands) with Prof. C. van Blitterswijk's Tissue Regeneration group, followed by a post-doctoral term at KU Leuven (Belgium) with Prof. F. Luyten. Between 2015 and 2016, joined the Wyss Institute for Biologically Inspired Engineering, Harvard Medical School (USA). Liliana returned to University of Twente to coordinate a project for the development of "Joint-on-chip" platforms, jointly with the University of Utrecht (Netherlands). Currently, she is an Assistant Professor at the Department of Developmental BioEngineering at University of Twente and at the Department of Equine Sciences/Regenerative Medicine Utrecht, Utrecht University.



**BEST ALUMNUS**

Mariana da Silva concluded her integrated master's degree in Biomedical Engineering and Biophysics from the University of Lisbon in 2019. She conducted her master's thesis project with the Computational Radiotherapy group at the University of Cambridge. This project focused on medical imaging synthesis using deep learning for MRI-only radiotherapy planning. She is currently a PhD student at the School of Biomedical Engineering and Imaging Science at King's College London, where she continues working on deep learning applied to medical imaging.



**FORUM**

In this edition, we will have a forum for debate where we are going to talk about "Neurologic and Psychiatric Disorders: The future of diagnosis". The aim of this forum is to discuss the possibilities and limits of the use of technology in diagnostic of this kind of disorders.

## Biomedical Engineering and I: Real testimony

In the 12th edition of WBME, we are pleased to announce APELA's presence in our event (Amyotrophic Lateral Sclerosis Portuguese Association). APELA is a non-governmental non-profit organization that aims to support all people suffering from Amyotrophic Lateral Sclerosis as well as their family members and/or caregivers. In this session, we will hear the testimony of how technologies focused on communication support are crucial for people suffering from this disease and what challenges there is still to be overcome in this area.