EMERALD General Workshop

1-3 December 2020

Venue:

Remote by ZOOM and YouTube.

ESRs and speakers will be sent a link to register directly in ZOOM.

Everyone else who wishes to follow the workshop, must register in: **https://forms.gle/gZuvaHSY4pvyS61UA** and a link will be sent to your email shortly before the start of the workshop each day. Registration must be completed before the 1st of December.

Times in the programme are in CET, please convert to your time zone, if applicable.

Local organisers:

Instituto de Biofísica e Engenharia Biomédica, FCiências.ID, TecLabs @

Faculdade de Ciências, Universidade de Lisboa, Portugal

Instituto de Telecomunicações @

Instituto Superior Técnico, Universidade de Lisboa, Portugal

Tuesday, 1st December

Lecture 1 title: Stroke and its imaging in the acute phase: a neurological point of view

Lecturer: *Dr. Eric Jouvent, Hôpital Lariboisière, INSERM, Paris, France*

Description:

This lecture will provide a first line understanding of what is a stroke, its different subtypes, and how patients are handled from the diagnosis to treatment regarding in particular the use of imaging.

Lecture 2 title: Neuroradiologic tools for acquiring images of the brain and its diseases

Lecturer: *Prof. Enrico Tedeschi, Federico II University Medical School, Naples, Italy*

Description:

The aim of the lecture is to give an overview of the main imaging modalities used in neuroradiology, discussing the principles of image acquisition of Computed Tomography and Magnetic Resonance techniques and showing current challenges in the diagnosis and follow-up of patients with different brain pathologies.

CET time		
9.00 – 9.10	10min	Welcome by Francesca Vipiana
9.10 – 10.10	1h	**Lecture 1** **Stroke and its imaging in the acute phase: a neurological point of view – Eric Jouvent**
10.10 – 10.30	*20min*	*Comfort break*
10.30 – 11.30	1h	**Lecture 2** **Neuroradiologic tools for acquiring images of the brain and its diseases – Enrico Tedeschi**

Wednesday, 2nd December

Workshop title: *Workshop Tech Transfer in Biomedicine*

Organisers: TecLabs, Faculdade de Ciências, Universidade de Lisboa

CET time		
9.00 – 9.10	10min	Welcome session & review of the day
9.10 – 10.00	50min	**Intelectual Property – António Pedro Marques, Tec Labs/Ciências ULisboa** Fundamental concepts: Invention, Innovation and IP Protection Forms of Protection To IP or not to IP: Patents, Designs and Software Protection in Biomedicine
10.00 – 10.30	30min	**IP talks (IP strategy pursued by Tec Labs spin-offs)** To IP – Fadhil Musa, Delox Not to IP – Eduardo Rodrigues, UpHill
10.30 – 10.45	*15min*	*Comfort break*
10.45 – 11.45	1h	**Regulation and Certification in Biomedicine – Nuno Matela, IBEB/Ciências ULisboa** Specific content to be defined
11.45 – 12.15	30min	**Practical exercise to decipher IP & Regulation/Certification** Participants move to break out rooms to solve a practical exercise
12.15 – 14.00	*1h45*	*Lunch break*
14.00 – 15.30	1h30	**Entrepreneurship & Innovation – Rita Tomé Rocha, Tec Labs/Ciências ULisboa** Entrepreneurial Competences and Innovation importance Tech Transfer: Licensing vs spin-off Case study of ScienceIN2Business Ciências ULisboa
15.30 – 15.45	*15min*	*Comfort break*
15.45 – 17.30	1h45	**Mentoring Session – Participants to be confirmed** Each student has 2 minutes to present their project and receive feedback from a group of experts in innovation, tech transfer & entrepreneurship
17.30		*End session*

Thursday, 3rd December

Workshop title: *Antenna design and practical aspects for microwave imaging applications & European funding opportunities in Horizon Europe*

CET time		
9.00 – 9.10	10min	Welcome
9.10 – 12.10	3h	**Antenna design and practical aspects for microwave imaging applications – João Felício and Carlos Fernandes, Instituto de Telecomunicações, Instituto Superior Técnico, Universidade de Lisboa** Antennas are key elements of any microwave imaging (MWI) system. They radiate the MW power towards the body and collect the backscattering produced by the tissues, which enables the computation of the image of the inner body. However, antennas are not passive elements and approximating them to radiative points is not the most accurate approach. In this workshop, we present the fundamental antenna parameters, as well as different antenna topologies that are commonly used in imaging systems. Lastly, we discuss some effects introduced by the antennas that distort the transmitted/received signals and propose calibration techniques to correct for them.
12.10 – 14.30	*1h50*	*Lunch break*
14.30 – 15.30	1h	**ERC proposal preparation – Maria Onorato, POLITO, Torino, Italy**
15.30 – 16.30	1h	**MSCA Postdoctoral Fellowships – Mafalda Pinto Basto, FCiências.ID, Portugal**
16.30		*End session*