

## IMD 2018 - Activities at Instituto Superior Técnico

IMD was celebrated at Instituto Superior Técnico with activities in three areas: Salão Nobre (Noble Hall) - a day of conferences on "Microorganisms, Bioeconomy and Sustainable Development"; hands on exhibitions in the Central building Main Hall and in the North Garden, and a training course on microbiology for high-school teachers. The three events occurred in parallel during the day.

### Microorganisms, Bioeconomy and Sustainable Development

The entire program of the Noble Hall was live broadcast (<https://www.youtube.com/user/isttvcomunidade>) and consisted of conferences by outstanding scientists, politicians, entrepreneurs, among others. Conferences highlighted the relevance of the invisible world for bio-economy and sustainable development. The conferences were open to all members of the society.

Held at the Main Auditorium of the Instituto Superior Técnico (Universidade de Lisboa) the plenary sessions started at 9.30 with the opening session and welcome speech by Arlindo Oliveira (Instituto Superior Técnico President) and Isabel Sá-Correia (Portuguese Society of Microbiology President), as well as the presidents or representatives of the Ciência Viva Agency, Portuguese Association of Biologists (Ordem dos Biólogos) and Portuguese Ecology Society.

The audience (average 75- 100 attendees in the room around all day) was composed by students (mainly), scientists, professors and general public interested in microbiology and science. The conferences were followed online (<https://internationalmicroorganismday.wordpress.com/follow-live-the-main-hall-program/>) by more than 300 online visitors. The first scientific session was under the main subject of the "MICROBES AND THE FASCINATION FOR THE INVISIBLE". The first talk, sponsored by ECCO-European Culture Collections' Organisation and the Pt-mBRCN - Portuguese microBiological Resource Centre Network) was given by José Paulo Sampaio ( PYCC, FCT-UNL, UCBio-Requinte) raising the question *Why do we need microorganisms' collections?*. The following talks were on "*The revolution of microscopy in cellular and molecular microbiology: Electron Cryomicroscopy*", presented by Célia Romão, ITQB-UNL and on *Exploring the depths of microbial diversity: Metagenomics* by Rodrigo Costa, (IST-ULisboa e iBB) and on *Microbiology and Supercomputing* by Arlindo Oliveira, (Informatics Department, INESC-ID, IST-ULisboa).

Moderated by Isabel Sá-Correia (Portuguese Society of Microbiology President) several Skype connections with colleagues and locations in Europe with ongoing activities on the Microorganism Day were followed by the audience. A presentation by Victor J Cid (Sociedad Española de Microbiología-Education group) on the *Teaching and dissemination of Microbiology: the Spanish Society of Microbiology experience* was offered and the morning session was closed by the Keynote Conference by Timothy Dinan (Dept. of Psychiatry, University College Cork, Ireland) on *The Impact of Gut Microbiota on Brain and Behaviour*.

The afternoon session was dedicated to THE CHALLENGES OF MICROBIOLOGY. João Cravinho (Coordinator of the Commission "Challenges of the Future" of the National Education Council (CNE)) addressed the *Challenges of the Future* with a global view of the contemporary changes of our society and how the new technologic developments impact in our society and interrelations. The thematic talks on Microorganisms and Health were co-organized with the National Directorate for Health (Portuguese Ministry of Health) and the Portuguese Travel Medicine Society (SPMV). The National Health Director Graça Freitas addressed the subject of *The National Vaccination Program: current challenges* and Jorge Atouguia (SPMV President) *The challenges posed by microorganisms in Travelers Medicine*.

At mid-afternoon, there were very alive Skype connections with people and locations in Portugal with ongoing activities to celebrate the Microorganism Day, e.g. High-Schools, Science Activity Centers, Museums among others.

The afternoon continued with talks on the *Microorganisms and the new age of Bioeconomy* by Francisco Gírio, Coordinator of the Bioenergy Unit at LNEG-Laboratório Nacional de Engenharia e Geologia on the subject *Microorganisms and the National Plan for the Promotion of Biorefineries*, followed by the talk on *Microorganisms and the treatment of municipal waste* by Susete Dias (President of TratoLixo-Tratamento de Resíduos Sólidos). The last two talks were on *Microorganisms and Vine and Wine* by Tim Hogg (UTAD & Univ. Católica, Diretor da INNOVINE&WINE) and *Microalgae and Bioeconomy* by Luís Costa (Chief Operation Officer, A4F Algae for future).

At late afternoon, the focus was on *Microorganisms, the Environment and Sustainable Development and Patrimony* introduced by Alexandre Quintanilha (Education and Science Commission President, Portuguese Parliament), and with talks on *Microorganisms, the Environment and Sustainable Development*, by Helena Freitas, (Center for Functional Ecology - Science for People & the Planet, Universidade de Coimbra) and *Microorganisms and Patrimony* by Teresa Caldeira, (HERCULES LAB, Universidade de Évora).

### **Main Hall Exhibitions**

The exhibitions, quiz, and hands-on activities at the lobby of Pavilhão Central and Jardim Norte mobilized many senior and young researchers, who organized an exciting and very diversified exhibition, inviting citizens from all ages to explore microorganisms and help them realize that there is an invisible world out there formed by a multitude of microscopic organisms essential in the human life and activities

### **Training Course for Teachers**

The IST Training course in Microbiology and Biotechnology for high school teachers was organized in collaboration with Ordem dos Biólogos. The course was overbooked indicating the relevance of the initiative and the opportunity of subsequent editions.

All the activities that took place at IST on the great microorganism's day ended by 9 pm with the organization-volunteers group picture (see below)



### **IMD Internationalization activities**

Fulfilling a major objective of the organization of the Microorganism Day by SPM, in 2018, the activities were extended to different European countries, supported by the above-mentioned international Microbiology Societies and other entities.