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| **MATBIO2017 programme** | |
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| **Monday 19th June 2017** | |
| 9:00-9.10 | **OPENING** |
|  | Xavier Obradors – Director Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) |
| **TISSUE ENGINEERING (Chair: Nieves Casañ)** | |
| 9.10-10.10 | Oscar Castaño (Institute for Bioengineering of Catalonia - IBEC)  Tissue Engineering: towards 3D artificial tissues |
| 10.10-11.10 | Ann Rajnicek (Institute of Medical Sciences, University of Aberdeen)  Tissue engineering for nervous system and tissue repair. |
| **11.10-11.30** | **COFFEE BREAK** |
| **THERAPY (Chair: Anna Roig)** | |
| 11.30-12.30 | Vanesa Sanz (Institute of Photonic Sciences – ICFO)  Applications of plasmonic nanoparticles on lab-on-a-chip technology and nanomedicine |
| 12.30-13.30 | Puerto Morales (Institute of Materials Science of Madrid - ICMM) |
| Magnetic hyperthermia: fundaments, progress and limitations |
| **13.30-15:00** | **Lunch/ ICMAB tour** |
| 15:00-18:00 | **HANDS-ON ACTIVITIES (1h sessions)** |
| Polymer swelling in scCO2 - Anna López-Periago |
| Electroactive materials as implants – Nieves Casañ |
| Synthesis of Au-NPs - Anna Laromaine |
| Synthesis and modification of 2D Materials – Stefania Sandoval, Gil Gonçalves |
| Soft-litography; Microcontact printing to create patterns of molecules – Sandra Giraldo, Ezhil Amirthalingam, Raul Díaz |
| Synthesis of boron-based molecular materials - Mahdi Chaari, Rosario Núñez |
| scCO2-Nanovesicles - Nathaly Segovia, Amable Bernabé |
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| **Tuesday 20th June 2017** | |
| **DRUG DELIVERY (Chair: Núria Aliaga)** | |
| 9.00-10.00 | Marcelo Calderón (Institute of Chemistry and Biochemistry, University of Berlin)  Environmental Responsive Dendritic Polymers for Theranostics |
| 10.00-11.00 | Natascia Grimaldi (Institute of Materials Science of Barcelona – ICMAB)  Nanovesicles and compressed-fluid based technology: can they represent a paradigm shift in Nanomedicine? |
| **11-11.30** | **COFFEE BREAK** |
| **BIOSENSORS (Chair: Imma Ratera)** | |
| 11.30-12.30 | Pilar Marco (Institute of Advanced Chemistry of Catalonia, IQAC)  Nanobiotechnologic perspectives for in vitro diagnostics |
| 12.30-13.30 | Encarnación Lorenzo (Autonomous University of Madrid - UAM)  Biosensors: Fundamentals and biomedical applications |
| **13.30-15** | **Lunch/ ICMAB tour** |
| 15:00 | **HANDS-ON** |
| 16.30 | Simulation - Jordi Faraudo |
| **TECHNOLOGY TRANSFER (Chair: Susana Garelik)** |
| Isabel Gavilanes (Institute of Microelectronics of Barcelona IMB-CNM) |
| 16.30-18.00 | **SCIENCE DATING** |
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| **Wednesday 21st June 2017** | |
| 9.00-11.00 | **HANDS-ON (1h sessions)** |
| SEM - Anna Esther Carrillo |
| DLS/Z-potential - Amable Bernabé, Nathaly Segovia |
| C.Elegans - Luo Zhongrui, Anna Laromaine |
| **11-11.30** | **COFFEE BREAK** |
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| 11.30-13.30 | **HANDS-ON (1h sessions)** |
| TEM - Judith Oró-Solé |
| EPR - Vega Lloveras |
| Hydrogen Peroxide Biosensor Based on Horseradish Peroxidase - Isabel fuentes |
| AFM - Andrés Gómez |
| **13.30-15** | **Lunch/ ICMAB tour** |
| **MATERIALS CYCLE (Chair: Clara Viñas)** | |
| 15.00-16.00 | Fernanda Marujo (Centre for Nuclear Sciences and Technologies – University of Lisboa)  In vitro/in vivo biological evaluation of prospective antitumour drugs: insights into the mechanism of action by nuclear tools |
| 16.00-17.00 | Beatriz Morancho (Vall d’Hebron Institute of Oncology - VHIO)  Immunotherapy: using the immune system to treat cancer |
| 17.00-18.00 | Angel Menargues (Barcelona Science Park - PCB)  Overview and reflection on ecotoxicological risk assessment |
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| **Thursday 22nd June 2017** | |
| **IMAGING (Chair: José Vidal-Gancedo)** | |
| 9.00-10.00 | Anna Roig (Institute of Materials Science of Barcelona – ICMAB)  Introduction to in-vivo medical imaging techniques from materials science and nanoscience view point |
| 10.00-11.00 | Jordi Llop (CIC biomaGUNE)  Radiochemistry and nuclear imaging: application to the in vivo investigation of nanomaterials |
| **11-11.30** | **COFFEE BREAK** |
| **BIOENGINEERED SCAFFOLDS (Chair: Concepción Domingo)** | |
| 11.30-12.30 | Mª Pau Ginebra (Polytechnic University of Catalonia - UPC)  Biomimetic ceramic scaffolds for bone engineering |
| 12.30-13.30 | Julio San Román (Institute of Polymer Science and Technology - ICTP)  Learning from the nature the structure and morphology of nanoparticles for advanced applications in nanomedicine |
| 13.30 | End-of-school |