D³ 4 HEALTH at NANOINNOVATION 2024

Faculty of Civil and Industrial Engineering, Sapienza University of Rome, Via Eudossiana 18, Rome

Digital Twin: the healthcare new era

(Monday September 9th, H 2.30 PM – 4.00 PM)
Chair: V. Panebianco (Sapienza)

Moderator: D. Alvaro (Sapienza)
2.00 Brief introduction – M. S. Sarto (Sapienza) – HUB President
2.10 Brief introduction – C. Catalano (Sapienza) – Project Scientific Coordinator
2.20 Greetings from MUR – L. Patella (MUR)
2.30 Digital Twin framework: Technical Implementation – Huan Nguyen (UK)
2.45 Extracellular Vesicles-based Biomarkers – Chiaramonte (UniMI)
3.00 Wearable technologies, sensors and devices – Alessandro d'Aloia (Sapienza)
3.15 Imaging biomarkers – Martina Pecoraro (Sapienza)
3.25 AI algorithms for DT implementation – Evaristo Cisbani (ISS)

3.40 – 4.00 Panel discussion: D³ 4 Health Digital Twin implementation
Presenter: V. Panebianco (Sapienza)
Discussants: V. Spagnolo (PoliBA), P. Campliglia (UniSa), F. Dotta (AOU Siena), L. Masuelli (Sapienza), S. Novelli (Sapienza), C. Russo (UniMol), G. Bretti (CNR), L. Nappa (HUB)

Biological Twin: the healthcare new era

(Monday September 9th, H 4.00 PM – 5.30 PM)
Chair: C.F. Pirri (PoliTO)

Moderators: F. Frascella, L. Napione
4.00 Biopsy material and its aspects for the selection in vitro by using microfluidics. – N.E. Ordueri (TK)
4.15 Mimicking tumor microenvironment to model Metastatic Colorectal Cancer (CRC) patient-derived organoids dynamics – Giulia Mesiano (PoliTO)
4.30 Integrating Organ-on-Chip and In-Silico Models: Towards a Cybernetic Platform for Complex In-Vitro Models – L. Businaro (CNR)
4.45 The possible role of biological twins in the development of Artificial Intelligence solutions for precision medicine: targeted in vitro experiments as a complement to traditional data strategies – P.Falco (AiZoOn)
5.00 Enhanced fluorescence detection of miRNA by means of Bloch surface wave-based biochips – Agostino Occhicone (Sapienza)

5.15 – 5.30 Panel discussion: D³ 4 Health Biological Twin implementation
Panel discussion: D³ 4 Health Biological Twin implementation
Presenter: C. F. Pirri (PoliTO)
Discussants: G. Tonon (UniSR), C.Tondaturo (PoliTO), F. Michelotti (Sapienza), L. Businaro, S.Marasso (CNR), P. Tiberto (INRIM), P. Netti (IIT)