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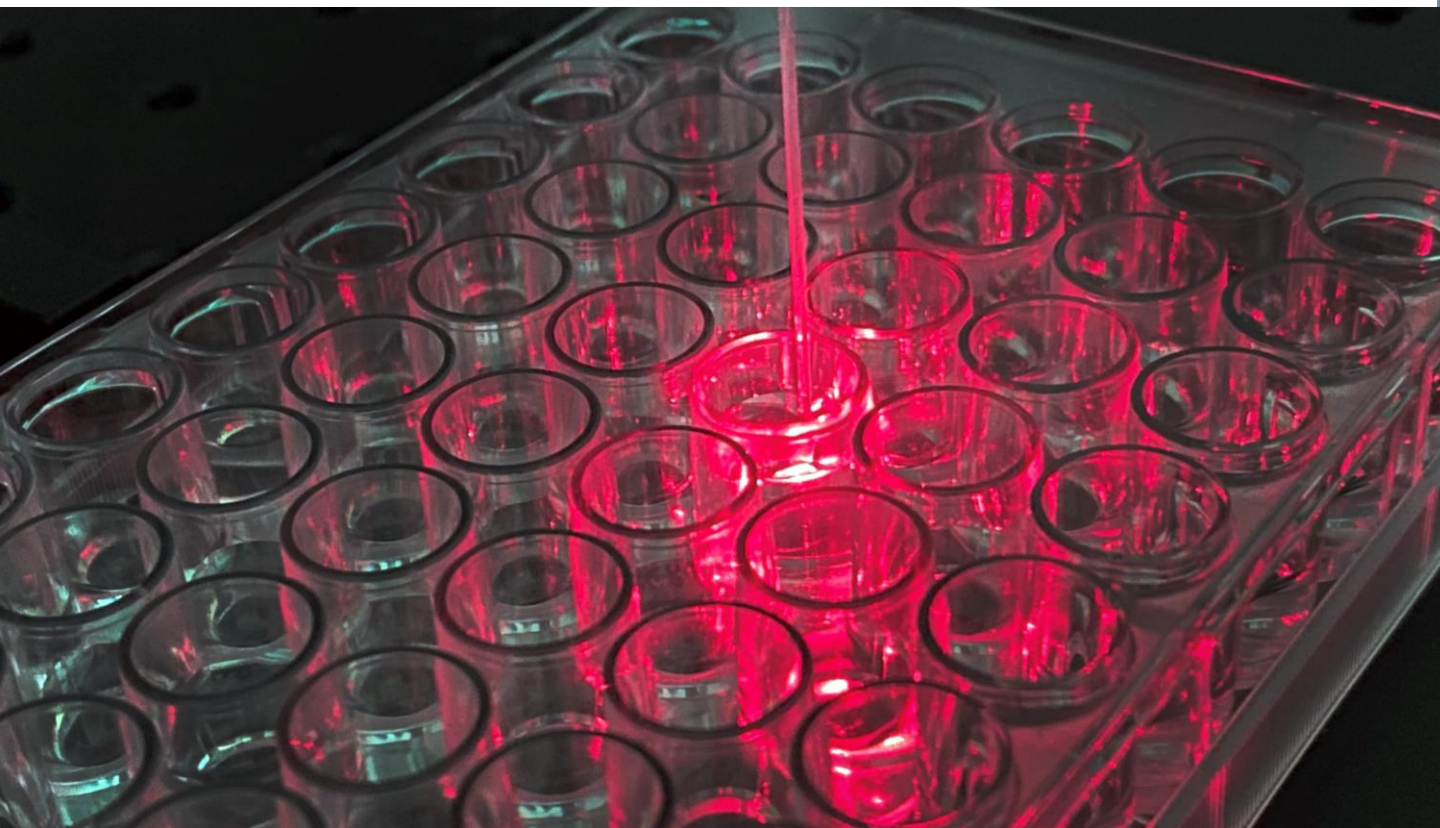
DIPARTIMENTO DI MECCANICA

TECHNOLOGICAL INNOVATIONS FOR THE PRECISION MEDICINE OF TOMORROW

Workshop

This event aims at exploring and discussing the advances in precision medicine methods and applications assured by the recent technological innovations

June 10th 2021, 9h30-16h00



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h. 09:30 - 09:50

Welcome – Paola Saccomandi

h. 09:50 - 10:20

Precision surgery: advanced technologies in the operating room – Michele Diana

h.10:20 - 10:50

The role of mathematical modeling for a patient-specific treatment – Stéphane Cotin

h. 10:50 - 11:10

Coffee break

h. 11:10 - 11:40

Innovative measurement approaches for a specific real-time intraoperative control – Martina De Landro

h.11:40 - 12:10

Barriers of the European health system in the advent of the precision medicine – Eric Felli

h. 12:10 - 12:40

Open discussion

h. 12:40-14:00

Lunch break

h.14:00 - 14:30

Toward precision healthcare: nanotechnological innovations – Paolo Decuzzi

h.14:30 - 15:00

Personalized targeting and drug delivery – Filippo Rossi

h.15:00 – 15:30

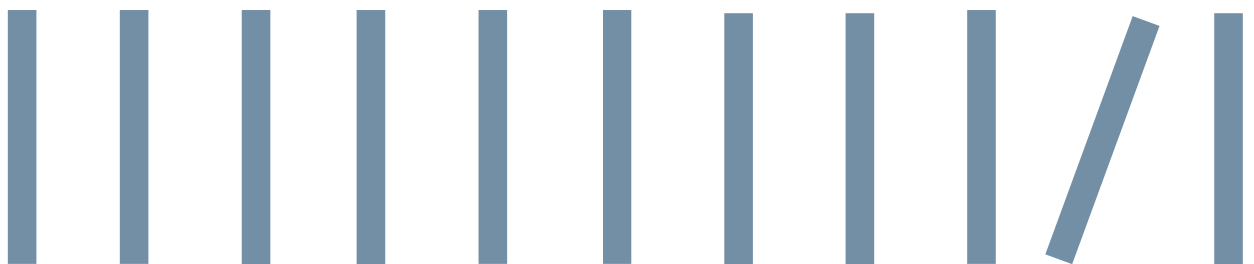
Nanomedicine: the role of the technological advances in improving the patient-specific theranostics – Paolo Bigini

h.15:30 - 16:00

Open discussion and closing

h.16:00

Final greetings





Paola Saccomandi, Ph.D

Associate Professor at the Department of Mechanical Engineering of Politecnico di Milano, Italy

Research Interests: fibre optic sensors and biomedical imaging for physiological parameters monitoring, and the development of light-based approaches for hyperthermal treatment and monitoring.

Michele Diana, MD, Ph.D

Scientific Director of the Research Institute against Cancer of the Digestive System (IRCAD), Strasbourg, France

Research Interests: image-guided surgery, virtual and augmented reality, optical imaging navigation systems, molecular fluorescence guided surgery, surgical robotics



Stéphane Cotin, Ph.D

Research Director at Inria and leader of the MIMESIS team in Strasbourg, France.

Research Interests: physics-based simulation, real-time simulation of soft-tissue deformations, finite element modeling, augmented reality and medical applications of this research.

Martina De Landro, Ph.D Student

Ph.D. student at the Department of Mechanical Engineering of Politecnico di Milano, Italy

Research Interests: temperature monitoring approaches to control mini-invasive ablative therapies including magnetic resonance thermometry, fiber optic sensors and hyperspectral imaging.



Eric Felli, Ph.D

Postdoc researcher in the University of Bern, Department for Biomedical Research, Hepatology, Switzerland.

Research Interests: multidisciplinary approach focused on regenerative medicine. Former Vice-Chair of the European Health Parliament of the Robotics, Artificial Intelligence and Precision Medicine Committee.

Paolo Decuzzi, Ph.D

Director of the Laboratory of Nanotechnology for Precision Medicine at Istituto Italiano di Tecnologia (IIT), Genova, Italy.

Research Interests: design of polymeric nanoconstructs for multi-modal imaging and combination therapy; fabrication of microfluidic chips for screening of nanomedicines.



Filippo Rossi, Ph.D

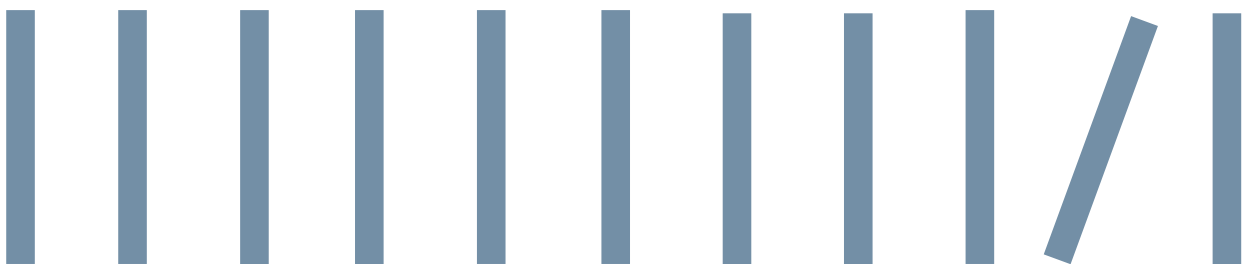
Associate Professor at the Department of Chemistry, Materials and Chemical Engineering "Giulio Natta" at Politecnico di Milano, Italy.

Research Interests: innovative polymeric materials for nanomedicine, drug delivery and tissue engineering with experimental and model studies.

Paolo Bigini, Ph.D

Head of the Nanobiology Unit, Department of Molecular Biochemistry and Pharmacology, at Istituto di Ricerche Farmacologiche Mario Negri, Milano, Italy.

Research Interests: Nano-pharmacokinetics, and nano-safety in healthy animals.





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GENERAL INFORMATION

TECHNOLOGICAL INNOVATIONS FOR THE PRECISION MEDICINE OF TOMORROW

ONLINE WORKSHOP

Live on the Microsoft Teams. Click [here](#) to join.

 Language: ENGLISH



Registration: click [here](#) or scan and get a reminder notification the day before the event.



Contact person: Martina De Landro martina.delandro@polimi.it

Project partners:



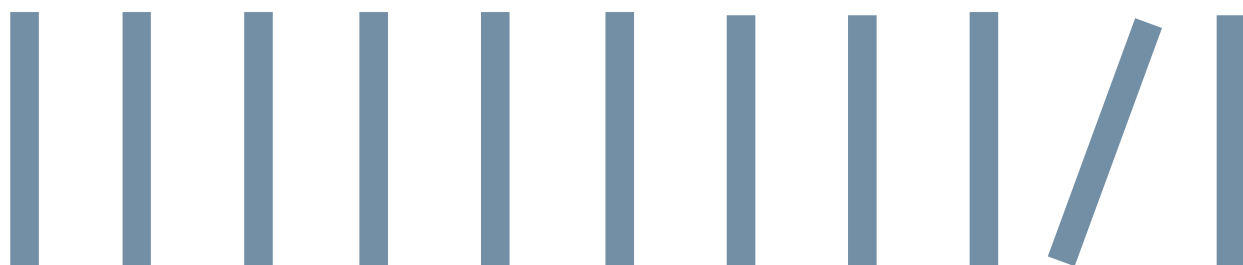
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