

A causa della pandemia da SARS-CoV-2, il workshop non ha avuto luogo nel 2020. Quest'anno la quinta edizione è stata organizzata in modalità mista: la mattina solamente sul canale YouTube mentre il pomeriggio sulla piattaforma Zoom. Sono stati invitati oltre ai giovani ricercatori dell'Ateneo pavese, anche giovani ricercatori del Politecnico di Torino, dell'Università di Genova e di Milano Bicocca al fine di promuovere la conoscenza e l'incontro tra vari gruppi che svolgono ricerche nell'area della nanomedicina, nell'ottica della nascita di collaborazioni, sinergie, e partecipazioni a futuri progetti. Due "invited talks", rispettivamente dall'Istituto di Nanotecnologia di Lecce e dall'Università Statale di Milano e Istituto Mario Negri, completeranno l'evento. Inoltre la giornata è suddivisa in 2 sessioni: la sessione mattutina è dedicata alla Medicina Rigenerativa mentre la sessione pomeridiana è focalizzata sulle Nano-terapie e la Nano-diagnostica.

Due to the SARS-CoV-2 pandemic, the workshop did not take place in 2020. This year the fifth edition has been organized in a mixed mode: in the morning only on the YouTube channel and in the afternoon on the Zoom platform. In addition to the young researchers from the University of Pavia, also young researchers from the Polytechnic of Turin, the University of Genoa and Milan Bicocca were invited in order to promote knowledge and meetings between various groups that carry out research in the area of nanomedicine, with a view to the birth of collaborations, synergies, and participation in future projects. Two "invited talks", respectively from the Institute of Nanotechnology of Lecce and from the State University of Milan and Mario Negri Institute, will complete the event. Furthermore, the day is divided into 2 sessions: the morning session is dedicated to Regenerative Medicine while the afternoon session is focused on Nano-therapies and Nano-diagnostics.

RICERCA E NANOMEDICINA

Quinta Edizione

A cura di P. Pallavicini e L. Visai

Martedì, 15 Giugno 2021

ore 9:00 > 18:15

**WORKSHOP INTERAMENTE ONLINE
IN LINGUA INGLESE**



UNIVERSITÀ
DI PAVIA



Centre for Health Technologies
University of Pavia



Centro 3R

9:00 - Short introduction to the workshop

First Session: Regenerative Medicine – Chairman

Livia Visai (YouTube channel)

9:10 - *Dalila Miele*

(Dep. of Drug Sciences, University of Pavia)

“Chitosan nanofibers as skin tissue substitutes”

9:30 - *Donatella Di Lisa*

(Dept. of Informatics, Bioengineering, Robotics and Systems Engineering (DIBRIS), University of Genoa)

“A thermosensitive hydrogel for mini-brain technology”

9:50 - *Valentino Caterina*

(Dep. of Drug Sciences, University of Pavia)

“Anionic polysaccharide and spermidine based scaffolds for nervous tissue regeneration”

10:10 - *Alice Zoso*

(Dep. of Mechanical and Aerospace Engineering, (DIMEAS), Politecnico di Torino)

“Bioartificial scaffolds for in vitro modelling of different stages of human cardiac fibrosis”

10:30 - *Francesca Cadamuro*

(University of Milano-Bicocca)

“Glycoconjugate biomaterials to design 3D extracellular matrix model”

10:50 - 11:10 Virtual coffee break

11:10 - ***Stefano Loporatti***

(CNR NANOTEC – Nanotechnology Institute, Lecce)

“Inorganic Nanocarriers for Cancer Therapy”

11:45 - *Alessandro Torchio*

(Dep. of Mechanical and Aerospace Engineering, (DIMEAS), Politecnico di Torino)

“Combining supramolecular architecture and photo-crosslinking for smart drug delivery in tissue engineering”

12:05 - *Sofia Magli*

(Dep. of Biotechnology and Biosciences, University of Milano-Bicocca)

“Multifunctional hybrid hydrogels: potential as 3D bioprintable platforms in tissue engineering and preclinical investigation”

12:25 - *Franca Scocozza*

(Dep. of Civil Engineering and Architecture, University of Pavia)

“3D Bioprinted Scaffolds Containing Mesenchymal Stem/Stromal Lyosecretome: Next Generation Controlled Release Device for Bone Regenerative Medicine”

12:45 - *Federica Barbugian*

(Dep. of Biotechnology and Biosciences, University of Milano-Bicocca)

“Hybrid HA based hydrogels for the development of 3D bioprintable in vitro glioblastoma models”

12:45 - 14:15 Virtual Lunch break

Second session: Nano-diagnostics and Nano-therapeutics –Chairman Piersandro Pallavicini (Zoom platform)

14:15 - ***Luisa De Cola***

(University of Milano, and Mario Negri Institute)

“Hybrid Materials for Gastrointestinal Diseases”

14:50 - *Sara Pugliese*

(Dep. of Physic, University of Pavia)

“Exploring the possible application of metal halide perovskite quantum dots in nanomedicine”

15:10 - *Davide Cicolari*

(Dep. of Physic, University of Pavia)

“Lanthanide-based MRI Contrast Agents Characterization Through NMRD Profile Analysis”

15:30 - *Lorenzo Rossi*

(Dep. of Biotechnology and Biosciences, University

of Milano-Bicocca)

“Multimodal nanoparticles targeting β -cells for in vivo imaging of pancreatic islets”

15:50 - *Laura Pandolfi*

(Laboratory of cell biology and immunology, IRCCS Policlinico San Matteo)

“Nanoparticles: a new era for lung fibrotic disorders”

16:10 - 16:20 Virtual Coffee break

16:20 - *Stefania Coniglio*

(Dep. of Molecular Medicine, University of Pavia)

“Microvilli adhesion: an alternative route for nanoparticle cell interaction”

16:40 - *Amirbahador Zeynali*

(Dep. of Physics, University of Milano-Bicocca)

“Laser-Assisted Structuration of Photothermally Responsive Proteinaceous Microarchitectures”

17:00 - *Lavinia Rita Doveri*

(Dep. of Chemistry, University of Pavia)

“Prussian blue, an EMA and FDA approved drug: are its nanoparticles suitable for in vivo use at physiological pH ?”

17:20 - *Francesca Brero*

(Dep. of Physics and INFN, University of Pavia)

“Towards a treatment for pancreatic cancer: the therapeutic efficacy of combining Hadron Therapy and Magnetic Nanoparticles-based Hyperthermia”

17:50 - *Lorenzo De Vita*

(Dep. of Chemistry, University of Pavia)

“PVA films with mixed silver nanoparticles and gold nanostars for intrinsic and photothermal antibacterial action”

18.15 - Conclusions and end of the workshop