

2nd Workshop STATE OF THE ART ON NANOTHERAPEUTICS AND NANODIAGNOSTICS COOPERATION EVENT BETWEEN ALBANIA, ITALY AND SPAIN Tirana, Albania (October 31, 2024)

During the NanoBalkan Conference one day will be dedicated to the 2nd Workshop – Cooperation event between Albania, Italy and Spain on the topic "State of the art of Nanotherapeutics and Nanodiagnostics". This 2nd Workshop aims to keep the collaboration between the three countries, Albania, Spain and Italy in the field of Nanoscience and Nanotechnologies and their applications in important areas such as life sciences. Scientists and representatives from institutions of the three countries will share ideas about collaboration opportunities and research support programs in the research and development including cooperation with industry in the field of nanotechnology.

The main objectives of the workshop are:

- Facilitate Collaboration: The primary goal of the workshop is to encourage collaboration among research groups from Albania, Italy, and Spain. By promoting open dialogue and networking opportunities, we aim to establish lasting partnerships that will pave the way for future joint research projects and collaborations.
- Exchange of Knowledge: The workshop will serve as a platform for experts and researchers to share their latest findings, cutting-edge technologies, and methodologies in nanotechnology and its applications in biomedicine. Participants will gain valuable insights into diverse research areas and foster mutual learning.
- ➤ Identify Common Research Interests: Participants will explore potential synergies in their research interests and identify areas where their expertise can complement each other. This will facilitate the development of joint projects, grant applications, and research initiatives that address shared challenges and opportunities.

VENUE: Palace of Congresses Tirana. Bulevardi Dëshmorët e Kombit, Tirana, Albania

DATE: October 31, 2024

ORGANISERS: Event organized by Phantoms Foundation (Spain) with the support from Spain of ICN2, CERCA, BIST, from Albania of NanoAlb and Academy of Sciences and from Italy of SITELF and the embassies of Spain and Italy in Albania.

ORGANISING COMMITTEE:

Antonio Correia (Phantoms Foundation, Spain)
Coordinator Arben Merkoçi (ICN2, Spain)
Co-Coordinator Nunzio Denora (University of Bari, Italy)
Ruslán R. Alvarez Diduk (ICN2, Spain)
Marianna Rossetti (ICN2, Spain)
Giulio Rosati (ICN2, Spain)
Majlinda Vasjari (NanoAlb, University of Tirana, Albania)
Kledi Xhaxhiu (NanoAlb, University of Tirana, Albania)
Aida Shala (University of Pristina, Kosovo)



TENTATIVE PROGRAM

9.00-9:15 Welcome, Organizers & Representatives from the Albanian Institutions, Academy of Sciences of Albania, Embassies of Italy and Spain in Tirana

Italy

- **9.15-9:30 Prof. Massimo Fresta (University of Catanzaro)** "Unlocking the power of nanomedicine through the surface's functionalization"
- **9.30-09:45 Prof. Rosario Pignatello (University of Catania)** "Optimization by response surface methodology of self-nanoemulsifying drug delivery systems (SNEDDS) as a new tool for the topical treatment of ocular diseases"
- **09.45-10:00 Prof. Francesco Lai (University of Cagliari)** "Lactoferrin- and antibodies-modified liposomes for the delivery of NK3 receptor agonist senktide to the brain"
- **10.00-10:15 Prof. Giuseppe De Rosa (University of Naples)** "Lipid nanoparticles for RNA delivery: achievements and challenges"
- **10.15-10:30 Prof. Francesco Trotta (University of Turin)** "Evolution of Cyclodextrin Nanosponges: Green and Versatile Materials"
- **10.30-10.45 Prof. Angela Assunta Lopedota (University of Bari)** "Pharmaceutical technology platforms for the development of tailored paediatric dosage forms"
- 10.45-11.30 Brainstorming & Coffee break

Spain

- **11:30-11:45 Dr. Gabriel Maroli** (ICN2), "Battery-Free Wearable Sensors with Bio-Adhesive Membranes: A Wireless Solution for Heat Stroke Prevention"
- 11:45-12:00 Dr. Ruslan Alvarez (ICN2) "Innovative Laser Nanostructuring of Reduced Graphene Oxide

Nanocomposites for Enhanced Sensing Applications"

- **12:00- 12:15 Massimo Urban** (ICN2) "Inkjet-Printed Electrochemical Biosensors: A Simple and Accessible Solution for Lab-Based Diagnostics"
- **12:15-12:30 Dr. Sergio Moya** (CIC BiomaGUNE) "Soft Matter and nanomedicine: from drug delivery to neurostimulation"
- 12:30-12:45 Dr. Mariana Kober (ICMAB) "Lipid nanovesicles for advanced therapies"
- **12:45-13:00 Carlos Javier Rodríguez Hernández** (Fundació Sant Joan de Déu Institut de Recerca Sant Joan de Déu, Spain) "Biosensors in Pediatric Oncology: Enhancing Drug Monitoring and Clinical Trials" **13:00-14:00** Lunch break & Brainstorming



Albania

14:00-14:15 Prof. Valbona Aliko (University of Tirana), "The erythrocyte-zinc nanoparticle nexus: unraveling the toxicological pathways"

14:15-14:30 Prof. Aida Shala (University of Pristina), "Empowering Progress in Science and Nanoscience in Kosovo through Motivation and Collaboration".

14:30-14:45 Prof. Merita Xhetani, (University of Tirana), "Albanian Young Initiatives in Human Genetics"

14:45-15:00 Prof. Arjan Korpa, (University of Tirana), "Mechanisms of virus Sars CoV-2 deactivation on porous nanocoated solid surfaces"

15:00-15:15 Prof. Nevila Broli (University of Tirana)) "An electrochemical sensing platform based on modified CPE with graphene oxide/TiO2 nanocomposite for Atenolol determination"

15:15-15:30 Prof. Kleva Shpati (Albanian University, Tirana), "The importance of Zinc and Copper nanoparticle usage in topic systems SNED"

15:30-16:30 Brainstorming & Coffee break

16:30-17:00 Wrap-up and Closing remarks