

3rd Workshop STATE OF THE ART ON NANOTHERAPEUTICS AND NANODIAGNOSTICS COOPERATION EVENT BETWEEN ALBANIA, ITALY AND SPAIN Tirana, Albania (October 1, 2025)

During the NanoBalkan Conference one day will be dedicated to the 3rd Workshop – Cooperation event between Albania, Italy and Spain on the topic "State of the art of Nanotherapeutics and Nanodiagnostics". This 3rd 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: Tirana International Hotel & Conference Centre

DATE: October 1, 2025

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)

Marianna Rossetti (ICN2, Spain)

Majlinda Vasjari (NanoAlb, University of Tirana, Albania)

Kledi Xhaxhiu (NanoAlb, University of Tirana, Albania)

Aida Shala (University of Pristina, Kosovo)



9:00-9:15 Welcome, Organizers & Representatives from the Albanian Institutions, Academy of Sciences of Albania, Embassies of Italy and Spain in Tirana

Italy

Chairpersons: Arben Merkoçi, Nunzio Denora

9:15-9:30 Prof. Massimo Fresta (University of Catanzaro) "Functionalized hybrid nanoparticles for glioblastoma targeting"

9:30-09:45 Prof. Teresa Musumeci (University of Catania) "Nose to brain delivery and nanomedicine: a brief journey through successes and setbacks"

09:45-10:00 Prof. Francesca Selmin (University of Milan) "From Nanotechnology to Medicinal Products: the Dosage Form as the Bridge to Clinical Translation"

10:00-10:15 Prof. Antonio Lopalco (University of Bari) "Exploring the Frontiers of Drug Delivery and Pharmaceutical Technology: the PhartecoLab Experience"

10:20 - 11:00 Coffee break & Brainstorming

Spain

Chairpersons: Mimoza Basholli, Massimo Fresta

11:00-11:15 Dr. Mariana Kober (ICMAB) "Stable nanocarriers for the delivery of nucleic acid therapeutics"

11:15-11.30 Prof. Mariana Medina Sanchez (CICnanoGUNE) "Medical Microrobots for Intrauterine Embryo Transfer: Toward Precision Reproductive Medicine"

11:30-11:45 Javier Ramón-Azcón (IBEC) "Biosensor-Integrated Organs-on-a-Chip: Bridging Nanotechnology and Personalized Medicine for Advanced Nanotherapeutics and Nanodiagnostics"

11:45-12:00 Dr. Gabriel Ortega (CICBioGUNE) "Engineering conformational biosensors for personalized medicine applications"

12:00-12:15 Dr. Alejandro Criado (Universidade da Coruña) "Graphene Field-Effect Transistor Microarray for Ultrasensitive Virus Detection and Surveillance"

12:15-14:30 Lunch break & Brainstorming

Albania

Chairpersons: Majlinda Vasjari, Marianna Rossetti

14:30-14:45 Prof. Niko Hyka (Medical University of Tirana), "Integration of Deep Learning Algorithms with PPIR and Al4MED for advanced medical Image analysis and simulations in radiotherapy"

14:45-15:00 Gledjan Caka (Faculty of Natural Sciences, University of Tirana), "Biomedicine meets machine learning: Mapping melanoma with data"



15:00-15:15 Prof. Merita Xhetani, (Faculty of Natural Sciences, University of Tirana), "Amygdalin as a potential breast cancer therapy via BAX/BCL-2 genes mediated apoptosis"

15:15-15:30 Prof. Bashkim Ziberi (University of Tetova), "Nanotheranostics for Cancer Diagnosis and Therapy"

15:30-16:40 Wrap-up and Closing remarks

16:40 -17:10 Coffee time