

CIBER-BBN/NANBIOSIS ICTS & RED Conexión NANOMEDICINA CSIC

Workshop

June 30th – July 1st 2022

Institute for Advanced Chemistry of Catalonia (IQAC-CSIC)

THURSDAY JUNE 30th

- 10:30-10:45** **OPENING**
Jesús Joglar, Institute for Advanced Chemistry of Catalonia Scientific Director
Fernando Herranz, Red Conexión Nanomedicina CSIC Scientific Coordinator
Ramón Martínez Máñez, CIBER-BBN Scientific Director
- 10:45-12:15** **NANOBIOTECHNOLOGICAL SOLUTIONS FOR DIAGNOSIS AND THERAPY**
 Chair: **Miriam Royo**, Institute for Advanced Chemistry of Catalonia (IQAC-CSIC, CIBER-BBN, NANBIOSIS)
- 10:45- 11:15 *Targeting aromatic amino acid metabolism for the early diagnosis of neurological diseases*
Montserrat Rodríguez, Institute for Advanced Chemistry of Catalonia (IQAC-CSIC, CIBER-BBN, NANBIOSIS)
- 11:15- 11:45 *Bringing therapeutic nanosolutions to fibrosis pathology in vivo and in 3D models*
Ana V. Villar, Institute for Biomedicine and Biotechnology of Cantabria (IBBTEC-CSIC)
- 11:45- 12:15 *Therapeutic oligonucleotides and nanomedicine*
Ramon Eritja Casadella, Institute for Advanced Chemistry of Catalonia (IQAC-CSIC, CIBER-BBN, NANBIOSIS)
- 12:15-12:45** **COFFEE BREAK**
- 12:45-14:15** **APPLICATIONS FOR ONCOLOGY I**
 Chair: **Jaume Veciana**, Materials Science Institute of Barcelona (ICMAB-CSIC, CIBER-BBN, NANBIOSIS)
- 12:45- 13:15 *Magnetic nanoheating for remote controlled drug release*
María del Puerto Morales Herrero, Materials Science Institute of Madrid (ICMM-CSIC)
- 13:15-13:45 *Glioblastoma treatment: an intranasal approach with novel nanocarriers*
Daniel Ruiz Molina, Catalan Institute of Nanoscience and Nanotechnology (ICN2-CSIC)
- 13:45- 14:15 *Carbon nanocapsules for biomedical imaging and cancer radiotherapy*
Gerard Tobías Rossell, Materials Science Institute of Barcelona (ICMAB-CSIC)
- 14:15-15:30** **LUNCH**
- 15:30-17:30** **NANOMEDICINE & OTHER FRONTIER APPLICATIONS**
 Chair: **María del Puerto Morales Herrero**, Materials Science Institute of Madrid (ICMM-CSIC)
- 15:30- 16:00 *Nanopatterns of Ephrin enhance Eph receptor clustering and downstream signaling*
Elena Martínez Fraiz, Institute for Bioengineering of Catalonia (IBEC, CIBER-BBN, NANBIOSIS)
- 16:00-16:30 *Molecular bases of memory and neurodegeneration*
Mariano Carrión-Vázquez, Cajal Institute (IC-CSIC)
- 16:30-17:00 *Electrical stimulation for tissue regeneration and nanomedicine*
Sahba Mobini, Institute of Micro and Nanotechnology (IMN- CSIC)
- 17:00-17:30 *Nanomedicine for molecular imaging diagnosis*
Fernando Herranz, Institute of Medicinal Chemistry (IQM-CSIC)

FRIDAY JULY 1st

9:00-12:00 DRUG DELIVERY NANOSYSTEMS

Chair: **Ramón Martínez Máñez**, Polytechnic University of Valencia (UPV, CIBER-BBN, NANBIOSIS)

9:00-9:30 *Efficacy, biodistribution and toxicity of nanomedicines in vivo in FVPR/U20*

Vanessa Díaz Riascos, Vall d'Hebron Research Institute (VHIR, CIBER-BBN, NANBIOSIS)

9:30-10:00 *PLGA nanocapsules for drug delivery*

Anna Solé Porta, Materials Science Institute of Barcelona (ICMAB-CSIC)

10:00-10:30 *Nano-emulsion-derived polymeric carriers for biomedical applications*

Santiago Grijalvo Torrijo, Institute for Advanced Chemistry of Catalonia (IQAC-CSIC, CIBER-BBN, NANBIOSIS)

10:30-11:00 *Polymeric nanosystems for applications in biomedicine*

Luis Rojo del Olmo, Institute of Polymer Science and Technology (ICTP-CSIC, CIBER-BBN)

11:00-11:30 *Gated silica nanoparticles for controlled release*

Antoni Llopis Lorente, Polytechnic University of Valencia (UPV, CIBER-BBN, NANBIOSIS)

11:30-12:00 *Quatsomes - versatile nanovesicles for biomedical applications*

Mariana Köber, Materials Science Institute of Barcelona (ICMAB-CSIC, CIBER-BBN, NANBIOSIS)

12:00-12:30 COFFEE & SNACK BREAK

12:30-14:00 APPLICATIONS FOR ONCOLOGY II

Chair: **Fernando Herranz**, Institute of Medicinal Chemistry (IQM-CSIC)

12:30-13:00 *Nanomedicine for biomarkers and new therapeutic targets in cancer immunotherapy*

Manuel Fuentes García, Institute of Cancer Molecular and Cellular Biology (IBMCC-CSIC)

13:00-13:30 *Technology for Nanomedicine at CTB-UPM*

José Javier Serrano Olmedo, Center for Biomedical Technology- Polytechnic University of Madrid (UPM, CIBER-BBN)

13:30-14:00 *Nanosystem for anticancer drug therapy against Thyroid Carcinoma with aggressive behavior*

Eugenia Mato Matute, Sant Pau Hospital of Barcelona (CIBER-BBN)

14:00-14:30 *On the search of trojan horses for an improved theragnosis of cancer*

Pilar Martín Duque, Institute of Nanoscience and Materials of Aragon (INMA-CSIC, CIBER-BBN, NANBIOSIS)

14:30-14:45 CLOSING

Jaume Veciana, NANBIOSIS Scientific Director (ICMAB-CSIC, CIBER-BBN, NANBIOSIS)

Fernando Herranz, Conexión Nanomedicina Coordinator (IQM-CSIC)