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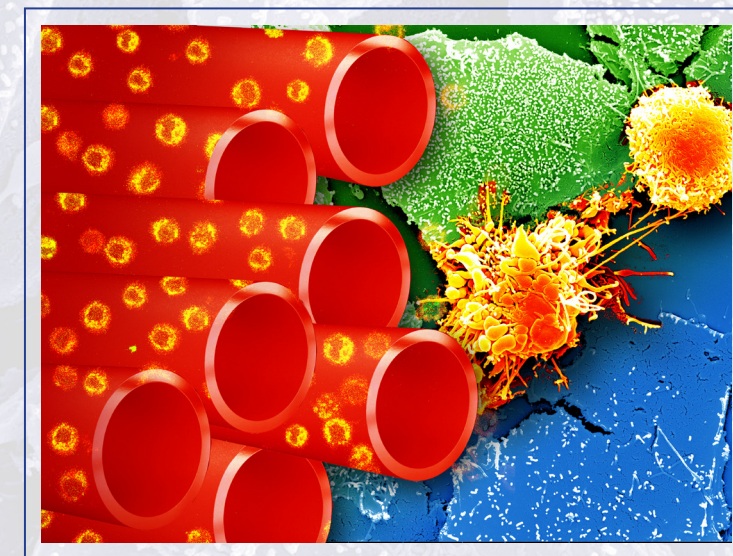
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# Therapeutic Nanoproducts: from Biology to Innovative Technology

June 19<sup>th</sup> - 20<sup>th</sup>, 2019

Aula Pocchiari  
Istituto Superiore di Sanità, Rome

CO-ORGANIZED BY

ISTITUTO SUPERIORE DI SANITÀ  
and  
Associazione Italiana di Colture Cellulari - AICC

## GENERAL INFORMATION

### DATES

Rome, Wednesday 19<sup>th</sup> - Thursday 20<sup>th</sup> June 2019

Istituto Superiore di Sanità, Aula Pocchiari

Viale Regina Elena, 299, 00161 Roma, Italy

www.iss.it

The conference is addressed to biologists, medical doctors,  
engineers, chemists and researchers.

Max. n. of participants 220

### REGISTRATION FEE

Annual membership fee: €50,00

The registration fee includes:

- Participation in the Scientific Sessions
- Attendance Certificate
- Conference kit, coffee break, lunch

## HOW TO REGISTER

The registration form is available at the page [www.iss.it](http://www.iss.it) and <http://www.aicc.website>.

Please fill it in sign it and send to the Organising Secretariat ([evelin.pellegrini@guest.iss.it](mailto:evelin.pellegrini@guest.iss.it)) by 12 June 2019.

Applications for participation will be accepted until the maximum capacity of the conference room is reached.

The registration fee is 50 euros, payable to the Associazione Italiana di Colture Cellulari, by bank transfer (IBAN: IT97B0538703612000003002045).

Payment must be made after having received notice of the acceptance of the application for participation. Please send copy of the transfer receipt to the organizing secretariat ([evelin.pellegrini@guest.iss.it](mailto:evelin.pellegrini@guest.iss.it)).

Participation is free for ISS employees.

Registration deadline 12 June 2019.

### ABSTRACTS

Please send abstracts (max 250 words) to the Scientific Secretariat ([maria.condello@iss.it](mailto:maria.condello@iss.it)).

Deadline for abstract submission: 31 May 2019.

Abstracts will be published on AICC website: <http://www.aicc.website>.

### LANGUAGE

The official language of the Conference is English. Simultaneous translation will not be provided.

### ATTENDANCE CERTIFICATE

Participants will get an attendance certificate at the end of the Conference.

## SCIENTIFIC PROGRAMME

### Wednesday, June 19<sup>th</sup>

12.30 Registration

13.30 Opening Ceremony and Welcome addresses:  
*Stefania Meschini, Patrizia Popoli, Michele Caraglia*

#### SESSION I - CELL INTERACTIONS OF THERAPEUTIC VESICLES

Chairs: *Alessandra Carè, Agnese Molinari*

13.45 Microvesicles and exosomes in metabolic diseases: their role in inflammation  
*Luciana Dini*

14.10 Insight into surfactant-based “soft” nanocarriers  
*Maria Carafa*

14.35 Mesenchymal stromal freeze-dried extracellular vesicles for nanomedicine:  
from GMP-compliant production to next generation drug delivery system  
*Sara Perteghella*

15.00 Nanomedicine in cancer: toward chemoresistance overcoming  
*Giuseppe De Rosa*

15.25 Hacking pancreatic cancer drug resistance with novel NO-gemcitabine prodrugs  
encapsulated in liposomes  
*Massimo Donadelli*

15.50 Liposomal carriers as possible therapeutic vesicles: morpho-functional investigation  
*Michela Battistelli*

16.15 Immunotoxicity aspects in the development and regulatory evaluation of nanodrugs  
*Gabriella Di Felice*

16.40 Recent innovations in high resolution microscopy  
*Giorgio Modesti*

17.05 Closing Remarks

### Thursday, June 20<sup>th</sup>

#### SESSION II - ADVANCED BIOMEDICAL TECHNOLOGY

Chairs: *Monica Boirivant, Annarica Calcabrini*

09.00 Nanostructured materials and devices  
*Mauro Grigioni*

09.25 Polymeric nanoparticles as versatile drug delivery systems  
*Donato Cosco*

09.50 Mesoporous silica-based nanosystems as a vehicle for targeted delivery  
of the antineoplastic drug Bortezomib  
*Antonella Leggio*

10.15 Mesenchymal stem cells as a vehicle for multimodal nanoparticles  
*Elisa Martella*

10.40 Coffee break

11.00 Vitvo: mimicking in vivo complexity by the innovative 3D model  
*Olivia Candini*

11.25 Exosomes and Microvesicles under the lens of the Super Resolution Microscopy  
*Giulia Anselmi*

11.50 VitroGel: tunable hydrogel for 3D cell culture and beyond  
*Caterina Sorteni*

12.15 SEC meets TRPS: Automated isolation and high-precision analysis of EVs  
*Camille Roesch*

12.40 Nanotech 5.0: from reality to virtual reality, fast forward  
*Matteo Mariani*

13.05 Lunch

#### SESSION III - NANOSIZED INNOVATIVE APPROACHES

Chairs: *Flavia Barone, Annarita Stringaro*

14.00 Nanocellulose and its composites in biomedical devices  
*Marina Scarpa*

14.25 Integrated microdevices for in-vitro cell assays: an overview  
*Leandro Lorenzelli*

14.50 Nanocarriers for neuromuscular diseases  
*Manuela Malatesta*

15.15 Hyperthermic nanoparticles to trigger adipolysis  
*Laura Calderan*

15.40 Bioderived Porous Silica Hybrid Nanovector for Theranostic Applications  
*Luca De Stefano*

16.05 Physico-chemical characterization of drug nanocarriers: a crucial step or  
a waste of time?  
*Simona Sennato*

16.30 Nanomaterials in the framework of REACH & CLP regulations  
*Maria Alessandrelli*

16.55 Fast, gentle and sensitive Super-Resolution for the imaging of dynamic biological  
processes  
*Alessandro Cometta*

17.20 Closing Remarks

### Aim and objectives

The conference will discuss in depth the mechanisms of interaction between new chemical-biological formulations and biophysical systems to improve the transport of drugs into normal and tumor cells. The enhancement of the therapeutic efficiency of a system of nanometric dimensions requires the development of new skills, within planning strategies leading to the expansion and sharing of

knowledge in a multidisciplinary environment.

The purpose of this event is to improve knowledge and encourage the optimization of production methods and discuss related regulatory aspects.

Key words: nanoprodukt, cell interactions, therapeutic vesicles, innovative technologies.

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