

Program

Wednesday, 21 September

- 09.00 Registration
- 10.00 **Opening Ceremony**
- Walter Ricciardi - President of Istituto Superiore di Sanità
Tullio Pozzan - Direttore del Dipartimento Scienze Biomediche – CNR
Alessandro Ruggieri - Chancellor of Tuscia University

Chairpersons: *Felice Grandinetti, Paola Luciani*

Invited lectures

- 10.20 **Y. Barenholz**
“Doxil[®], the First FDA Approved Nano-Drug: New Lessons Learned (from physical-chemistry and nanotechnology through metabolomics and tumor micro-environment to the clinics)”
- 10.50 **F. Ricci**
“Nature-inspired DNA-based nanodevices for diagnostic and drug-delivery applications”
- 11.20 *Coffee break*

Selected lectures

- 11.40 **L. Motiei**
“Communicating with fluorescent molecular sensors in biological environments”
- 12.00 **D. Alberti**
“Dual therapeutic agents to improve the effect of Boron Neutron Capture Therapy on cancer cells.”
- 12.20 **E. Papini**
“The capture of PEG and POZ NPs by monocytes/macrophages in serum is mediated by complement activation”

Industry report

- 12.40 **A. Pigozzo**
“Microcalorimetry of Nanoparticles: a ground-breaking approach for drug delivery platforms design”
- 13.00 *Lunch and Poster session*

Chairpersons: *Yechezkel Barenholz, Francesco Ricci*

Invited lecture

- 14.30 **D. Maysinger**
“Impact of nanomedicines on neurons and glia”

Selected lectures

- 15.00 **A. Clementino**
“Nanoparticles for an innovative administration of statins”
- 15.20 **J. W. Trzcinski**
“Bionanoparticles: versatile platforms for nanomedicine”
- 15.40 **S. Castellani**
“Safety and uptake of solid lipid nanoparticles by airway epithelial cells: an in vitro study”
- 16.00 **K. Turjeman**
“Liposome-based steroidal nano-drugs for the treatment of inflammatory diseases: from basic to the clinics”
- 16.20 *Poster session and Coffee break*

Thursday, 22 September

Chairpersons: *Giovanna Mancini, Vladimir P. Torchilin*

Invited lecture

- 09.00 **P. Luciani**
“Design of a Ratiometric Fluorescent Probe for Specific Detection of Extracellular Reactive Oxygen Species”

Selected lectures

- 9.30 **A. Mazzaglia**
“Nanoassemblies based on folate-tailored amphiphilic cyclodextrin/pheophorbide complexes for targeted PDT”
- 9.50 **C. Ferroni**
“Near-infrared photoactivable poly-methylmethacrylate core-shell fluorescent nanoparticles”
- 10.10 **M. Comes Franchini**
“Nano-heaters for cancer therapy: a comparison between gold nanorods and magnesium nanoparticles”
- 10.30 **G. Varchi**
“Keratin-based nanoparticles: novel tools for drug delivery”
- 10.50 *Coffee break*

Chairpersons: *Sophia G. Antimisiaris, Thomas J. Webster*

Invited lecture

- 11.10 **E. Segal**
“Porous silicon nanostructure for cancer therapy and diagnostics”

Selected lectures

- 11.40 **M. Capozza**
“In vitro and in vivo characterization of new nano-sized diagnostic probes for Photoacoustic Imaging”
- 12.00 **L. Tei**
“ICG-loaded Mesoporous Silica Nanoparticles as photoacoustic contrast agents”
- 12.20 **V. Maggi**
“Cyclic RGD functionalized PEGylated gold nanoparticles for tumor targeting”
- 12.40 **S. Lai**
“Organic-inorganic coated Gold Nanorods for biomedical applications”
- 13.00 *Lunch and Poster session*

Chairpersons: *Luigi Ambrosio, Dusica Maysinger*

Selected lecture

- 14.40 **Y. Yamakoshi**
“LDL for targeted delivery of MRI-CA to atherosclerosis”

Invited lecture

- 15.00 **T. J. Webster**
“15 years of commercializing nanomedicine into real medical products”

Selected lectures (special session on design and preparation - 15min talk)

- 15.30 **A. S. Rodrigues**
“Smart Hybrid Nanocontainers for Theranostic Applications”
- 15.45 **L. Chronopoulou**
“Biosynthesis of injectable gelling peptides for applications in bone tissue regeneration”
- 16.00 **S. Villa**
“Promising applications of multifunctional magnetic nanoparticles in biomedicine”
- 16.15 **F. Novelli**
“Self-assembling octapeptide-polymer conjugate to be used as drug carriers”
- 16.30 **T. Ribeiro**
“Small mesoporous silica nanoparticles for nanomedicine”
- 16.45 *Poster session and Happy hour*

Social Dinner (poster prizes)

Friday, 23 September

Chairpersons: *Agnese Molinari, Ester Segal*

Invited lecture

- 09.30 **L. Ambrosio**
“Multifunctional templates and advanced technologies for tissue regeneration”

Selected lectures

- 10.00 **S. M. Dozio**
“3D Cell Cultures in Porous Scaffolds with Oriented Microtubules Designed for Dental Regeneration”
- 10.20 **V. Laghezza Masci**
“Ultrastructural investigation of different collagen-based scaffolds and their in vitro interactions”
- 10.40 *Coffee break*

Invited lectures

- 11.00 **S. Antimisiaris**
“Targeting the brain with liposomes or exosomes: What can each systems learn from the other?”
- 11.30 **V.P. Torchilin**
“Stimuli-sensitive combination nanopreparations for cancer”

Selected lectures

- 12.00 **S. Centi**
“Development of cellular vehicles for delivery of gold nanorods to tumors”
- 12.20 **P. Oliva**
“Ex vivo plaque permeability evaluation in ApoE(-/-) mice using fluorescent blood pool agents”
- 12.40 **Flash presentations of awarded posters**
- 13.00 *Closing remarks and Lunch*