

RATIONALE

Nanoscience offers a chance to make significant progress in the diagnosis and treatment of cancer. The interaction in real time with normal and cancer cells at molecular and cellular level is being applied to two broad areas: the development of nanovectors for drug (or imaging agents) delivery to cancer cells and the design of nanosensor devices for early detection of cancer biological signatures.

The 2008 OECI Scientific Conference aims to explore coming forms of personalized medicine in which an early detection and better comprehension of the disease will define more appropriate and effective treatments of cancer.

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To register: <http://www.oeci-eeig.org>

OECI Genoa 2008 is organised

Under the auspices of



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Discovering new worlds in medicine:

towards nanoapplication in cancer prevention and treatment

*STATE OF THE ART AND OPPORTUNITIES
WITHIN THE 7TH FP*

Second announcement

May 23rd, 2008

Palazzo Ducale
Sala del Minor Consiglio



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SCIENTIFIC PROGRAMME

MORNING SESSION

- 8.30 Welcome by the authorities**
- 8.45 Opening**
Enrico Garaci and Ulrik Ringborg
- 9.00 Innovation of cancer care in the 21st century – the role of European collaboration**
Umberto Veronesi
- 9.30 Opportunities in the 7th FP and the Nanomedicine Platform**
Renzo Tomellini
- 10.00 Nanotechnologies: an overview**
Mauro Ferrari

SECTION 1: APPLICATION TO CANCER PREVENTION AND DIAGNOSIS (Chair: U. Ringborg and D. de Valeriola)

- 10.30 Optical biopsy of cancer: nanotechnological aspects**
Ricardas Rotomskis
- 10.50 Nanopore devices and nanoscale microscopies for genomics**
Ugo Valbusa
- 11.10 Point-of-care systems for rapid DNA quantification in oncology**
Marco Bianchessi
- 11.30 MR and iron magnetic nanoparticles: imaging opportunities in preclinical and translational research**
Carlo Emanuele Neumaier

11.50 COFFEE BREAK

SECTION 2: APPLICATION TO CANCER TREATMENT - 1ST PART (Chair: T. Tursz and G. Storme)

- 12.00 Drug Design: an overview on modern structure-based drug design**
Tom Blundell
- 12.20 ABCD nanoparticles for the delivery of therapeutic nucleic acids and imaging agents to tumour**
Andrew Miller
- 12.40 Apoptosis chip for testing of drugs on breast cancer cells**
Albert van den Berg

13.00 LUNCH

AFTERNOON SESSION

SECTION 2: APPLICATION TO CANCER TREATMENT – 2ND PART (Chair: A. Llombart-Bosch and K. Nilsson)

- 14.10 Drug delivery: application of liposomal drugs to neuroectodermal cancer treatment**
Mirco Ponzoni
- 14.30 siRNA nanoformulation is efficient in mouse xenografted tumors expressing human junction oncogenes**
Claude Paul Malvy
- 14.50 Transformation of novel nanomaterials to clinically viable nanomedicine tools: the case of carbon nanotubes**
Kostas Kostarelos
- 15.10 Nanoparticles for tumour imaging and tumour gene Delivery**
Daniel Scherman
- 15.30 Use of Nanoparticles for Cerebral Cancer**
Jorg Kreuter
- 15.50 Therapeutic reactive oxygen generation using Fullerenes**
Peter Scharff

16.10 COFFEE BREAK

SECTION 3: TECHNOLOGY ASSESSMENT AND RISK MANAGEMENT. (Chair: W. van Harten)

- 16.20 Assessment of new early phase nanotechnologies**
W. van Harten
- 16.40 Nanoparticles: potential cancer risks and research needs**
Richard Moore
- 17.00 CONCLUSIONS**
Marco A. Pierotti