

V International Workshop on Nitric Oxide and Cancer 23-24 March 2017 Bologna - Italy



Final Program

Wednesday afternoon - March 22nd 2017

2:00 pm – 3:00 pm Participants registration

2:45 pm – 3:10 pm **Dr. Roberto Zamboni** - Director of the Bologna Research Area and of the Institute of Organic Synthesis and Photoreactivity

First session – Pro-tumorigenic activity mediated by NO

Session Chair: Professor Timothy Billiar

3:10 pm – 3:45 pm

Invited Lecture

Professor David A. Wink (National Cancer Institute- Bethesda, USA)
The Oncogenic properties of the Redox Inflammatory Protein Inducible Nitric Oxide Synthase in ER (-) Breast Cancer

3:45 pm – 4:10 pm

Selected lecture

Dr. Erika Terzuoli (Department of Life Sciences, University of Siena, IT)
Cross-talk between mPGES-1 and iNOS: activation of stem-like phenotype in EGFR-driven epithelial tumor cells

4:10 pm – 4:40 pm

Coffee Break

Second session – Pro-tumorigenic activity mediated by NO

Session Chair: Professor David A. Wink

4:40 pm – 5:15 pm

Invited Lecture

Professor Timothy R. Billiar (University of Pittsburgh, USA)
iNOS regulates the phenotype of liver cancer stem cells

5:15 pm – 5.40 pm

Selected lecture

Dr. Sharon Glynn (Discipline of Pathology, Lambe Institute for Translational Research, School of Medicine, National University of Ireland Galway)
Chronic Nitric Oxide exposure induces prostate cell carcinogenesis involving genetic instability and a pro-tumorigenic secretory phenotype

- 5:40 pm – 6:05 pm **Selected lecture**
Dr. Salvatore Rizza (Cell stress and survival Unit, Danish Cancer Society Research Center, Copenhagen, DK)
The denitrosylating enzyme GSNOR controls tumor progression and malignancy
- 6:05 pm – 6:35 pm **Invited Lecture**
Professor S. Perwez Hussain (National Cancer Institute, Bethesda, USA)
Nitric Oxide as an Enhancer of Pancreatic Cancer Progression: A Potential Therapeutic Opportunity
- 6:35 pm – 7:00 pm **General Discussion for sessions I and II**

Thursday morning - March 23rd 2017

Third session – Anti-tumorigenic activity mediated by NO

Session Chair Professor Jordi Muntané Relat

- 9:00 am – 9:35 am **Invited Lecture**
Professor Vasily A. Yakovlev (Virginia Commonwealth University, Richmond, USA)
Nitric oxide in maintaining of genomic instability and synthetic lethality - two sides of the same coin
- 9:35 am – 10:10 am **Invited Lecture**
Professor Stéphanie Plenchette-Colas (EPHE-University Of Burgundy, Dijon, FR)
S-nitrosylation of cIAP1 switches cancer cell fate from TNF α /TNFR1-mediated cell survival to death
- 10:10 am – 10:35 am **Selected lecture**
Dr. Cristina Maccallini (Department of Pharmacy, University of Chieti, IT)
CM554, a new potent and selective iNOS inhibitor: synthesis, docking study, and biological evaluation on glioma cells line
- 10:35 am – 11:00 am **Company lecture**
Dr. Manuela Liberi (Bruker Italia)
TBA



11.05 am – 11.35 am **Coffee Break**

Fourth session – Anti-tumorigenic activity mediated by NO

Session Chair: Dr. Valentina Rapozzi

- 11:35 am – 12:10 pm **Invited Lecture**
Professor Albert W. Girotti (Medical College of Wisconsin, USA)
Role of endogenous nitric oxide in hyper-aggressiveness of tumour cells that survive a photodynamic therapy challenge
- 12:10 pm – 12:30 pm **Selected lecture**
Dr. Marialucia Gallorini (Department of Pharmacy, University of Chieti, IT)
In vitro biological response of C6 rat glioma cells towards a new selective iNOS inhibitor

12:30 pm – 12:50 pm

Company lecture

Dr. Emrah Eroglu (Department of Molecular biology and Biochemistry, Medical University of Graz, AT)
Shining a Light on Cellular Nitric Oxide Dynamics



12:50 pm – 1:25 pm

Invited Lecture

Professor Jordi Muntané Relat (Instituto De Biomedicina De Sevilla, ES)
Integration of oxidative and nitrosative stress in the overall cell death signaling induced by Sorafenib in hepatoma cells

1:25 am – 2:30 pm

Lunch

Thursday afternoon- March 23rd 2017

Fifth session – Anti-tumorigenic activity: NO donors and multi-modal treatment

Session Chair: Dr. Greta Varchi

2:30 pm – 3:05 pm

Invited Lecture

Professor Salvatore Sortino (Laboratory of photochemistry, Department of Drug Science, University of Catania, IT)
Nitric Oxide Photodelivering Nanoconstructs

3:05 pm – 3:25 pm

Selected lecture

Dr. Damien Afonso (Laboratory of photochemistry, Department of Drug Science., University of Catania, IT)
Mesoporous silica nanoscaffolds photoreleasing nitric oxide with carbon dots as fluorescent reporters

3:25 pm – 3:45 pm

Selected lecture

Dr. Maria Luisa Navacchia (Institute of Organic Synthesis and Photoreactivity – Italian National Research Council, IT)
NO photoreleaser-deoxyadenosine and -bile acid derivatives bioconjugates as novel potential photo-chemotherapeutics

3:45 pm – 4:05 pm

Selected lecture

Dr. Claudia Ferroni (Institute of Organic Synthesis and Photoreactivity – Italian National Research Council, IT)
Synthesis, in vitro biological activity and mechanistic study of a novel photodynamic bifunctional conjugate

4:05 pm – 4:35 pm

Coffee Break

Sixth session – Anti-tumorigenic activity: NO donors and multi-modal treatment

Session Chair: Professor Khosrow Kashfi

4:35 pm – 5:10 pm

Invited Lecture

Professor David Russel (University Of East Anglia, Norwich, UK)

Functionalised gold nanoparticles for the measurements of intracellular nitric oxide and for targeted photodynamic cancer therapy

5:10pm – 5:30 pm

Selected lecture

Dr. Fabiana Quaglia (Department of Pharmacy, University of Napoli Federico II, IT)

PEGylated biodegradable nanoparticles for dermal nitric oxide photodelivery

5:30 pm – 6:15 pm

General discussion Sessions 3-4-5-6

6:15 pm – 8:00 pm

Social Event

8:45 pm

Social Dinner

Friday morning - March 24th 2017

Seventh session – Anti-tumorigenic activity: Novel nitric oxide donors

Session Chair: Professor Salvatore Sortino

9:15 am – 9:50 am

Invited Lecture

Professor Khosrow Kashfi (City University Of New York, USA)

Molecular targets of NOSH-aspirin in a xenograft mouse model of ER(-) breast cancer"

9:50 am – 10:15 am

Selected lecture

Dr. Lucia Morbidelli (Department of Life Sciences, University of Siena, IT)

Characterization of the antitumoral activity of novel metal-nonoate

10:15 am – 10:35 am

Selected lecture

Dr. Elena Gazzano (Department of Oncology, University of Torino, IT)

Nitric oxide donor-doxorubicins: a new strategy effective against drug resistant tumors

10.35 am – 11:00 am

Coffee Break

Eighth session – Anti-tumorigenic activity: role of oxidative pathways

Session Chair: Professor Benjamin Bonavida

11:00 am – 11:35 am

Invited Lecture

Professor Georg Bauer (University Medical Center, Freiburg, DE)

Nitric oxide acts at multiple sites during selective apoptosis induction in tumor cells

11:35 am – 12:05 pm

Invited Lecture

Professor Giuseppe Filomeni (Danish Cancer Society Research Center, Copenhagen, DK)

GSNOR and mitochondria crosstalk: implications in cancer therapy and ageing

12:05 pm – 1:15 pm Overall discussion and future perspectives: All chairs

1:15 pm – 2:30 pm

Lunch