LISBON

INTERNATIONAL CONFERENCE ON
NITRIC OXIDE THERAPEUTICS
IN CANCER AND OTHER DISEASES

CONFERENCE PROGRAM

4th International Conference on

NITRIC OXIDE THERAPEUTICS

in Cancer and Other Diseases

7 – 9 OCTOBER 2026 | **LISBON, PORTUGAL**

International Society for Nitric Oxide and Cancer
ISNOC

WELCOME

On behalf of the International Society on Nitric Oxide and Cancer (ISNOC), it is our great pleasure to welcome you to the **4th International Conference on Nitric Oxide Therapeutics in Cancer and Other Diseases**.

This meeting brings together researchers, clinicians, and experts from biochemistry, biology, chemistry, pharmacology, engineering, and related fields to discuss the latest advances in nitric oxide (NO) therapeutics. The programme spans molecular and cellular mechanisms, next-generation NO donors and delivery systems, therapeutic applications in cancer, inflammatory-related diseases and other indications, as well as the therapeutic potential of other gasotransmitters.

We would like to thank all participants for being part of this year's edition. We hope you enjoy the scientific programme and the discussions, and that the meeting provides plenty of opportunities to exchange ideas, start new collaborations, and share some enjoyable moments together in Lisbon.

COMMITTEES

LOCAL ORGANIZERS



Moisés Pinto
IST, University of Lisbon, Portugal



Rosana Pinto
IST, University of Lisbon, Portugal

With the support of the Portuguese Chemical Society

ISNOC EXECUTIVE COMMITTEE



Benjamin Bonavida
University of California, Los Angeles, CA, USA



Khosrow Kashfi
City University of New York School of Medicine, USA



Sharon Glynn
National University of Ireland Galway, Ireland



Jordi Muntanè
IBIS, University of Seville, Spain



Giuseppe Filomeni
Danish Cancer Society Research Center, Copenhagen, Denmark



Lucia Morbidelli
University of Siena, Italy



Stephanie Plenchette
University of Burgundy, EPHE PSL, Dijon, France



Valentina Rapozzi
University of Udine, Italy

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SCIENTIFIC PROGRAM

DAY 1 — WEDNESDAY, 7 OCTOBER

Lisbon **14:00 – 19:30**

13:15

Welcome Coffee & Registration
Conference Venue: Fundação da Cidade de Lisboa
Address: Campo Grande 380, 1700-097 Lisboa



14:00

OPENING CEREMONY

Welcome addresses by Conference Chairs, President of ISNOC, Representative of the Liga Portuguesa Contra o Cancro, SPQ President, CERENA President

14:30

INTRODUCING THE BBA JOURNALS — ELSEVIER AND THE SPECIAL ISSUE

Marina Holz - New York Medical College, Valhalla, New York (USA)

14:35

PLENARY LECTURE

(30 minutes presentation + 10 minutes for questions)

Khosrow Kashfi — *City University of New York School of Medicine (USA)*

Development of NOSH-aspirin and its potential therapeutic applications

SESSION CHAIR(S): Rosana Pinto and Moisés Pinto

15:15

SESSION 1 — NITRIC OXIDE: MOLECULAR AND CELLULAR MECHANISMS

Invited talks (20 minutes presentation + 5 minutes for questions)

Selected Talks (12 minutes presentation + 3 minutes for questions)

SESSION CHAIR(S): Sharon Glynn and Chiara Pecorari

15:15 - Christopher H. Switzer — *University of Leicester (UK)*

Oxygen Defines Chemistry: How Tumour Hypoxia Redirects Nitric Oxide into Sulfur Biology

15:40 - Hugo Pequeno Monteiro — *Universidade Federal de São Paulo (Brasil)*

Anoikis resistance in human melanoma cells is mediated by Nitric Oxide, Reactive Oxygen Species, and Focal Adhesion Kinase

15:55 - Valentina Rapozzi — *University of Udine (Italy)*

The NO–Nrf2–Hypoxia Axis: A Redox Regulatory Network Driving Resistance to Photodynamic Therapy

16:10

Coffee break + Poster Session

16:40

SESSION 1 (CONT.) — NITRIC OXIDE: MOLECULAR AND CELLULAR MECHANISMS

16:40 - Moran Benhar — *Technion – Israel Institute of Technology (Israel)*

Mechanistic insights into the regulation of cancer cell death by hydrogen sulfide and related molecules

17:05 - Gianmarco Matrullo — *University of Rome Tor Vergata (Italy)*

GSNOR Downregulation Enhances Rhabdomyosarcoma Proliferation Through CDK4-Mediated Retinoblastoma Hyperphosphorylation

17:20- Daniela Ramos Tuzzi — *University of São Paulo (Brasil)*

Dinitrosyl Iron Complexes as Reactive Sources of Peroxynitrite

17:35

SESSION 2 — NO THERAPEUTIC APPLICATIONS: CANCER AND IMMUNOTHERAPY

Invited talks (20 minutes presentation + 5 minutes for questions)
Selected Talks (12 minutes presentation + 3 minutes for questions)
SESSION CHAIR(S): Giuseppe Filomeni and Ciara O'Neill

17:35 - Antonio Rodriguez-Ariza — *Instituto Maimónides de Investigación Biomédica de Córdoba (IMIBIC) (Spain)*
Nitric oxide-driven regulation of tumor metabolism and immune resistance in cancer

18:00

FLASH PRESENTATIONS — YOUNG RESEARCHERS SESSION

(6 minutes presentation + 2 minutes for questions)

18:00 - Tamara Lisa Weidemeier — *University of Sevilla (Spain)*
Nitric oxide as a context-dependent modulator of therapeutic responses in TNBC and HCC

18:08 - Margherita Galanti — *University of Rome Tor Vergata (Italy)*
GSNOR deficiency promotes DNA damage and replication stress in rhabdomyosarcoma

18:16 - Leonie Thomas — *University of Luxembourg (Luxembourg)*
A Next-Generation Sequencing Transcriptomic Signature Associated with iNOS Expression in Triple-Negative Breast Cancer

18:24 - Letizia Incampo — *Danish Cancer Institute (Denmark)*
Regulation and impact of GSNOR loss in breast cancer progression

18:35

Poster Session & Networking Drinks

60 min

DAY 2 — THURSDAY, 8 OCTOBER

Lisbon **09:00 – 18:25**

09:00 — **Welcome to Day 2**

09:15

PLENARY LECTURE

(30 minutes presentation + 10 minutes for questions)

David Wink — *National Cancer Institute, NIH, Frederick (USA)*

The spatial analysis of the tumor microenvironment elucidates mechanisms of immunosuppression by NOS2 and COX2, and their roles in cancer stemness and metastasis, facilitated by the specific architecture of cellular niches.

SESSION CHAIR: Khosrow Kashfi and Gianmarco Matrullo

09:55

SESSION 2 (CONT.) — NO THERAPEUTIC APPLICATIONS: CANCER AND IMMUNOTHERAPY

SESSION CHAIR(S): Khosrow Kashfi and Gianmarco Matrullo

09:55 - Stefan Chlopicki — *Jagiellonian University in Kraków (Poland)*

Methyl-nicotinamide (MNA) and vitamin K — two vitamins improving NO-dependent endothelial function; implications for cancer treatment

10:20 - Amir Abdo — *University of Galway (Ireland)*

The NO–Macrophage Axis in Triple-Negative Breast Cancer: Immunometabolic Reprogramming, EMT, and Pre-Metastatic Niche Formation

10:35 — **Coffee break + Poster Session**

11:05

SESSION 2 (CONT.) — NO THERAPEUTIC APPLICATIONS: CANCER AND IMMUNOTHERAPY

11:05 - Sharon Glynn — *University of Galway (Ireland)*

Nitric Oxide regulation of Human Endogenous Retrovirus K in Triple Negative Breast Cancer: Implications for Metastatic Progression and Patient Outcomes

11:20 - Ciara O'Neill — *University of Galway (Ireland)*

Liquid biopsy in prostatic disease assessment: potential roles for iNOS and HERV-K

11:35

SESSION 3 — NO THERAPEUTIC APPLICATIONS: ACUTE AND CHRONIC INFLAMMATORY-RELATED DISEASES

Invited talks (20 minutes presentation + 5 minutes for questions)
Selected Talks (12 minutes presentation + 3 minutes for questions)
SESSION CHAIR(S): Lucia Morbidelli and Valentina Rapozzi

11:35 - Alice Nova — *Fondazione IRCCS San Gerardo dei Tintori, Monza (Italy)*
Nitric oxide applications in critical care setting

12:00 - Asghar Ghasemi — *Shahid Beheshti University of Medical Sciences (Iran)*
NO in metabolic/chronic disease contexts, including the role of nitric oxide in type 2 diabetes

12:15 - Olga Pechanova — *Centre of Experimental Medicine, Slovak Academy of Sciences (Slovakia)*
ACE2 inhibition elicits distinct pulmonary NO-signaling in healthy and cardiometabolic disease models

12:30

Lunch Break

14:00

SESSION 4 — NO THERAPEUTIC APPLICATIONS: OTHER INDICATIONS

Invited talks (20 minutes presentation + 5 minutes for questions)
Selected Talks (12 minutes presentation + 3 minutes for questions)
SESSION CHAIR(S): Lucia Morbidelli and Valentina Rapozzi

14:00 - João Laranjinha — *Universidade de Coimbra (Portugal)*
Nitric Oxide-Mediated Redox Cycles Regulating Neurovascular Coupling to Improve Cognition in Neurodegeneration

14:25 - Miriam Cortese-Krott — *Eberhard Karls Universität Tübingen (Germany)*
The role of eNOS in kidney function

14:50 - Anna Grochot-Przeczek — *Jagiellonian University (Poland)*
The role of KEAP1 in nitric oxide biology – focus on ageing

15:05 - Chiara Pecorari — *Danish Cancer Institute (Denmark)*
NO-rules: nitrosylation-driven metabolic reprogramming redefines paradigms in cancer

15:20 - Mathilde Lepoitevin — *Ecole Normale Supérieure, Institute of Porous Materials of Paris (France)*
Chemodynamic/nitric oxide therapy in chronic wound healing and antibiotic-resistant infection management

15:35

SESSION 5 — EXPANDING THE THERAPEUTIC LANDSCAPE OF GASOTRANSMITTERS BEYOND NITRIC OXIDE

Invited talks (20 minutes presentation + 5 minutes for questions)

Selected Talks (12 minutes presentation + 3 minutes for questions)

SESSION CHAIR(S): Stéphanie Plenchette and Jordi Muntané

15:35 - Roberto Motterlini — *INSERM U955, University Paris-Est (France)*

Carbon Monoxide: A Surprising Strategy Against Obesity

16:00 - Helena Vieira — *Universidade Nova de Lisboa (Portugal)*

The molecular mechanism of carbon monoxide-induced neuroprotection: targeting glial cells and red blood cells

16:25

Coffee break + Poster Session

17:00

SESSION 5 (CONT.) — EXPANDING THE THERAPEUTIC LANDSCAPE OF GASOTRANSMITTERS BEYOND NITRIC OXIDE

SESSION CHAIR(S): Stéphanie Plenchette and Jordi Muntané

17:00 - Vincenzo Brancaleone — *University of Basilicata (Italy)*

Gasotransmitters and vascular disease: the inflammatory perspective

17:25 - Roberta Albino dos Reis — *Federal University of ABC (Brazil)*

Advanced Hydrogel Platforms for Tuneable NO and/or H_2S Delivery: A New Frontier in Keratinocyte Modulation

17:40 - Martina Cebova — *Centre of Experimental Medicine, Slovak Academy of Sciences (Slovakia)*

Distinct nitric oxide and carbon monoxide signaling is associated with cardioprotection after myocardial infarction

17:55

FLASH PRESENTATIONS II — YOUNG RESEARCHERS SESSION

(6 minutes presentation + 2 minutes for questions)

17:55 – Emma Levieux — *EPHE-PSL (France)*
Biotin-switch technique/proximity ligation assay-based method for in situ analysis of S-nitrosylated proteins

18:03 – Elayne Neirynck — *EPHE-PSL (France)*
Development of a sequential therapy — docetaxel/cisplatin, then glyceryl trinitrate — for the treatment of triple-negative breast cancer: Role of the tumour necrosis factor superfamily

18:11 – Marie Siegle — *University of Galway (Ireland)*
The effect of nitric oxide on TNBC proliferation, senescence and apoptosis in 2D and 3D

18:19 – Sarah Larroudé — *Tampere University (Finland)*
SNAP-loaded poly-lactic-acid honeycomb membranes as nitric oxide releasing materials under light stimulus

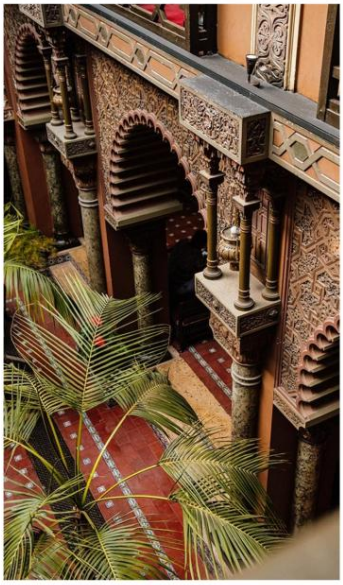
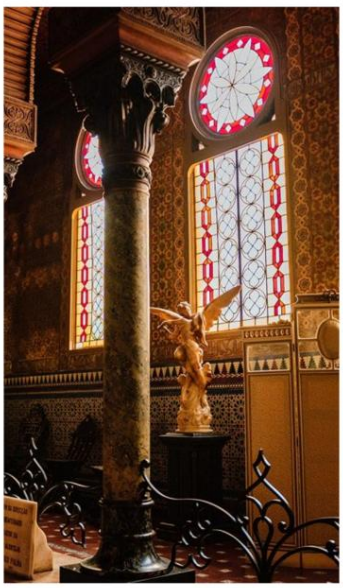
18:27 - Eronildo Alves Pinto Junior — *University of Campinas (Brazil)*
Antiproliferative and antimigratory activity of S-nitrosoglutathione (GSNO) in skin cancer cell lines

18:25

End of Day 2

20:30

Conference Dinner
Restaurant Casa do Alentejo
Address: R. das Portas de Santo Antão 58, 1150-268 Lisboa



DAY 3 — FRIDAY, 9 OCTOBER

Lisbon **09:00 – 12:30**

09:00 — **Welcome to the Last Day**

09:15

PLENARY LECTURE

(30 minutes presentation + 10 minutes for questions)

Mark Schoenfisch — *University of North Carolina at Chapel Hill (USA)*

Nitric oxide-releasing therapeutics for treating chronic respiratory infections

SESSION CHAIR(S): Rosana Pinto and Moisés Pinto

09:55

SESSION 6 — NEXT-GENERATION NITRIC OXIDE DONORS AND DELIVERY SYSTEMS

Invited talks (20 minutes presentation + 5 minutes for questions)

Selected Talks (12 minutes presentation + 3 minutes for questions)

SESSION CHAIR(S): Moisés Pinto and Mathilde Lepoitevin

09:55 - Amedea Seabra — *Federal University of ABC (Brazil)*

Nitric Oxide releasing nano/biomaterials for biomedical applications

10:20 - Xuewei Wang — *Virginia Commonwealth University (USA)*

Long-Term Controlled Release of Nitric Oxide from Stabilized Liquid Formulations of S-Nitrosothiols

10:35 — **Coffee break**

11:05

SESSION 6 (CONT.) — NEXT-GENERATION NITRIC OXIDE DONORS AND DELIVERY SYSTEMS

11:05 - Russell Morris — *University of St Andrews (UK)*

Porous Materials for NO delivery: From "Microporous Water" to extruded MOF-Polymer Composites for Mitigation of Complications Associated with Catheterisation

11:30 - Tanveer Tabish — *University of Oxford (UK)*

Stimuli-responsive graphene nanoplatforms for targeted nitric oxide delivery in cardiovascular therapeutics

11:45 - Maytê dos Santos Toledo — *Federal University of ABC (Brazil)*

Nanoencapsulation Strategies for Redox Modulation and Nitric Oxide Delivery: Selective Cytotoxicity in Melanoma Models

12:00	**Lifetime Achievement Award; Announcement of the new ISNOC President**
12:15	**CLOSING REMARKS & AWARDS FOR FLASH AND POSTER PRESENTATIONS** *Conference Chairs, ISNOC President, BBA Elsevier*
12:30	**End of the Conference**
15:00 – 17:00	**Boat Tour on the Tagus River** Address: Doca do Bom Sucesso, 1400-038 Lisboa



Program subject to change. All times are local (Lisbon, GMT).

POSTER SESSIONS

All posters must be on display during both scheduled poster sessions, on Wednesday and Thursday. They must be taken down at the end of the day on Thursday.

1	*The complex NOS2-NOX4-GSNOR regulates metastasis and angiogenesis in colon cancer cells.* **Ana Caroline S. Teodoro**, Ana I.S. Moretti, Caroline Alves, Mariana L. Stein, Nicolas S. dos Anjos, Paulo V. Sousa, Arnold Stern, Hugo P. Monteiro
2	*Investigating NO-mediated activation of HERV-K in gastrointestinal cancers* **Xueer Yang**, C.E. O'Neill, M.E. Siegle, S. Hynes, S.A. Glynn
3	*Nitric Oxide-Based Nano-immunotherapy for Overcoming Tumor Resistance* **Mai Ho**, B. Bonavida
4	*NO Donors as Modulators of Tumor Hypoxia and Immunotherapy Resistance* **Ryan McWhorter**, B. Bonavida
5	*The crosstalk between Nitric Oxide and Hydrogen Sulfide in nutrient deprivation-induced quiescence and 5-Fluorouracil-induced chemoresistance in CRC.* **Paulo Vinicius de Sousa**, I. Ribeiro, A. Teodoro, H.P. Monteiro
6	*A compartmentalised electrochemical platform for quantitative assessment of NO-scavenging biomaterials and therapeutics* **Godspower Tochukwu Isaac**, A.M. Alsharabasy, S. Glynn, AS. Pandit
7	*Recovery of vascular function by zofenopril in obese Zucker diabetic fatty rats* S. Cacanyiova, E. Saman, A. Berenyiova, M. Majzunova, V. Soke, **Martina Cebova**
8	*Unlocking neuroprotective effect of carboxyhemoglobin (COHb) in Parkinson's disease: impact on erythrocytes* **Margarida Pereira**, H. Vieira
9	*Preventing Cardiovascular Intervention Complications with Metal-Organic Framework Nitric Oxide Releasing Catheters* **Morven J. Duncan**, E. M. Coghill, A. Arshad, P. W. F. Hadoke, I. L. Megson, R. E. Morris
10	*Dual Gasotransmitter Delivery from a Ti-MOF: First Report of Combined NO and H2S Adsorption and Release* **Nélida Almeida,** M. Marques, C .Serre, I. Ribeiro, M. L. Pinto, R.V. Pinto, J. Pires
11	*An Fe-MOF-Based Dual-Delivery Platform for Combined Nitric Oxide Gas Therapy and 5-Fluorouracil Chemotherapy* **João Rego**, J. Pires, C. Serre, M. L. Pinto, R. V. Pinto