DIJON 20 25

Programme

9th International Workshop on Nitric Oxide and Cancer Special focus on Inflammation and Therapeutics (September, 8th-10th, 2025)

Maison des Sciences de l'Homme, Université de Bourgogne Europe, Dijon

MONDAY, 8th SEPTEMBER 2025

9h15-10h00 - Registration & coffee

10h00-10h15 - Welcome and opening remarks

Local organizers - ISNOC

Pr. Vincent Thomas – President of Université Bourgogne Europe

Pr. François Ghiringhelli – Director of Center for Translational and Molecular Medicine (CTM)

10h15-10h30 - Lifetime achievement award

Pr. Benjamin Bonavida

Introduction of Awardee: Pr. Khosrow Kashfi

 <u>SESSION 1</u> - NO in tumor: from dimensional distribution to therapeutic strategies and clinic Chairs: Sharon Glynn and Katrina Miranda

10h30-11h15 - David A. Wink - National Cancer Institute, NIH, Frederick (MD, USA)

Keynote Lecture: Spatial geography of NOS2 and COX2 in the tumor microenvironment reveal aches that drive poor outcome

11h15-11h40 - Timothy R. Billiar - University of Pittsburgh (PA, USA)

NOS2-COX2 Inhibition Potentiates the Anti-tumor Potency of Checkpoint Inhibitors in Hepatocellular Cancer

11h40-12h05 - Jenny C. Chang - Houston Methodist Res. Institute (TX, USA)

Obesity, Metabolism, Cancer and Nitric oxide

General discussion

12h30-13h55 - Lunch Break

SESSION 2 - Control of inflammatory stress in tumor: new therapeutic targets

Chairs: Stéphanie Plenchette and Lucia Morbidelli

13h55-14h20 - Moran Benhar - Technion Israel Institute of Technology, Haifa (Israel)

Molecular mechanistic insights into reactive sulfur species mediated protection from inflammatory cell death

14h20-14h45 – Csaba Szabo – University of Fribourg (Switzerland)

Endogenously produced hydrogen sulfide supports the function of cancer cells

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14h45-15h10 – Stéphanie Solier – Institut Curie, Paris (France)
Copper and plasticity
15h10-15h20 – Sharon Glynn – University of Galway (Ireland)
Presentation of the NO-CANCER-NET - Doctoral Network - Marie Sklodowska-Curie Actions (MSCA)
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15h20-15h30 – Young investigator session: flash poster presentations

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Letizia Incampo (Poster 1) – Danish Cancer Institute, Copenhagen (Denmark)

Mathew Choaji (Poster 2) – Trinity College Dublin (Ireland)

Leonie Thomas (Poster 3) – University of Luxembourg (Luxembourg)

Elayne Neirynck (Poster 4) – CTM, EPHE-PSL, Dijon (France)
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15h30-16h00 - Coffee Break

SESSION 3 - Control of thiol-based redox signaling

Chairs: Moran Benhar and Salvatore Rizza

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16h00-16h25 – Douglas D. Thomas – University of Illinois Chicago (IL, USA)

"NO Trespassing" how nitric oxide hijacks non-heme iron proteins to control the epigenome

16h25-16h50 – Christopher Switzer – University of Leicester (UK)

Oxidative Signalling Mechanisms in Tumour Hypoxia

16h50-17h15 – Dennis Stuehr – Lerner Research Institute, Cleveland (OH, USA)

Nitric oxide and hypoxia regulation of heme protein functions and potential role in cancer
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17h15-17h25 - Young investigator session: flash poster presentations

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Xiling Song (Poster 5) – Institut des Matériaux Poreux de Paris (France)
Thenesia Govender (Poster 6) – National Research Council of Italy (Italy)
Erna Tintor (Poster 7) – University of Udine (Italy)
Godspower Isaac (Poster 8) – University of Galway (Ireland)
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■ 17h25-18h25 - POSTER SESSION

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19h15-20h15 – Wine tasting at "Ducal kitchens – Palace of the Dukes and States of Burgundy"

20h30 – DINNER at the "Central restaurant – Hotel IBIS Styles Dijon Central"
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TUESDAY, 9th SEPTEMBER, 2025

 <u>SESSION 4</u> - NO in cancer and beyond: tumor microenvironment, immune response and metabolism Chairs: Benjamin Bonavida and Giuseppe Filomeni

8h30-8h55 – Katrina Miranda – University of Arizona, Tucson (AZ, USA)

Impact of Exogenous and Endogenous Production of Nitroxyl in Cancer Cells

8h55-9h20 - Emma Creagh - Trinity College Dublin (Ireland)

Inflammatory factors affecting TNBC tumour and infiltrating immune cell phenotype & function

9h20-9h45 - Erika M. Palmieri - National Cancer Institute, NIH, Frederick (MD, USA)

Metabolic reprogramming of Tumor Microenvironment by Nitric Oxide

9h45-10h10 - Csaba Szabo - University of Fribourg (Switzerland)

Hydrogen cyanide, the fourth gasotransmitter exerts metabolic and tumor-cell-supporting roles in hepatoma cells

10h10-10h40 - Coffee Break

10h40-11h10 - Young investigator session: short talks

Chiara Pecorari – Danish Cancer Institute, Copenhagen (Denmark)

Thomas Morin – CTM, EPHE-PSL, Dijon (France)

Marta Ballester Martinez – Danish Cancer Institute Copenhagen (Denmark)

<u>SESSION 5</u> - Angiogenesis, endothelial dysfunction and NO

Chairs: Lucia Morbidelli and Jordi Muntané

11h10-11h35 – Jean-Philippe Gratton – University of Montréal (QC, Canada)

Regulation of normal and pathological angiogenesis by endothelial nitric oxide synthase (eNOS)

11h35-12h00 – **Valérie Schini-Kerth** – University of Strasbourg (France)

Sodium-glucose co-transporter 2: A novel therapeutic target in endothelial senescence and dysfunction promoting cardiovascular disease

12h00-12h25 - Miriam M. Cortese-Krott - Heinrich Heine University Dusseldorf (Germany)

The role of NO/sGC pathway in erythropoiesis

12h30-14h00 - Lunch Break

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14h00-14h10 - Young investigator session: flash poster presentations

Elena Maresca (Poster 9) – Danish Cancer Institute, Copenhagen (Denmark)

Tamara Weidemeier (Poster 10) – Institute of Biomedicine of Seville (IBiS) (Spain)

Monika Migdalek (Poster 11) – University of Siena (Italy)

Maria Siegle (Poster 12) – University of Galway (Ireland)

SESSION 6 – NO, cancer development and progression

Chairs: Stéphanie Plenchette and Emma Creagh

14h10-14h35 - Maria Clara Franco - FIU Center for translational science (FL, USA)

The Tumorigenic Role of Nitrated Proteins in Cancer

14h35-15h00 – **Jordi Muntané** – Institute of Biomedicine of Seville (IBiS) (Spain)

S-nitrosylation signature related to Sorafenib resistance in liver cancer cells

15h00-15h25 – **Giuseppe Filomeni** – Danish Cancer Institute, Copenhagen (Denmark)

Dual cysteines switches: How NO and H₂O₂ selectively tune TRAP1 oncogenicity

15h25-15h55 - Young investigator session: short talks

Ciara E. O'Neill – University of Galway (Ireland)

Gianmarco Matrullo – University of Rome "Tor Vergata" (Italy)

Rosana V. Pinto – University of Lisbon (Portugal)

15h55-16h15 - Coffee Break

SESSION 7 - Novel therapeutic considerations in NOS, NO delivery & drugs Part 1

Chairs: Khosrow Kashfi and Giuseppe Filomeni

16h15-16h40 – **Benjamin Bonavida** – University of California, Los Angeles (CA, USA)

Does iNOS/NO facilitates immune evasion of cancer?

16h40-17h05 – Thomas Sauter – University of Luxembourg (Luxembourg)

Computational drug sensitivity prediction

17h05-17h30 - Aryan Farahani - University of Medical Sciences, Tehran (Iran)

Challenging the Paradigm: Constitutive Expression of iNOS and the Case for Revisiting NOS Nomenclature

■ 17h30-18h25 - <u>POSTER SESSION</u>

19h30 - Gala DINNER at "Restaurant La Closerie - Maison Philippe Le Bon"

WEDNESDAY, 10th SEPTEMBER, 2025

 <u>SESSION 8</u> - Novel therapeutic considerations in NOS, NO delivery & drugs – Part 2

Chairs: Valentina Rapozzi and Thomas Sauter

9h00-9h25 – Christian Serre – Institut des Matériaux Poreux de Paris (France)

Biocompatible Metal-Organic Frameworks Gasotransmitters for Wound Healing and Beyond

9h25-9h50 – **Isabelle Malfant** – Laboratoire de Chimie de Coordination (France)

Nitric oxide Photorelease - Coordination Chemistry and Therapeutic Perspectives

9h50-10h15 - Greta Varchi - National Research Council of Italy (Italy)

Targeting SMYD3-driven epigenetic pathways in cancer chemoresistance and stemness: advancing combination therapy strategies

10h15-10h45 - Coffee Break

10h45-11h10 – In-Kyu Park – Chonnam National University (Rep. of Korea)

Stimuli-Responsive Nanocarriers Enable Controlled Nitric Oxide Delivery to Reprogram Tumor Immunity and Amplify Therapeutic Impact

Round-table discussion – "NO, Tumor Microenvironment Regulation, and Tumor-Specific Targeting: Challenges and Future Directions"

Awards & concluding remarks

12h00 - END OF MEETING