



Ecole Pratique des Hautes Etudes  
INSERM, University of Burgundy



UCLA  
Jonsson Comprehensive Cancer Center

## **First International Conference on Nitrosylation In Oncology and Immunology**

February 2-3, 2012  
*Dijon, France*

**Jean-François Jeannin**  
Ecole Pratique des Hautes Etudes  
INSERM  
University of Burgundy

**Benjamin Bonavida**  
Jonsson Comprehensive Cancer Center  
David Geffen School of Medicine  
University of California at Los Angeles

## SPEAKERS

**BENHAR Moran** - *Israel Institute of Technology, Haifa, Israel*  
**BONAVIDA Benjamin** - *University of California, Los Angeles, USA*  
**CHEN Yu-Ju** - *Institute of Chemistry, Academia Sinica, Taiwan*  
**GASTON Benjamin** - *University of Virginia, Charlottesville, USA*  
**GRATTON Jean-Philippe** - *Université de Montreal, Montreal, Canada*  
**ISCHIROPOULOS Harry** - *University of Pennsylvania, Philadelphia, USA*  
**KASHFI Khosrow** - *University of New York, New York, USA*  
**KEEFER Larry** - *National Cancer Institute, Frederick, Maryland, USA*  
**LANCASTER Jack** - *University of Alabama, Birmingham, USA*  
**LEON Lissbeth** - *Ecole Pratique des Hautes Etudes, Dijon, France*  
**LIU Limin** - *University of California, San Francisco, USA*  
**MARSHALL Harvey** - *Duke University, Durham, USA*  
**MARTINEZ-RUIZ Antonio** - *Instituto de Investigación Sanitaria Princesa, Madrid, Spain*  
**MONTEIRO Hugo** - *Universidade Federal de São Paulo, São Paulo, Brazil*  
**MUTUS Bulent** - *University of Windsor, Windsor, Canada*  
**RAO Chinthalapally** - *University of Oklahoma, Oklahoma, USA*  
**ROJANASAKUL Yon** - *West Virginia University, Morgantown, USA*  
**WINK David** - *National Cancer Institute, Bethesda, USA*

## CHAIRS

**BETTAIEB Ali** - *Ecole Pratique des Hautes Etudes, Dijon, France*  
**BONAVIDA Benjamin** - *University of California, Los Angeles, USA*  
**CHEN Yu-Ju** - *Institute of Chemistry, Academia Sinica, Taiwan*  
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Laboratoire Novartis  
Merck  
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# PROGRAM

### **New NO donors and S-nitrosylation**

KASHFI Khosrow - *University of New York, New York, USA*

Nitric oxide-releasing hybrid drugs target cellular processes through S-nitrosylation

KEEFER Larry - *National Cancer Institute, Frederick, Maryland, USA*

Thiol modification by pharmacologically active agents of the diazeniumdiolate class

### **S-nitrosylation, molecular targets, structural and functional effects**

ISCHIROPOULOS Harry - *University of Pennsylvania, Philadelphia, USA*

Structural and functional diversity of protein S-nitrosylation

BENHAR Moran - *Israel Institute of Technology, Haifa, Israel*

Proteomic strategies for identifying S-nitrosylated targets of thioredoxin

MUTUS Bulent - *University of Windsor, Windsor, Canada*

Does S-nitrosylation of neutral sphingomyelinase control plasma membrane cholesterol in cancer cells?

CHEN Yu-Ju - *Institute of Chemistry, Academia Sinica, Taiwan*

Decoding the Personalized Tissue S-Nitrosoproteome in Human Colorectal Cancer

### **S-nitrosylation, epithelial to mesenchymal transition and tumor cell death**

LEON Lissbeth - *Ecole Pratique des Hautes Etudes, Dijon, France*

GTN sensitises tumor cells to apoptosis: implication of S-nitrosylation

ROJANASAKUL Yon - *West Virginia University, Morgantown, USA*

S-Nitrosylation of Caveolin-1 Regulates Lung Carcinoma Cell Anoikis

BONAVIDA Benjamin - *University of California, Los Angeles, USA*

Inhibition of Epithelial to Mesenchymal Transition (EMT) in Cancer by NO: Pivotal Roles of Nitrosylation of NF- $\kappa$ B, YY1 and Snail

### **S-nitrosylation, mutagenesis, carcinogenesis, tumor promotion and tumor growth**

LIU Limin - *University of California, San Francisco, USA*

S-nitrosylation from GSNOR Deficiency Promotes Mutagenesis and Hepatocarcinogenesis

WINK David - *National Cancer Institute, Bethesda, USA*

The role of discrete levels of NO, nitrosation and iNOS in tumor promotion in Cancer

GRATTON Jean-Philippe - *Université de Montreal, Montreal, Canada*

eNOS and nitric oxide signaling at endothelial cell junctions : implications in tumor angiogenesis

MONTEIRO Hugo - *Universidade Federal de São Paulo, São Paulo, Brazil*

A role for nitric oxide and for inducible nitric oxide synthase in tumor biology

### **S-nitrosylation and tumor risk, prevention and therapy**

GASTON Benjamin - *University of Virginia, Charlottesville, USA*

S-nitrosylation and lung cancer risk

RAO Chinthalapally - *University of Oklahoma, Oklahoma, USA*

Targeting iNOS for Cancer Prevention and Treatment: Where we stand?

### **S-nitrosylation in immune response**

MARSHALL Harvey - *Duke University, Durham, USA*

Regulation of the Immune Response by S-nitrosylation of NF-Kappa B

MARTINEZ-RUIZ Antonio - *Instituto de Investigación Sanitaria Princesa, Madrid, Spain*

Thiol redox proteomics and S-nitrosylation in the immune synapse

## Time Table

### Thursday February 2, 2012

9:00 am - 9:15 am JEANNIN Jean-François – **Welcome remarks**

#### **Session 1: New NO donors and S-nitrosylation**

9:15 am - 10:45 am *Chairs: D. Wink, J. Lancaster*

9:15 am - 10:00 am KASHFI Khosrow, Nitric oxide-releasing hybrid drugs target cellular processes through S-nitrosylation

10:00 am - 10:45 am KEEFER Larry, Thiol modification by pharmacologically active agents of the diazeniumdiolate class

10:45 am - 11:00 am Coffee break

#### **Session 2: S-nitrosylation, molecular targets, structural and functional effects**

11:00 am - 4:00 pm *Chairs: A. Bettaieb, Y. Rojanasakul*

11:00 am - 11:45 am ISCHIROPOULOS Harry, Structural and functional diversity of protein S-nitrosylation

11:45 am - 12:30 pm BENHAR Moran, Proteomic strategies for identifying S-nitrosylated targets of thioredoxin

2:30 pm - 3:15 pm MUTUS Bulent, Does S-nitrosylation of neutral sphingomyelinase control plasma membrane cholesterol in cancer cells?

3:15 pm - 4:00 pm CHEN Yu-Ju, Decoding the Personalized Tissue S-Nitrosoproteome in Human Colorectal Cancer

4:00 pm - 4:15 pm Coffee break

#### **Session 3: S-nitrosylation, epithelial to mesenchymal transition and tumor cell death**

4:15 pm - 6:30 pm *Chairs: L. Keefer, Y-J. Chen*

4:15 pm - 5:00 pm LEON Lissbeth, GTN sensitises tumor cells to apoptosis: implication of S-nitrosylation

5:00 pm - 5:45 pm ROJANASAKUL Yon, S-Nitrosylation of Caveolin-1 Regulates Lung Carcinoma Cell Anoikis

5:45 pm - 6:30 pm BONAVIDA Benjamin, Inhibition of Epithelial to Mesenchymal Transition (EMT) in Cancer by NO: Pivotal Roles of Nitrosylation of NF-kB, YY1 and Snail

### Friday February 3, 2012

#### **Session 4: S-nitrosylation, mutagenesis, carcinogenesis, tumor promotion and tumor growth**

9:00 am - 12:15 pm *Chairs: K. Kashfi, B. Bonavida*

9:00 am - 9:45 am LIU Limin, S-nitrosylation from GSNOR Deficiency Promotes Mutagenesis and Hepatocarcinogenesis

9:45 am - 10:30 am WINK David, The role of discrete levels of NO, nitrosation and iNOS in tumor promotion in Cancer

10:30 am - 10:45 am Coffee break

10:45 am - 11:30 am GRATTON Jean-Philippe, eNOS and nitric oxide signaling at endothelial cell junctions : implications in tumor angiogenesis

11:30 am - 12:15 pm MONTEIRO Hugo, A role for nitric oxide and for inducible nitric oxide synthase in tumor biology

#### **Session 5: S-nitrosylation and tumor risk, prevention and therapy**

2:15 pm - 3:45 pm *Chairs: J-P. Gratton, A. Martínez-Ruiz*

2:15 pm - 3:00 pm GASTON Benjamin, S-nitrosylation and lung cancer risk

3:00 pm - 3:45 pm RAO Chinthalapally, Targeting iNOS for Cancer Prevention and Treatment: Where we stand?

3:45 pm - 4:00 pm Coffee break

#### **Session 6: S-nitrosylation in immune response**

4:00 pm - 5:30 pm *Chairs: L. Liu, C. Rao*

4:00 pm - 4:45 pm MARSHALL Harvey, Regulation of the Immune Response by S-nitrosylation of NF-Kappa B

4:45 pm - 5:30 pm MARTINEZ-RUIZ Antonio, Thiol redox proteomics and S-nitrosylation in the immune synapse

5:30 pm - 6:00 pm LANCASTER Jack, Concluding remarks- Adjournment