



**COST Action BM1005**  
**Gasotransmitters: from basic science to therapeutic applications**  
**(ENOG: European Network on Gasotransmitters)**

## **Final Action Conference**

**May 2-4, 2015**

**Plaza Hotel, Athens, Greece**

**Local Organizer: Prof. Andreas Papapetropoulos**

## **PROGRAM**

### **MAY 2<sup>st</sup>**

12:00 – 14:00 Registration

14:00 – 14:15 Chairman's welcome

#### **Carbon monoxide (CO)**

Chair: G. Cirino (IT), A. Hobbs (UK)

14:15 – 14:45 Light-controlled delivery of carbon monoxide to biological systems:  
Achievements and future challenges

U. Schatzschneider (DE)

14:45 – 15:15 Heme oxygenase and carbon monoxide in stem cells  
differentiation

J. Dulak (PL)

15:15 – 15:45 Carbon monoxide and mitochondria: modulation of cell metabolism,  
redox response and cell death

H. Vieira (PT)

15:45 – 16:00 On the crosstalk between gasotransmitters: binding of NO and CO  
to the H<sub>2</sub>S-synthesizing human cystathionine β-synthase

A. Giuffrè (IT)

16:00 – 16:30 *Coffee break*



16:30 – 17:20 Post-translational mechanisms of eNOS regulation  
D. Fulton (USA)

### Special invited talk, COST Action 1203

Chair: A. Papapetropoulos (EL)

17:20 – 18:20 Redox switches in the vascular system – new on/off triggers  
A. Daiber (DE) Chair BM1203 EU-ROS

18:20 – 19:20 WG leader meeting

19:20-19:30 Attendance list signing

### MAY 3<sup>rd</sup>

### NITRIC OXIDE (NO)

Chair : I. Fleming (DE), J. Lundberg (SE)

9:30 – 10:00 Tyrosine phosphorylation of eNOS: role in regulation of NO output  
in disease

I. Fleming (DE)

10:00 – 10:30 Mechanisms of redox responses to endothelial shear stress: from  
peroxide to nitric oxide

S. Lamas (ES)

10:30 – 11:00 Shc66, endothelial function and NO

G. Camici (IT)

11:00 – 11:30 Endothelial nitric oxide synthase activation in cardioprotection

A. Andreadou (EL)

11:30 - 12:00 *Coffee break*

12:00 – 12:30 The nitrate-nitrite-NO pathway and renal function

E. Wietzberg (SE)

12:30 – 13:00 Phenotype of apo-sGC mice

P. Brouckaert (BE)

13:00 – 13:20 ESR Lecture I. Bibli (EL) eNOS phosphorylation by PYK-2 regulates  
cardioprotection

13:20 – 14:50 *Lunch*



- 14:50 – 17:00      **Management Committee Meeting**
- 17:00 – 17:30      *Coffee break*
- 17:30 - 18:30      The biology of H<sub>2</sub>S: what can we learn from the use H<sub>2</sub>S donors  
P.K. Moore (Singapore)
- 18:30 – 18:40      Attendance list signing
- 18.40 - 19.20      Sulfide Oxidation and the Generation of Reactive Sulfur  
R. Banerjee (USA)

## May 4<sup>th</sup>

### Hydrogen sulfide (H<sub>2</sub>S)

Chairs: H. Kimura (Japan), R. Banerjee (USA)

- 09:00 -09:30      Chemical Biology of the H<sub>2</sub>S and NO crosstalk  
M. Filipovic (DE)
- 09:30 -10:00      Mechanistic Chemical Perspective of Hydrogen Sulfide Signaling  
P. Nagy (HU)
- 10:00 -10:30      Chemical tools for imaging H<sub>2</sub>S in live organisms  
M. Pluth (USA)
- 10:30 -10:45      Novel lab-on-a-chip detection device for hydrogen sulfide in aqueous  
samples  
J. H. Chidlow Jr (USA)
- 10:45 -11:15      Coffee break
- Chairs: C. Szabo (USA), J. Wallace (Canada)
- 11:15 - 11:45      Role of Hydrogen Sulfide in Evolution and the Evolution of  
Hydrogen Sulfide Signaling  
K.R. Olson (USA)
- 11:45 - 12:15      Physiological roles of hydrogen sulfide and polysulfides'  
H. Kimura (Japan)
- 12:15 - 12:45      Thiol redox sensing and signalling  
P. Eaton (UK)
- 12:45 - 13:15      Role of thiosulfate on hydrogen sulfide-mediated redox signaling in  
endothelial cells  
X. Shen (USA)
- 13:15 - 13:30      Proteomic analysis of cysteine persulfides in H<sub>2</sub>S-dependent  
signalling  
S. Longen (DE)
- 13:30 - 15:00      *Lunch*



## **COST Special Lecture**

Chair: A. Papapetropoulos (EL), G. Cirino (Italy)

15:00 - 16:00 CBS Update: Structure, CBS Replacement Therapy, H<sub>2</sub>S Production  
J. Kraus (USA)

## **Pharmacology of H<sub>2</sub>S**

Chairs: F. Bouillaud (FR), M. Feelisch (UK)

16:00 - 16:30 Therapeutic potential of mitochondria-targeted hydrogen sulfide donors

M. Whiteman (UK)

16:30 - 17:00 All H<sub>2</sub>S donors are not created equal

A. Papapetropoulos (EL)

17:00 - 17.30 Urogenital tract, phosphodiesterase-5 and the hydrogen sulfide pathway

G. Cirino (IT)

17:30 - 17:45 Hydrogen sulfide donors: new potential agents in melanoma treatment

A. Ianaro (IT)

17:45 – 18:00 Attendance list signing

*Farewell*

