

NITRIC OXIDE

February 4-9, 2007
Crowne Plaza
Ventura, CA

Chair:
William C. Sessa

Vice Chair:
David A. Wink

The Nitric Oxide (NO) GRC is designed to provide chemists, biologists, cell biologists, clinicians and other scientists with state of the art knowledge on the basic structure/function relationships of NO generating systems and the biology of NO as a signaling molecule in physiological and pathophysiological states. The main strength of this meeting is the opportunity for cross disciplinary interactions and exploring new vistas in this important translational field of research.

SUNDAY

- 4:00 pm - 9:00 pm Arrival and Check-in
- 6:00 pm Dinner
- 7:30 pm - 7:40 pm Welcome / Introductory Comments by GRC Site Staff and **William C. Sessa** (Yale University)
- 7:40 pm - 9:30 pm **PLENARY LECTURES**
- Discussion Leader: **Steven S. Gross** (Cornell University Medical School)
- 7:40 pm - 8:25 pm **Salvador Moncada** (University College London)
"Role of NO in mitochondrial function"
- 8:25 pm - 8:35 pm Discussion
- 8:35 pm - 9:20 pm **Bettie Sue Masters** (University of Texas Health Sciences, San Antonio)
"Perspectives in NOS enzymology from insights derived from P450"
- 9:20 pm - 9:30 pm Discussion

MONDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm **NO GENERATING/SENSING PATHWAYS: STRUCTURE AND FUNCTION**
- Discussion Leader: **Brian Crane** (Cornell University)
- 9:00 am - 9:25 am **Elizabeth D. Getzoff** (The Scripps Research Institute)
"Structural insights into NOS function"
- 9:25 am - 9:40 am Discussion
- 9:40 am - 10:05 am **William R. Montfort** (University of Arizona)
"Nitrophorins as NO transport proteins"
- 10:05 am - 10:20 am Discussion
- 10:20 am Coffee Break / Group Photo

11:10 am - 11:35 am **Dennis Stuehr** (Cleveland Clinic Foundation)
"Mechanisms of NOS catalysis"

11:35 am - 11:50 am Discussion

11:50 am - 12:15 pm **Focco van den Akker** (Case Western Reserve University)
"Insights into NO activation of the soluble guanylyl cyclase"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm

IN VIVO CHEMISTRY AND ACTIONS OF NO: NO ADDUCTS OR CGMP SIGNALING

Discussion Leader: **Charles Lowenstein** (The Johns Hopkins Hospital)

7:30 pm - 7:55 pm **Mark Gladwin** (National Institute of Health)
"Nitrite regulation of regional blood flow control"

7:55 pm - 8:10 pm Discussion

8:10 pm - 8:35 pm **Joan Mannick** (University of Massachusetts Medical School)
"S-nitrosylation and ALS"

8:35 pm - 8:50 pm Discussion

8:50 pm - 9:15 pm **Doris Koesling** (Ruhr-Universität Bochum)
"Physiological roles of NO-cGMP-PKA pathways in vivo"

9:15 pm - 9:30 Discussion

TUESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm

UNCOUPLED NOS: IS IT REAL IN VIVO? MECHANISMS AND PATHOPHYSIOLOGY

Discussion Leader: **Kirk Pritchard** (Medical College of Wisconsin)

9:00 am - 9:25 am **Antonius Gorren** (Karl-Franzen - Universität Graz)
"Biochemistry of uncoupled NOS: Truth and fiction"

9:25 am - 9:40 am Discussion

9:40 am - 10:05 am **Jay Zweier** (The Ohio State University)
"Detection and generation of superoxide from NOS"

10:05 am - 10:20 am Discussion

10:20 Coffee Break

11:10 am - 11:35 am **Ingrid Flemming** (Klinikum der J.W. Goethe-Universität)
"Regulation of eNOS function"

11:35 am - 11:50 am Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm

CELLULAR BIOLOGY OF NO AND NOS

Discussion Leader: **David Fulton** (Medical College of Georgia)

7:30 pm - 7:55 pm **Tim Billiar** (University of Pittsburgh)
"TBA"

7:55 pm - 8:10 pm Discussion

- 8:10 pm - 8:35 pm **N Tony Eissa** (Baylor College of Medicine)
"Post-translational control of iNOS"
- 8:35 pm - 8:50 pm Discussion
- 8:50 pm - 9:15 pm **Charles Lowenstein** (The Johns Hopkins Hospital)
"NO regulation of secretion"
- 9:15 pm - 9:30 pm Discussion

WEDNESDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm **TERMINATION OF NO SIGNALING**
Discussion Leader: **Ferid Murad** (University of Texas - Houston Medical School)
- 9:00 am - 9:25 am **Harry Ischiropoulos** (University of Pennsylvania)
"Redox regulation of NO bioactivity"
- 9:25 am - 9:40 am Discussion
- 9:40 am - 10:05 am **Limin Liu** (University of California, San Francisco)
"Physiological control of SNO activity by SNO reductase"
- 10:05 am - 10:20 am Discussion
- 10:20 am Coffee Break
- 10:40 am - 11:05 am **Sharron Francis** (Vanderbilt University School of Medicine)
"cGMP phosphodiesterase control of NO signaling"
- 11:05 am - 11:20 am Discussion
- 11:20 am - 12:30 pm HOT TOPICS SESSION (YOUNG INVESTIGATORS AWARDS)
- 12:30 pm Lunch
- 1:30 pm - 4:00 pm Free Time
- 4:00 pm - 6:00 pm Poster Session
- 6:00 pm Dinner
- 7:30 pm - 8:10 pm Business Meeting
(Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair)
- 8:10 pm - 9:10 pm **Alexander Varshavsky** (California Institute of Technology)
"NO and regulated protein degradation"
- 9:10 pm - 9:25 pm Discussion

THURSDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm **ROLES OF NO IN PHYSIOLOGY AND PATHOPHYSIOLOGY**
Discussion Leader: **Gabor M. Rubanyi** (Cardium Therapeutics, Inc.)
- 9:00 am - 9:25 am **Manasi Nandi** (University College London)
"Regulation of ADMA in Health and disease"
- 9:25 am - 9:40 am Discussion
- 9:40 am - 10:05 am **James G. Tidball** (University of California, Los Angeles)
"nNOS correction of cardiomyopathy"
- 10:05 am - 10:20 am Discussion
- 10:20 am Coffee Break
- 11:10 am - 11:35 am **David Roberts** (National Institute of Health)
"Reciprocal control of angiogenesis by NO and thrombospondins"
- 11:35 am - 11:50 am Discussion
- 11:50 am - 12:15 pm **Kenneth Bloch** (Massachusetts General Hospital)

	"Role of NO in models of heart disease"
12:15 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	THERAPEUTIC STRATEGIES AIMED AT REGULATING NO BIOLOGY
	Discussion Leader: William C. Sessa (Yale University)
7:30 pm - 7:55 pm	Vijay Shah (Mayo Clinic) "Manipulation of NO in liver disease"
7:55 pm - 8:10 pm	Discussion
8:10 pm - 8:35 pm	Warren Zapol (Massachusetts General Hospital) "Inhaled NO as a Therapeutic"
8:35 pm - 8:50 pm	Discussion
8:50 pm - 9:15 pm	Jane R. Connor (Pfizer) "Role of NO in arthritis"
9:15 pm - 9:30 pm	Discussion
FRIDAY	
7:30 am - 8:30 am	Breakfast
9:00 am	Departure

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