

PROGRAM

ISN Forefronts in Nephrology

Endothelial Biology and Renal Disease: From the bench to prevention

March 16 - 19, 2006

Palisades, New York

USA

Thursday, 16 March, 2006

- 12.00-17.00 Arrival of guests and registration
- 18.00-19.00 Dinner (Hearth Dining Room)
- 19.00-19.10 Welcome (Watson Room)

Michael S. Goligorsky, New York Medical College, USA Ton Rabelink, Leiden University Medical Centre, The Netherlands

19.10-20.00 Opening Lecture

Qais Al-Awqati, Columbia University, USA

20.00-21.00 Opening Reception

Friday, 17 March, 2006

- 07.30-08.30 Breakfast
- 08.30-10.30 Session 1: Endothelial cell cycle Chair: Dr. William Sessa, Yale University, USA

Mechanisms Affecting Endothelial Hyperpermeability Victor van Hinsbergh, VU University Medical Center, Amsterdam, The Netherlands

Senescence and apoptosis Judit Haendeler, Frankfurt Medical School, Germany

Endothelial progenitor cells Hermann Haller, Hannover Medical Center, Germany

Endothelial injury and repair Ton Rabelink, Leiden University Medical Centre, The Netherlands

10.30-11.00 Coffee break

11.00-13.00 Session 2: Signaling in endothelial cells Chair: Dr Vikas Sukhatme, Beth Israel Hospital Deaconess Medical Center, USA

> Caveaolae as signaolosomes in endothelia Michael Lisanti, Albert Einstein College of Medicine, USA

Signals converging on eNOS William Sessa, Yale University, USA

Dual role of carbon monoxide in endothelial-smooth muscle signaling Alberto Nasjletti, New York Medical College, USA

Redox signalling Bradford Berk, University of Rochester, USA

13.00-14.00 Lunch

- 14.00-16.00 Hot topics and Poster Session
- **16.00–18.00** Session 3: General Mechanisms of Endothelial Dysfunction in Renal Disease Chair: Dr Bradford Berk, University of Rochester, USA

ROCKs and Endothelial Dysfunction James K. Liao, Harvard Medical School, USA

ADMA Patrick Vallance, University College London, UK

Dyslipidemia Erik Stroes, University Hospital Utrecht, The Netherlands

Endothelium in Insulin Resistance Coen Stehouwer, University Hospital Maastricht, The Netherlands

18.30-19.30 Dinner

19.30-21.00 Evening lecture: Vignettes in Vascular Biology: From Fish to Humans Vikas Sukhatme, Beth Israel Hospital Deaconess Medical Center, USA

Saturday, 18 March, 2006

- 07.30-08.30 Breakfast
- **08.30-10.30** Session 4: Clinical Markers of Endothelial Dysfunction Chair: Dr Christopher Wilcox, Georgetown University Medical Center, USA

Surrogate Markers of Endothelial Dysfunction Carmine Zoccali, CNR, Hospital of Regio Calabria, Italy

Vessel wall function measurement John E. Deanfield, Institute of Child Health, UK

Pulse pressure wave analysis: marker of endothelial dysfunction? *Gerard London, Centre Hospital Manhes, France*

Assessment of Endothelial Function via Laser Doppler Flowmetry Julian Stewart, New York Medical College, USA

10.30-11.00 Coffee break

11.00-13.00 Session 5: Endothelial organelles

Chair: Dr Alberto Nasjletti, New York Medical College, USA

Endothelial dysfunction in Fabry disease James A. Shayman, University of Michigan, USA

Regulation of mitochondrial biogenesis and function by nitric oxide Emilio *Clementi, University of Milan, Italy*

SNO modification of proteins Steven S. Gross, Cornell University, USA

Endoplasmic reticulum stress David Ron, New York University School of Medicine, USA

13:00-15:00 Lunch and Roundtable discussion - What is Endothelial Cell Dysfunction Moderators: Eberhard Ritz, Heidelberg University, Germany John E. Deanfield, Institute of Child Health, UK Coen Stehouwer, University Hospital Maastricht, The Netherlands Michael S. Goligorsky, New York Medical College, USA

15.00-16:00 Poster Discussion Session

16:00-18.00 Session 6: Arachidonic acid metabolites and their actions on endothelium Chair: Dr. Richard Johnson, University of Florida College of Medicine, USA

Renal Vascular Actions of Epoxide Metabolites: EDHF and Other Emerging Concepts John Imig, Medical College Of Georgia, USA

Vasoconstrictor Prostaglandins and Thromboxanes Mediate Endothelial Function in Oxidative Stress *Christopher Wilcox, Georgetown University Medical Center, USA*

Cytochrome P450 epoxygenase metabolites in vascular signalling *Rudi Busse, University of Frankfurt, Germany*

The cell-specific and hypoxia-regulated expression of endothelial nitric oxide synthase (eNOS) is controlled by chromatin-based mechanisms *Philip A. Marsden, University of Toronto, Canada*

18.30-20.30 Dinner

Sunday, 19 March, 2006

- 07.30-08.30 Breakfast
- **08.30-10.30** Session 7: Endothelial cross-talk with other cells Chair: Dr. Rudi Busse, University of Frankfurt, Germany

Pharmacology and Nanopharmacology in Platelet Research Marek Radomski, University of Texas, USA

Endothelial-monocyte interactions Catherine Godson, University of Dublin, Ireland

Endothelial-smooth muscle cell interactions Shaun Sandow, University of New South Wales, Australia

Endothelial-podocyte interactions Susan Quaggin, The Samuel Lunenfeld Research Institute, Canada

10.30-11.00 Coffee break

11.00-13.00 Session 8: Prevention of endothelial dysfunctions in renal diseases Chair: Dr. Eberhard Ritz, Heidelberg University, Germany

> Anti-oxidant Therapies Michael Wolin, New York Medical College, USA

Hypoxia-inducible gene expression as a potential therapeutic target *Kai-Uwe Eckardt, University of Erlangen-Nurenberg, Germany*

NO and the Control of Tissue Oxygen Use Thomas Hintze, New York Medical College, USA

Uric acid induced endothelial dysfunction: A central mechanism for Cardiorenal diseases? *Richard Johnson, University of Florida College of Medicine, USA*

13.00-14.00 Lunch