

U.S. EPA Research Meeting on Mechanisms and Health Risks of Exposure to Ambient Particulate Matter

**U.S. Environmental Protection Agency
Main Campus, Building C
Auditorium
Research Triangle Park, NC**

April 18 - 19, 2006

Agenda

Day 1 – Tuesday, April 18, 2006

8:30 – 9:00 Registration

9:00 – 9:30 Welcome and Introductions
Barbara Glenn, EPA/ORD

The STAR Grants Program and Environmental Protection
Rebecca Clark, EPA/ORD

EPA's Research Program for PM
Dan Costa, National Program Director for Air, EPA/ORD

Session I: Recent Developments Concerning the Biologic Mechanisms of PM Toxicity
Chairperson: Robert Devlin, EPA/ORD

9:30 – 9:45 Session Introduction
Robert Devlin, EPA/ORD

9:45 – 10:15 Cardiovascular Toxicity of PM: Soluble Components or Solid Particles?
Urmila Kodavanti, EPA/ORD

10:15 – 10:30 Break

10:30 – 11:00 Air Pollution and Human Vascular Dysfunction: Mechanism and Mediators
Robert Brook, University of Michigan, Ann Arbor, MI

**11:00 – 11:30 Effect of Diesel Exhaust Particulate Exposures on Endothelial Function in Humans:
The Role of Oxidative Stress**
Joel Kaufman, University of Washington, Seattle, WA

11:30 – 12:00 Cardiovascular Responses to Particulate Exposure
David Christiani, Harvard College, Boston, MA

12:00 – 1:30 Lunch

1:30 – 2:00 Coronary Effects of Combustion-Source Particulate Matter
Matthew Campen, Lovelace Respiratory Research Center, Albuquerque, NM

2:00 – 2:30 **Mechanisms of Signal Transduction Initiation in Human Airway Epithelial Cells Exposed to PM Metals**
James Samet, EPA/ORD

2:30 – 3:00 **Effects of Airborne Particles on Allergic Airway Disease**
Jack Harkema, Michigan State University, Lansing, MI

3:00 – 3:20 **Break**

3:20 – 3:50 **Health Effects of Airborne Particulate Matter and Gasses**
Kent Pinkerton, University of California, Davis, CA

3:50 – 4:30 **Panel Discussion of Session I**
Discussants will represent a variety of perspectives including air quality regulation development, risk assessment, and mechanisms research.
Robert Devlin, EPA/ORD
John Bachmann, EPA/OAR
Dan Costa, EPA/ORD
Ian Gilmour, EPA/ORD
John Vandenberg, EPA/ORD

4:30 – 5:00 **General Discussion**

5:00 **Adjourn**

Day 2 – Wednesday, April 19, 2006

8:15 – 8:45 **Registration**

Session II: **Recent Population Studies of Long-Term and Short-Term PM Exposure**
Chairperson: Lucas Neas, EPA/ORD

8:45 – 9:00 **Session Introduction**
Lucas Neas, EPA/ORD

9:00 – 9:30 **Multiple Pollutants and Risk of Cardiac and Respiratory Emergency Department Visits in Atlanta**
Paige Tolbert, Emory University, Atlanta, GA

9:30 – 10:00 **Chronic and Acute Exposure to Ambient Fine Particulate Matter and Other Air Pollutants: National Cohort Studies of Mortality and Morbidity**
Jonathan Samet, The Johns Hopkins University, Baltimore, MD

10:00 – 10:20 **Break**

10:20 – 10:50 **Long-Term Chronic Exposure to Particulate Matter and Cardiopulmonary Disease**
Francine Laden, Brigham and Women's Hospital, Boston, MA

10:50 – 11:10 **The Use of Research Findings in Standard Setting for Particulate Matter**
John Bachmann, EPA/OAR

11:10 – 11:30 **Upcoming Changes in U.S. Monitoring Networks**
Kevin Cavender, EPA/OAR

- 11:30 – 12:00** **Relating Cardiovascular Disease Risk to Ambient Air Pollutants Using Geographic Information Systems Technology and Bayesian Neural Networks: The AHSMOG Study**
Synnove Knutsen, Loma Linda University, Loma Linda, CA
- 12:00 – 1:00** **Lunch**
- 1:00 – 1:30** **Exposure to Ambient Particulate Matter and Subclinical Atherosclerosis**
Ana Diez-Roux, University of Michigan, Ann Arbor, MI
- 1:30 – 2:00** **MESA-Air: Progress on a Ten Year Study of PM Exposure, Subclinical Atherosclerosis, and Cardiovascular Disease**
Joel Kaufman, University of Washington, Seattle, WA
- 2:00 – 2:30** **Panel Discussion of Session II**
Discussants will represent a variety of perspectives including air quality regulation development, risk assessment, and epidemiological and biostatistical research.
Lucas Neas, EPA/ORD
Montserrat Fuentes, North Carolina State University
Bryan Hubbell, EPA/OAR
Mary Ross, EPA/ORD
Darrell Winner, EPA/ORD
- 2:30 – 3:00** **General Discussion**
- 3:00 – 3:15** **Closing Remarks**
- 3:15** **Adjourn**