

3:00 PM Break

3:15 PM Can We Rely on Environmental Health Research?

Chairs: *Amy Herring*, Duke University and HEI Research Committee; and *Kiros Berhane*, University of Southern California and HEI Review Committee

3:15 Reproducibility and Replicability: Definitions and What They Imply

Steve Goodman, Codirector of Meta Research Innovation Center, Stanford University

3:45 Choices and Consequences: Study Design, Data Analysis, Reporting, Interpretation

Amy Herring

4:15 Reproducibility and Air Pollution Epidemiology

Rick Burnett, Health Canada

4:45 Panel Discussion

Ila Cote, Formerly of the U.S. Environmental Protection Agency
Richard Smith, University of North Carolina–Chapel Hill

5:30 PM Free Evening

Tuesday, May 1

7:00 AM Breakfast

8:30 AM Advancing Air Quality, Global Health, and Energy Science at HEI

Part I: Progress on Air Quality and Global Health Science

Chairs: *David Eaton*, University of Washington–Seattle and chair of HEI Research Committee; and *James Merchant*, University of Iowa and chair of HEI Review Committee

8:30 Introduction of New Chair of the Research Committee

Dan Greenbaum, Health Effects Institute

8:40 Introduction to Core Research and Review Committees

David Eaton and *James Merchant*

8:55 Presentation of 2017 Walter A. Rosenblith New Investigator Awards

Annemoon van Erp, Health Effects Institute

9:05 Core Science Program: Traffic-Related Air Pollution, Low Levels of Exposure, Accountability, and Mechanisms
Rashid Shaikh, Health Effects Institute

9:25 Global Health Program: GBD MAPS, Household Air Pollution, and Ports

Katy Walker, Health Effects Institute

Part II: Launching the HEI Energy Research Program and Initial Findings

Chair: *George Hornberger*, Vanderbilt University and chair of Energy Research Committee

9:50 Introduction to the Energy Research Committee and the Program

George Hornberger

10:05 Progress on Systematic Review of the Human Health Literature Related to Unconventional Oil and Natural Gas Development

Anna Rosofsky, Health Effects Institute

10:25 Plans for Exposure Literature Review and Research Planning

Donna Vorhees, Health Effects Institute

10:45 AM Break

11:15 AM The Power of Place: Pathways to Healthy Urban Living

Chairs: *David Foster*, University of Wisconsin–Madison and HEI Research Committee; and *Frank Kelly*, King’s College London, United Kingdom, and HEI Review Committee

11:15 Keynote Speaker: Health of Urban Populations

Sandro Galea, Boston University

12:00 PM Lunch

1:00 Interrelationships Between Urban Green Space, Air Pollution, and Health

Jaime Hart, Harvard T.H. Chan School of Public Health

1:30 Healthy Urban Living: Urban Design, Transport Planning, and Travel Choice

Lawrence Frank, University of British Columbia, Canada

2:15 General Discussion

2:30 PM Conference Adjourns

HEALTH EFFECTS INSTITUTE

ANNUAL CONFERENCE

April 29–May 1, 2018

**The Drake Hotel
Chicago, Illinois**



Trusted Science • Cleaner Air • Better Health

Sunday, April 29, 2018

PRE-CONFERENCE WORKSHOP

9–11:30 AM Causal Modeling in Air Pollution Research and Policy

Chairs: *Francesca Dominici*, Harvard T.H. Chan School of Public Health and HEI Research Committee; and *Katherine Walker*, Health Effects Institute

9:00 Opening Remarks / Objectives
Katherine Walker and *Francesca Dominici*

9:10 The Many Paths to Causality
Richard Scheines, Carnegie Mellon University

9:35 Predicting and Evaluating Changes in Health Risks Caused by Changes in Air Pollution
Tony Cox, Cox Associates

10:00 Approaches to Causal Inference in Observational Studies in Medical Decision Making
Sharon-Lise Normand, Harvard Medical School and Harvard T.H. Chan School of Public Health

10:25 AM Break

10:45 Panel Discussion
Lianne Sheppard, University of Washington and HEI Review Committee, and the speakers

MAIN CONFERENCE

11:30 AM Lunch

1:00 PM Ozone: Global Pollutant, Personal Effects

Chairs: *Dan Greenbaum*, Health Effects Institute; and *Jana Milford*, University of Colorado–Boulder and HEI Review Committee

1:00 Welcome and Introduction
Dan Greenbaum

1:10 Global Dimensions to Regional Air Quality: Transboundary Transport and Climate Change
Arlene Fiore, Columbia University

1:50 Recent Studies That Will Contribute to the Ozone Health Assessment and the Setting of the Standard

1:50 Introduction
Jana Milford

2:00 Link Between Ozone and Health: Epidemiological Evidence
Mike Jerrett, University of California–Los Angeles

2:30 PM Break

2:50 Link Between Ozone and Health: Clinical Studies
Mark Frampton, University of Rochester Medical Center and HEI Review Committee

3:20 Panel Discussion: How Does Scientific Knowledge and Uncertainty Inform Attainment Efforts at Ground Level?
Philip Fine, South Coast Air Quality Management District
David Brymer, Texas Commission on Environmental Quality

3:40 General Discussion

3:55 PM Presentation of Student and Postdoc Travel Awards

Dan Greenbaum

4:00 PM Break

4:15 PM Poster Session 1

5:30 PM Break

6:00 PM Opening Reception, Dinner, and Keynote Speaker

Venkat Sumantran, Chairman, Celeris Technologies, and coauthor of *Faster, Smarter, Greener: The Future of the Car and Urban Mobility*

Monday, April 30

7:00 AM Breakfast

8:30 AM Health Effects of Traffic-Related Air Pollution: Assessing the Evidence in an Evolving and Complex World

Chairs: *Francesco Forastiere*, Lazio Regional Health Service, Italy; and *Fred Lurmann*, Sonoma Technology, Inc.

8:30 Introduction of Panel Members for the New Review of the Traffic and Health Literature
Bob O'Keefe, Health Effects Institute

8:40 Traffic-Related Air Pollution: A Moving Target
Beth Conlan, Ricardo, United Kingdom

9:10 Important Knowledge Gaps in Studying Health Effects of Traffic Exposure
Francesco Forastiere

9:30 Comments from Stakeholders and General Discussion
Kathryn Sargeant, U.S. Environmental Protection Agency
Kurt Karperos, California Air Resources Board
Matthew Spears, Engine Manufacturers Association

10:10 The New HEI Traffic and Health Studies
Hanna Boogaard, Health Effects Institute

10:15 AM Break

10:45 AM Air Pollution and Diabetes: What Is the Evidence?

Chairs: *Barbara Hoffmann*, University of Düsseldorf, Germany, and HEI Research Committee; and *Ivan Rusyn*, Texas A&M University and HEI Research Committee

10:45 Brief Introduction to the Session
Ivan Rusyn

10:50 Overview of Evidence of a Link Between Air Pollution and Diabetes
Barbara Hoffmann

11:10 Mechanistic Insights into Air Pollution and Type 2 Diabetes
Sanjay Rajagopalan, Case Western University

11:30 Long-Term Exposure to Air Pollution and Type 2 Diabetes in Adults
Robin Puett, University of Maryland

11:50 Early-Life Exposure to Air Pollution and Diabetes in Childhood
Abby Fleisch, Maine Medical Center

12:10 General Discussion

12:30 PM Lunch

1:30 PM Poster Session 2