

2006 Fellows Symposium

Exploring Frontiers in Science: Implications for Research and Policy

Agenda

Monday, April 3, 2006

7:15 am *Symposium Check-in begins*

Welcome and Opening Remarks [Grumman Auditorium]

8:10 am **Edo Pellizzari, PhD**, *Symposium Chair, Senior Fellow, Analytical and Environmental Health Sciences, RTI International*

Victoria Franchetti Haynes, PhD, *President and CEO, RTI International*

Plenary Session [Grumman Auditorium]

Plenary Chair: Edo Pellizzari, PhD

Infectious Diseases: Vaccines and Vaccine Development

8:30 – 9:15 am HIV Vaccine Development: Looking for a Solution to an 'Insoluble' Problem
Barton Haynes, MD, *Director, Human Vaccine Institute, Duke University Medical Center*

Nanotechnology: Technical Megatrend of the 21st Century

9:15 – 10:00 am Nanotechnology and Energy: Be a Scientist and Save the World
Wade Adams, PhD, *Director, Center for Nanoscale Science and Technology, Rice University*

10:00 – 10:30 am Break

Integrative, Herbal and Complementary Medicine: Herbs Seen as Natural Products – Frontiers for Therapeutic Discovery

10:30 – 11:15 am Rational versus Irrational Herbalism: Implications for Research
David Eisenberg, MD, *Director, Division for Research and Education in Complementary and Integrative Medical Therapies, Osher Institute at Harvard Medical School*

Chronic Health Disorders: Challenges and Opportunities in Confronting Chronic Diseases

11:15 – 12:00 pm Genetic Testing in Practice: The Annoying Obstacle of Evidence
Alfred Berg, MD, *Chair, Department of Family Medicine, University of Washington*

12:00 – 1:15 pm Lunch

12:45 – 1:15 pm **Keynote Address:** Federal Role in Research and Policy
The Honorable David Price, NC 4th District [pending congressional schedule]

Breakout Sessions

Infectious Diseases: Vaccines and Vaccine Development [Sunflower Room]

Session Chair: Scott Wetterhall, MD, MPH, *Senior Program Director, Health Security and Systems Research, RTI International*

1:30 – 2:10 pm The Pandemic Potential of Avian Influenza Viruses
Jackie M. Katz, MD, *Team Leader, Influenza Branch, Centers for Disease Control and Prevention*

2:10 – 2:50 pm Development of T Cell-Based Vaccines: Progress, Promise, and Reality
Kent Weinhold, PhD, *Director, Duke Center for AIDS Research, Duke University Medical Center*

2:50 – 3:05 pm Break

3:05 – 3:30 pm Vaccines: Issues of Efficacy and Effectiveness
Diane Wagener, PhD, *Director, Genomics and Statistical Genetics, RTI International*

3:30 – 4:30 pm Panel Discussion
[3:30 – 3:50 pm] Guest Panel Speaker: Cancer Vaccine Development
Samir Khleif, MD, *Principal Investigator, Vaccine Branch, Center for Cancer Research, National Cancer Institute*

Nanotechnology: Technical Megatrend of the 21st Century [Grumman Auditorium]

Session Co-Chairs: David Ensor, PhD, Senior Fellow, Aerosol Science, Nanotechnology, RTI International, and **Anthony Andrady, PhD**, Senior Research Scientist, RTI International

- 1:30 – 2:10 pm Health Implications of Nanomaterials
Günter Oberdörster, DVM, PhD, Professor of Environmental Medicine, University of Rochester
- 2:10 – 2:50 pm What's Next for Nanotechnology and the U.S. National Nanotechnology Initiative
Clayton Teague, PhD, Director, National Nanotechnology Coordination Office, Office of Science and Technology Policy, Executive Office of the President
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Nanotechnology Research and Development Initiatives at RTI International
David Ensor, PhD, Senior Fellow, Aerosol Science, Nanotechnology, RTI International
- 3:45 – 4:30 pm Panel Discussion

Integrative, Herbal, and Complementary Medicine: Herbs Seen as Natural Products – Frontiers for Therapeutic Discovery [Bellflower Room]

Session Chair: Bernadette Marriott, PhD, Vice President, Science Integration, RTI International

- 1:30 – 2:10 pm Research Findings, Gaps, and Challenges for Informed Practice
Fredi Kronenberg, PhD, Director, Rosenthal Center for Complementary and Alternative Medicine, Columbia University College of Physicians and Surgeons
- 2:10 – 2:50 pm Herbal Drugs: Quantitate Before You Medicate!
Nicholas Oberlies, PhD, Director, Natural Products Laboratory, RTI International
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Research and Regulation of Herbal Medicine: An International Perspective
Michael Smith, MR PharmS, ND, Director, Bureau of Research Development and Programs, Health Canada
- 3:45 – 4:30 pm Panel Discussion

Chronic Health Disorders: Challenges and Opportunities in Confronting Chronic Diseases [Redbud Room]

Session Chair: Kathleen Lohr, PhD, Distinguished Fellow, Health Services Research, RTI International

- 1:30 – 2:10 pm Organizing and Paying for Medical Care for Aging Boomers
Albert Siu, MD, MPH, Professor and Chair, Geriatrics and Adult Development, Chairman, Brookdale Department of Geriatrics and Adult Development, Mount Sinai School of Medicine, New York
- 2:10 – 2:50 pm Chronic Disease, New Technology, and Aging: Ethics Issues and Ambiguity
Elizabeth Heitman, PhD, Center for Biomedical Ethics and Society, Vanderbilt University Medical Center
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Chronic Disease, Aging, and the RTI International Research Portfolio
Joshua Wiener, PhD, Senior Fellow and Program Director, Aging, Disability and Long-Term Care, RTI International
- 3:45 – 4:30 pm Panel Discussion
- 4:30 – 6:00 pm **Poster Session and Reception**

Basic research is what I am doing when I don't know what I am doing. Werner Von Braun (1912-1977)

Tuesday, April 4, 2006

7:30 am Symposium Check-in

Opening Remarks and Announcements [Grumman Auditorium]

8:15 am James Chromy, PhD, *Symposium Co-Chair, Senior Fellow, Statistics, RTI International*

Plenary Session [Grumman Auditorium]

Plenary Chair: James Chromy, PhD

Environment: Global Climate

8:30 – 9:15 am Evolving Science and Policy Issues in Global Climate Change
Dina Kruger, *Director, Climate Change Division, U.S. Environmental Protection Agency*

Energy: Energy Sustainability

9:15 – 10:00 am Zero Emission Coal Technology – A Pathway to a Secure Energy Future
Joseph Strakey, PhD, *Director, Coal and Power Research and Development, U.S. Department of Energy*

10:00 – 10:30 am Break

International Health: Malaria – Science and Economic Implications

10:30 – 11:15 am Ethical Dilemmas in Malaria Control
Andrew Spielman, PhD, *Harvard School of Public Health and Center for International Development*

Democratic Governance/Political Science: Democratization in the Muslim World

11:15 – 12:00 pm Globalization and Democracy in the Muslim World
Mehran Kamrava, PhD, *Chair, Department of Political Science, California State University, Northridge*

12:00 – 1:30 pm Lunch and Poster Viewing

Breakout Sessions

Environment: Global Climate [Redbud Room]

Session Co-Chairs: Terrence Pierson, PhD, *Unit Vice President, Environmental Sciences, RTI International*, and **Brian Murray, PhD**, *Director, Center for Regulatory Economics and Policy Research, RTI International*, and *Nicholas Institute of the Environment, Duke University*

1:30 – 2:10 pm Confronting Climate Change in the U.S.: Science, Political Will and Public Policy
Peter Frumhoff, PhD, *Program Director, Global Environment, Union of Concerned Scientists*

2:10 – 2:50 pm Tradeoffs and Synergies between Terrestrial Carbon Sequestration and Other Ecosystem Services
Robert Jackson, PhD, *Professor, Department of Biology, Duke University*

2:50 – 3:05 pm Break

3:05 – 3:45 pm Economics of Greenhouse Gas Mitigation at Different Spatial and Sectoral Scales
Brian Murray, PhD, *Director, Center for Regulatory Economics and Policy Research, RTI International*, and *Nicholas Institute of the Environment, Duke University*

3:45 – 4:30 pm Panel Discussion

Energy: Energy Sustainability [Sunflower Room]

Session Co-Chairs: David Myers, PhD, *Unit Vice President, Engineering and Technology, RTI International*, and **Raghubir Gupta, PhD**, *Senior Director, Center for Energy Technology, RTI International*

- 1:30 – 2:10 pm Energy Sustainability and the North Carolina Perspective on the Challenges Ahead
Robert McMahan, Jr., PhD, *Senior Science and Technology Advisor to the Governor of North Carolina*
- 2:10 – 2:50 pm Sustainability in the Chemical and Energy Industries
Jeff Siirola, PhD, *Technology Fellow, Eastman Chemical Company*
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Development and Deployment of Next-Generation Energy Technologies at RTI International
Raghubir Gupta, PhD, *Senior Director, Center for Energy Technology, RTI International*
- 3:45 – 4:30 pm Panel Discussion

International Health: Malaria – Science and Economic Implications [Grumman Auditorium]

Session Co-Chairs: F. Reed Johnson, PhD, *Senior Fellow, Health Solutions, RTI International*, and **Subhrendu Pattanayak, PhD**, *Fellow, Environmental Health and Development, RTI International*

- 1:30 – 2:10 pm Malaria Treatment: Drugs, Resistance, and the Challenge of Actually Making It Work in Real Life
Peter Bloland, DVM, MPVM, *Center for Infectious Diseases, Centers for Disease Control and Prevention*
- 2:10 – 2:50 pm Deforestation and Malaria Risk in the Amazon Basin
Jonathan Patz, MD, MPH, *Center for Sustainability and the Global Environment, University of Wisconsin-Madison*
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Economic Epidemiology Perspectives on Malaria Prevention and Control
Subhrendu Pattanayak, PhD, *Fellow, Health, Social, and Economics Research, RTI International*
- 3:45 – 4:30 pm Panel Discussion

Democratic Governance/Political Science: Democratization in the Muslim World [Bellflower Room]

Session Chair: Derick Brinkerhoff, PhD, *Senior Fellow, International Public Management, RTI International*

- 1:30 – 2:10 pm The Next Wave in Islamic Governance: Globalized Authenticity
Charles Kurzman, PhD, *Associate Director of the Carolina Center for the Study of the Middle East and Muslim Civilizations, University of North Carolina at Chapel Hill*
- 2:10 – 2:50 pm Spreading Democracy in Islamic Societies: Reconciling Realist and Neoconservative Views
Arthur Goldsmith, PhD, *College of Management, University of Massachusetts-Boston*
- 2:50 – 3:05 pm Break
- 3:05 – 3:45 pm Governance Reform in Islamic and non-Islamic Countries: Different in All Unimportant Respects?
Derick Brinkerhoff, PhD, *Senior Fellow, International Public Management, RTI International*
- 3:45 – 4:30 pm Panel Discussion

There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact. Mark Twain (1835-1910)