

Northeast Superfund Research Program Meeting

Tuesday, April 4 – Wednesday, April 5, 2017

Northeastern University

John D. O'Bryant African American Institute, Cabral Center
40 Leon Street, Boston, MA 02115

Tuesday, April 04, 2017

8:00 am to 9:00 am	Breakfast, Sign-In
9:00 am to 9:15 am	Welcome and Introductions – Akram Alshawabkeh, Northeastern University
9:15 am to 10:45 am	Overviews of Northeast SRP Centers <i>Session chair: Bruce Stanton</i> PROTECT SRP Center (Northeastern) – Akram Alshawabkeh Boston University SRP Center – David Sherr Brown SRP Center – Robert Hurt Columbia SRP Center – Joseph Graziano Dartmouth College SRP Center – Bruce Stanton University of Pennsylvania SRP Center – Ian Blair
10:45 am to 11:00 pm	Break
11:00 am to 12:15 pm	Session #1 – Reducing Water-Borne Arsenic Exposure in the Northeast <i>Session Chairs: Ana Navas-Acien and Joe Graziano – Columbia University</i>
12:15 pm to 1:30 pm	Lunch
1:30 pm to 2:45 pm	Session #2: Community/Stakeholder Interactions <i>Session Chair: Ian Blair – University of Pennsylvania</i>
2:45 pm to 3:00 pm	Break
3:00 pm to 4:15 pm	Session #3: How to Leverage Big Data for Environmental Science Research <i>Session Chair: David Sherr – Boston University</i>
4:30 pm to 7:00 pm	Reception and Poster Session – Location: Curry Student Center - Indoor Quad

Wednesday, April 05, 2017

8:00 am to 9:00 am	Breakfast, Sign-In
9:00 am to 10:30 am	Session #4: Diverse Perspectives on Poly- and Perfluoroalkyl Substance Contamination <i>Session Chair: Eric Suuberg – Brown University</i>
10:30 am to 10:45 am	Break
10:45 am to 11:45 am	Brainstorming session on center-to-center interactions <i>Session Chairs: Akram Alshawabkeh and Bruce Stanton</i>
11:45 am to 12:00 pm	Evaluation and Discussion of 2018 Meeting

Session Details

11:00 am to 12:15 pm – Session #1: Reducing Water-Borne Arsenic Exposure in the Northeast

Contacts: Joe Graziano, jg24@cumc.columbia.edu; Ana Navas-Acien, an2737@cumc.columbia.edu

Session summary: This session will provide several important examples of research translation activities that are ongoing in SRP Centers in the Northeast. Naturally occurring arsenic in well water is a widespread problem in many regions of the United States. This session will focus on ongoing exposure to water-borne arsenic in New Jersey and New Hampshire, and will examine current activities of the Columbia and Dartmouth SRP programs to raise awareness and reduce exposure in susceptible populations in these two states.

11:00 am - 11:30 am - New Jersey's Private Well Testing Act: A Geographic Summary of a Decade of Data

Speaker: Nick Procopio, PhD, Division of Science, Research, and Environmental Health, NJ Dept. of Environmental Protection

11:30 am - 11:45 am - The Columbia University SRP's Ongoing Research Translation Activities to Raise Awareness and Reduce Arsenic Exposure in Pregnant Women' in Hunterdon County, NJ

Speaker: Joseph Graziano, PhD, Professor of Environmental Health Sciences, Mailman School of Public Health, Columbia University

11:45 am - 12:15 pm - Translating and Communicating Arsenic Science to the Public and Policymakers

Speaker: Laurie Reynolds Rardin, MES, Research Translation Coordinator, Dartmouth Toxic Metals Superfund Research Program

1:30 pm to 2:45 pm – Session #2: Community/Stakeholder Interactions

Contact: Ian Blair, ianblair@mail.med.upenn.edu

Session summary: This session will provide two examples of interactions between SRP Centers and their local communities. There will also be a discussion on the resources that are available for education and action in relation to community health at one of the Superfund sites. In addition, a perspective will be provided on the expectations that important stakeholders (such as the Agency for Toxic Substances and Disease Registry) have on community engagement. Finally, there will be a panel discussion focused on community issues of interest to the session participants.

1:30 pm - 1:45 pm - Realities of Environmental Toxicity and Their Ramifications for Community Engagement

Speaker: Edward A. Emmett, MD, Professor, Department of Occupational and Environmental Medicine, Perelman School of Medicine, University of Pennsylvania

1:45 pm - 2:00 pm - Resources for Education and Action for Community Health at a Superfund Site

Speaker: Frances K. Barg, PhD, Associate Professor, Department of Family Medicine and Community Health, Perelman School of Medicine, University of Pennsylvania

2:00 pm - 2:15 pm - Scaling Site-based Strategies for Community Engagement

Speaker: Scott Frickel, Ph.D., Associate Professor of Sociology and Environment and Society, Brown University

2:15 pm - 2:30 pm - A Stakeholder's Perspective on Community Engagement

Speaker: Lora Werner, MPH, Regional Director, Agency for Toxic Substances and Disease Registry, US EPA Region 3, Philadelphia, PA

2:30 pm - 2:45 pm - Panel Discussion

Speakers: Ian Blair, Edward Emmett, Fran Barg, Scott Frickel, and Lora Werner

3:00 pm to 4:15 pm – Session #3: How to Leverage Big Data for Environmental Science Research

Contact: David Sherr, dsherr@bu.edu

Session summary: The amount of scientific data deposited in public and private databases is huge and increasing at an unprecedented rate. This means that the answers to many environmental science questions are already in hand, buried in databases. But, the question of how environmental scientists access and use those data is a vexing one. In this session, we will present two examples of the kind of genomic and population-based research that can be done once one knows how to mine existing databases. A third presentation will summarize some of the barriers to fully exploiting these rich resources. The final talk will look to the future of Big Data, particularly as it relates to ways of making it more accessible to biologists and epidemiologists and to training the next generation of computational environmental scientists. A panel discussion after the formal talks will engage the audience and ferret out the opportunities and limitations inherent to Big Data research.

3:00 pm - 3:05pm - Introduction: Why Environmental Scientists Should Gravitate toward Big Data and Its Enormous Mass

Speaker: David Sherr, PhD, Director of the Immunology Training Program, Professor of Environmental Health, Professor of Pathology & Laboratory Medicine, Boston University

3:05 pm - 3:20 pm - Consortia of Epidemiologic Studies for Environmental Health: An Urgent Need

Speaker: Ana Navas-Acien, MD, MPH, PhD, Professor, Environmental Health Sciences, Columbia University

3:20 pm - 3:35 pm - ScanGeo: Automated Meta-analysis of Public Gene Expression Data

Speaker: Thomas H. Hampton, MS, Senior Bioinformatics Analyst, Geisel School of Medicine at Dartmouth, Department of Microbiology and Immunology, Dartmouth College

3:35 pm -3:50 pm - Leveraging Transcriptomics to Study the Impact of Chemicals on Human Cells

Speaker: Aravind Subramanian, Broad Institute of Massachusetts Institute of Technology and Harvard University

3:50 pm - 4:05 pm - Toward Cancer Prevention: High-throughput Transcriptomics for the Screening of Chemical Carcinogens

Speaker: Stefano Monti, PhD, Associate Professor, Boston University School of Medicine, Department of Medicine, Boston University

4:05 pm - 4:15 pm - Panel Discussion

9:00 am to 10:30 am – Session #4: Diverse Perspectives on Poly- and Perfluoroalkyl Substance Contamination

Contact: Robert Hurt, robert_hurt@brown.edu

Session summary: Poly- and perfluoroalkyl substances (PFAS) are ubiquitous, highly persistent environmental toxicants that are contaminants of increasing concern in groundwater. A number of communities in the Northeastern U.S. have recently discovered elevated PFAS levels in public and private drinking water wells, and PFAS have also been identified in public water supplies across the nation during sampling under the Unregulated Contaminant Monitoring Rule. This session offers diverse perspectives on PFAS health risks through an expert panel representing research in epidemiology, mechanistic toxicity pathways, fate and transport in the environment, and Northeast community interactions.

Session Chair: Eric Suuberg, PhD, Professor of Engineering, Research Translation Core Leader, Brown SRP Program

9:00 am - 9:15 am - Epidemiologic evidence on PFOA from the C8 Science Panel and Beyond

Speaker: David Savitz, PhD, Professor of Epidemiology, Professor of Obstetrics and Gynecology, Vice President for Research, Brown University

9:15 am - 9:30 am - Urgent Research Needs for Better Understanding the Toxicity of PFAS

Speaker: Jamie DeWitt PhD, Associate Professor, Dept. of Pharmacology & Toxicology, Brody School of Medicine, East Carolina University

9:30 am - 9:45 am - Fate and Transport of PFASs in Groundwater

Speaker: Jennifer Guelfo, PhD, State Agencies Liaison, Brown University SRP Program

9:45 am - 10:00 am - Empowering Citizens: Community Driven Research around PFOA Groundwater Contamination in Hoosick Falls, NY and Bennington, VT

Speaker: David Bond, Professor and Associate Director, Center for the Advancement of Public Action, Bennington College

10:00 am - 10:30 am - Panel Discussion