

**FROM WATERSHEDS TO SHOWER HEADS:
A WORKSHOP ON LEGIONELLA RESEARCH AND POLICY**

May 25 – 26, 2016

**Emory Conference Center Hotel
South Wing – Starvine Ballroom**

Goal of workshop: The goal of this workshop, organized by the Rollins School of Public Health at Emory University is to gain increased interest and support for research and policy development into legionella control and prevention in built water systems. By assessing the state of the art with regards to the basic and applied knowledge related to control of legionella, the workshop will serve to guide future efforts. The workshop will provide a basis for strengthening prevention policies, identify high-impact research needs, strengthen the interdisciplinary collaborations necessary to address these needs, and provide a foundation upon which to launch future research efforts.

Wednesday, May 25, 2016

**11:30am – 1:00pm: Registration (South Wing Foyer)
Buffet lunch for out-of-town guests (Dining room)**

1:00pm – 1:20pm: Welcome and opening remarks
Paula Olsiewski, PhD, Alfred P. Sloan Foundation
Ruth Berkelman, MD, Emory University

1:20pm – 2:30pm Paving Paths from Experience: New York City
In this session, we will hear from representatives from the New York City Department of Health and Mental Hygiene (DOHMH) about the epidemiology of legionellosis in NYC, their experiences with the 2015 Legionnaires' disease outbreaks in the Bronx, surveillance and prevention policies.

Moderator: Ruth Berkelman, MD, Emory University

Speaker:

Marci Layton, MD, Bureau of Communicable Disease, NYC DOHMH

2:30pm – 3:00pm: Break

3:00pm – 4:00pm: Water Security and Conservation – Emerging Challenges
Panelists will present on challenges by “green” technologies, water reuse technologies and water storage.

Moderators:

Gary Roselle, MD, Dept. of Veterans Affairs

Joan Rose, PhD, Michigan State University

Speakers/Panelists:

Marc Edwards, PhD, MS, Virginia Tech

Nicholas Ashbolt, PhD, University of Alberta, Canada

Gary Roselle, MD, Dept. of Veterans Affairs

4:00pm – 5:00pm: Diagnostic Testing, Public Health Surveillance and Epidemiology

Panelists will present and deliberate on current diagnostic tools, new diagnostic tools on the horizon, epidemiologic exploration into “sporadic” cases, recommendations for patient testing, considerations for patient care and public health, and the communication of surveillance data.

Moderator:

Mike Osterholm, PhD, MPH, University of Minnesota

Speakers/panelists:

Sharon Greene, PhD, MPH, Bureau of Communicable Disease, NYC DOHMH

Leonard Mermel, DO, ScM, AM (Hon), FSHEA, FIDSA, FACP, Rhode Island Hospital & Brown University

Brian Raphael, PhD, Centers for Disease Control and Prevention (CDC)

5:30pm – 6:30pm: Reception (Silverbell Pavillion)

6:30pm – 8:00pm: Dinner (Silverbell Pavillion)

Thursday, May 26, 2016

7:00am – 8:00am: Continental breakfast (outside Starvine Ballroom)

8:00am – 8:45am: Legal Challenges of Legionella

This session will feature a discussion of the legal considerations and ramifications of Legionella amplification and Legionellosis case detection. Legal issues that impact research and prevention policies will be considered.

Moderator: Ruth Berkelman, MD, Emory University

Speakers/panelists:

Dan Moretti, JD, Landman, Corsi, Ballaine & Ford, NYC

Tom Bernier, JD, Goldberg Segalla, Maryland

Susan Smith, JD, Goldberg Segalla, Maryland

8:45am – 9:45am: Environmental Monitoring and Testing

Panelists will present and consider what is known about the usefulness of environmental testing for legionella in prevention of the disease from the built environment, the variation in sampling protocols (location, frequency, volume) and culture methods, interpretation of results (action thresholds) and communication of results.

Moderators:

Shantini Gamage, PhD, MPH, Dept. of Veterans Affairs

Kim Musser, PhD, Bacteriology Laboratory, New York State Dept. of Health

Speakers/panelists:

Dana Flanders, MD, DSc, MPH, MA, Emory University

Maria Luisa Ricci, PhD, Istituto Superiore di Sanita, Rome, Italy

Chuck Haas, PhD, Drexel University

Janet Stout, PhD, Special Pathogens Laboratory

9:45am – 10:00am: Break

10:00am – 11:30am: Approaches for Control and Primary Prevention

This session will review current industry approaches (e.g., engineering, environmental health) and guidelines for control and primary prevention both domestically and internationally.

Speakers will discuss strengths as well as unintended consequences of various approaches. The session will include perspectives from other countries as well as from the U.S.

Moderators:

Christopher Boyd, Environmental Sciences and Engineering, NYC DOHMH

Gary Roselle, MD, Dept. of Veterans Affairs

Panel 1:

Sebastian Crespi PhD, Biolinea.com, Spain

Noel Cleaves, Dept. of Health and Human Services Victoria, Melbourne, Australia

Martin Exner, MD, Institute of Hygiene and Public Health, University of Bonn, Germany

Panel 2:

David Krause, PhD, MSPH, Geosyntec Consultants

Tim Keane, Legionella Risk Management, Inc.

Brian Shelton, MPH, PathCon Laboratories

11:30am – 12:30pm: Engineering and Infrastructure Controls

In this session, panelists will review and discuss topics such as pipe material, flow rates, and various disinfection technologies available for Legionella remediation. Strengths and unintended consequences of various engineering controls will be considered including impact on other pathogens, corrosion and scalding.

Moderator: Amy Pruden, PhD, Virginia Tech

Speakers/panelists:

Joseph Falkinham III, PhD, Virginia Tech

Lutgarde Raskin, PhD, University of Michigan

Paul Van der Wielen, PhD, MsC, KWR Watercycle Research Institute

Mark Rodgers, PhD, Environmental Protection Agency (EPA)

12:30pm – 1:30pm: Lunch (Dining Room)

1:30pm – 2:00pm: Identifying Gaps in Knowledge: Flint, Michigan

In this session, a Genesee County Health Department representative will discuss the epidemiology of the 2014 – 2015 Legionnaires' disease outbreak and gaps that have been identified in research and policy subsequent to the epidemic.

Session introduction: Jim Curran, MD, MPH, Dean, Rollins School of Public Health, Emory University

Speaker: Suzanne Cupal, MPH, Genesee County Health Department

2:00pm – 3:00pm: Public Water Supply Community/Utility Level Controls

Discussants will share approaches to maintaining disinfectant residuals and utility operations and address what is known about the influence of water main breaks and corrosion control on legionella amplification.

Session moderators:

Amy Pruden, PhD, Virginia Tech

Speakers/panelists:

Norm Pace, PhD, University of Colorado

Jen Clancy, PhD, Corona Environmental Consulting

Jorge Santo Domingo, PhD, Environmental Protection Agency

Marc Edwards, PhD, MS, Virginia Tech

3:00pm – 3:30pm: Break*

3:30pm – 4:30pm: Planning for the future: paths forward for research and policy

In this closing session, session moderators will offer remarks on the most salient research needs and policy gaps identified through their respective sessions. Leadership from federal agencies, foundations, and professional organizations are invited to comment on the gaps identified. An emphasis will be placed on actionable paths forward in regards to Legionella research and policy.

Session moderator: Ruth Berkelman, MD, Emory University

4:30pm – 4:55pm: Call to Action

Mike Osterholm, PhD, MPH, University of Minnesota

4:55pm – 5:00pm: Closing Remarks and Adjourn

Ruth Berkelman, MD, Emory University

This workshop was made possible by a grant from The Alfred P. Sloan Foundation.

**Please remember to complete and return the post-workshop survey that was included in your registration packet.
Thank you.*