

# MoBE 2017 Agenda

**Tuesday, October 10, 2017**

5:00 – 7:00 pm

Reception, *NAS Great Hall*

5:30 – 6:00 pm

Keynote

**Keynote Introduction**

GOLD Sponsor: **Jacques Ravel**, University of Maryland School of Medicine



Keynote Speaker

**Ed Yong**, *The Atlantic*

*A science writer's view of the MoBE field*

**Wednesday, October 11, 2017**  
**In the public eye – living in a microbial world**

8:30 – 9:00 am

Doors Open, coffee, check-in and poster set up, *NAS Great Hall*

9:00 – 9:30 am

Welcome and Introduction, *NAS Auditorium*

**Lynn M. Schriml**, MoBE 2017 Symposium Chair, University of Maryland School of Medicine

**Paula J. Olsiewski**, MoBE Program Director, Alfred P. Sloan Foundation

9:30 – 10:00 am

Keynote

**Keynote Introduction**

GOLD Sponsor: **Ryan Kemp**, Zymo Research Corporation



Keynote Speaker

**Susan Lynch**, University of California San Francisco

*Chronic Inflammatory Disease and the Built Environment*

- 10:00 – 10:30 am Coffee Break
- 10:30 – 11:30 am Session 1: **MoBE Science Here and Now**  
Session Chair: **Jordan Peccia**, Yale University
- Jonathan Eisen**, University of California Davis  
*The microbiology of the built environment network (microBEnet) and perspectives on the MoBE field*
- Jessica Green**, University of Oregon  
*Designing healthier spaces and buildings*
- Lisa Brenner**, University of Colorado  
*Mental Health and the Microbiome of the Built Environment*
- 11:30 am – 12:30 pm Session 2: **Implications of MoBE for Health and Design**  
Session Chair: **Elaine Hubal**, Environmental Protection Agency
- Shelly Miller**, University of Colorado  
*Building Engineering Controls for Improving Occupant Health: Mitigating Airborne Particles, Toxic Gases, and Infectious Aerosols*
- Rachel Adams**, University of California Berkeley  
*Sources and quantities of microbes and mVOCs indoors*
- Karen Dannemiller**, Ohio State University  
*The nexus of housing characteristics, indoor microbial communities, and asthma severity*
- Mark Mendell**, California Department of Health  
*Adverse and beneficial effects of the indoor microbiome – current implications for health or design?*
- 12:30 – 1:30 pm Lunch
- 1:30 – 2:30 pm Session 3: **Public Health and Indoor Microbial Communities**  
Session Chair: **Diane Gold**, Harvard T.H. Chan School of Public Health
- Maria Gloria Dominguez-Bello**, New York University School of Medicine  
*Microbial Biogeography of Homes across urbanization gradients*
- Brandon Bubba Brooks**, Kaleido Biosciences  
*The NICU microbiome's role in neonate gut colonization*
- Jane Carlton**, New York University School of Medicine  
*A city view: ATM's, parasites and wastewater*

- 2:30 – 3:30 pm      Session 4: **MoBE insights on microbial exposure**  
Session Chair: **Laura Kolb**, Environmental Protection Agency
- Eric Alm**, Massachusetts Institute of Technology  
*Sewers, microbes and drugs*
- Emmanuel Mongodin**, University of Maryland School of Medicine  
*Microbial functions and the built environment*
- David Mills**, University of California Davis  
*Microbiology of food production built environments: dairies and wineries*
- 3:30 – 4:00 pm      Coffee Break
- 4:00 – 5:00 pm      Panel Discussion: **Myth and Reality of MoBE manipulation**  
Moderator: **Rob Knight**, University of California San Diego
- Panelists:      **Rita Colwell**, University of Maryland  
                    **Jeffrey Siegel**, University of Toronto  
                    **Ilana Brito**, Cornell University  
                    **Jessica Green**, University of Oregon
- 5:00 pm              Group photo
- 5:00 – 7:00 pm      Poster Session & Reception, *West Court and Great Hall*

**Thursday, October 12, 2017**  
**Beyond the public eye – infrastructure, public awareness**

8:30 – 9:00 am      Doors Open, coffee, *NAS Great Hall*  
9:00 – 9:30 am      Welcome and Introduction, *NAS Auditorium*  
Gordon Conference Announcement: **Jordan Peccia**, Yale University

9:30 – 10:00 am      Keynote  
**Keynote Introduction**  
GOLD Sponsor: **Kevin Sato**, National Aeronautics and Space Administration



**Keynote Speaker**  
**Marc Edwards**, Virginia Tech University  
*MoBE, Public Health and the Flint Water Crisis*

10:00 – 11:00 am      Coffee Break

11:00 am – 12:00 pm      Session 5: **From MoBE Research to MoBE Applications**  
Session Chair: **Scott Kelley**, San Diego State University  
  
**Jack Gilbert**, University of Chicago  
*From Hospitals to Forensic Applications*  
**Richard Shaughnessy**, University of Tulsa  
*From Home to School: Tribal Indoor Air Quality Intervention Study*  
**Anders Benteson Nygaard**, Oslo and Akershus University College of Applied Sciences  
*Bacteria in Norwegian kindergartens: Small children and their microbial environments*

12:00 – 12:30 pm      Session 6: **The Building Science – MoBE nexus (Part 1)**  
Session Chair: **Richard Corsi**, University of Texas at Austin

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*Building Science  $\cap$  Science in Buildings (or why MoBE > Robots)*  
**Amy Pruden**, Virginia Tech University  
*Towards Prebiotic/Probiotic Control of the Microbiome in Built Water Systems*

12:30 – 1:30 pm      Lunch

- 1:30 – 2:30 pm      **Session 6: The Building Science – MoBE nexus (Part 2)**  
**Betsy Pugel**, National Aeronautics and Space Administration  
*Tiny houses: Planetary protection-focused materials selection for spaceflight hardware surfaces*  
**Kent Duffy**, SRG Partnership  
*The influences of microbial research on architectural practice*  
**Wendy J. Goodson**, Air Force Research Laboratory  
*Microbiomes of Military Cargo Aircraft and their Connection to Biocorrosion*
- 2:30 – 3:00 pm      **Session 7: NAS Microbiomes of the Built Environment Consensus Study**  
Session Chair: **Katherine Bowman**, National Academies of Sciences, Engineering and Medicine
- Joan Bennett**, Rutgers University  
*NAS MoBE study overview MoBE outcomes, perspectives and future studies*
- 3:00 – 3:30 pm      Coffee Break
- 3:30 – 4:30 pm      Panel Discussion: **Charting MoBE Research Priorities**  
Moderator: **Jonathan Eisen**, University of California Davis
- Panelists:      **Jordan Peccia**, Yale University  
                              **Claire Fraser**, University of Maryland School of Medicine  
                              **Amy Pruden**, Virginia Tech University
- 4:30 pm              Meeting Closing, **Paula Olsiewski**, Alfred P. Sloan Foundation