MoBE 2017 Agenda

Tuesday, October 10th, 2017
5:00-7:00 pm Reception,  *NAS Great Hall*
5:30 – 6:00 pm Keynote speaker: *Ed Yong* (The Atlantic)
A science writer’s view of the MoBE field

Wednesday, October 11th, 2017

Day 1: In the public eye -- living in a microbial world

8:30  *Doors Open* - Coffee, Check-In and poster set up  
     *NAS Great Hall*

9:00  **Welcome and Introduction**  
     Auditorium  
     Lynn M. Schriml, MoBE 2017 symposium chairman  
     University of Maryland School of Medicine, Institute for Genome Sciences  
     Paula J. Olsiewski, MoBE Program Director, Alfred P. Sloan Foundation

9:30  **Keynote**  
     *NAS Auditorium*  
     Keynote Introduction: GOLD Sponsor - Zymo Research Corporation  
     Keynote speaker: *Susan Lynch* (UCSF School of Medicine)  
     Chronic Inflammatory Disease and the Built Environment

10:00  **Coffee Break**

10:30  **Session 1: MoBE Science Here and Now**  
     Session Chair: Jordan Peccia (Yale University)  
     Jonathan Eisen (UC 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 Build Environment

11:30  **Session 2: Implications of MoBE for Health and Design**  
     Session Chair: Elaine Hubal (EPA)  
     Shelly Miller (University of Colorado):  
     Building Engineering Controls for Improving Occupant Health: Mitigating Airborne Particles, Toxic Gases, and Infectious Aerosols.  
     Rachel Adams (BIMERC):  
     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, LBNL):
Adverse and beneficial effects of the indoor microbiome – current implications for health or design?

12:30  Lunch

1:30  Session 3 - Public Health and Indoor Microbial Communities
Session Chair: Diane Gold (Harvard T.H. Chan School of Public Health)

Maria Gloria Dominguez-Bello (NYU 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 (NYU School of Medicine):
A city view: ATM’s, parasites and wastewater

2:30  Session 4 - MoBE insights on microbial exposure
Session Chair: Tina Bahadori (EPA) Chemical Safety for Sustainability Research Program Leader

Eric Alm (MIT):
Sewers, microbes and drugs

Emmanuel Mongodin (Institute for Genome Sciences, UMSOM):
Microbial function and built environments

David Mills (UC Davis):
Microbiology of food production built environments: dairies and wineries

3:30  Coffee Break

4:00  Panel Discussion: Myth and Reality of MoBE manipulation
Moderator: Rob Knight (UCSD)
Panelists: Rita Colwell (University of Maryland)
Jeffrey Siegel (U of T)
Ilana Brito (Cornell)
Jessica Green (University of Oregon)

5:00-7:00 Poster Session & Reception
West Court and Great Hall

Thursday, October 12th, 2017
Day 2: Beyond the public eye - infrastructure, public awareness and an evolving research agenda

8:30  Doors Open - Coffee, Check-In

NAS Great Hall
9:00 Welcome and Introduction
   Gordon Conference Announcement - Jordan Peccia
   NAS Auditorium

9:30 Keynote
   NAS Auditorium
   Keynote Introduction: GOLD Sponsor - (NASA)
   Keynote speaker: Marc Edwards (Virginia Tech)
   MoBE, Public Health and the Flint Water Crisis

10:00 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

11:00 Coffee

11:30 Session 6: The Building Science – MoBE nexus (Part 1)
   Session Chair: Rich Corsi (University of Texas at Austin)
   Richard Corsi (University of Texas at Austin):
   Building Science ∩ Science in Buildings (or why MoBE > Robots)
   Amy Pruden (Virginia Tech):
   Towards Prebiotic/Probiotic Control of the Microbiome in Built Water Systems

12:00 Lunch

1:00 Session 6: The Building Science – MoBE nexus (Part 2)
   Betsy Pugel (NASA): 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

2:00 Session 7 - NAS Microbiomes of the Built Environment Consensus Study
   Session Chair: Katherine Bowman (NAS)
   Joan Bennett (Rutgers University): NAS MoBE study overview
   MoBE outcomes, perspectives and future studies

2:30 Coffee Break
**3:00 Panel Discussion: Charting MoBE Research Priorities**

Moderator: **Jonathan Eisen** (UC Davis)

Panelists:  
- **Jordan Peccia** (Yale)  
- **Norman Pace** (University of Colorado)  
- **Claire Fraser** (Institute for Genome Sciences, UMSOM)

**4:30** Meeting Closing, **Paula Olsiewski** (Alfred P. Sloan Foundation)