

## MoBE 2017 Agenda

### Tuesday, October 10<sup>th</sup>, 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 11<sup>th</sup>, 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  $\cap$  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)