

Montana Biofilm S&T Meeting Final AGENDA: July 16–18, 2019





8/6/2019 4:39 PM

Monday July 15

6:00-8:30 pm Registration & welcome reception

> Larkspur Foyer, Hilton Garden Inn Bozeman

Tuesday July 16

7:30-8:00 am Registration & continental breakfast

Larkspur Foyer, Hilton Garden Inn

8:00-8:10 Introductory remarks

Larkspur Ballroom
Matthew Fields, CBE Director
Paul Sturman, CBE Industrial
Coordinator
Laura Wahlen, Research Scientist,
Baxter Healthcare

SESSION 1: Biofilm Methods

8:10-8:40

Proposed standard method for antimicrobial urinary catheters: ruggedness test results

Darla Goeres, Associate Research Professor, Chemical & Biological Eng., MSU; PI, Standardized Biofilm Methods Laboratory, CBE

8:40-9:10

Monitoring hand hygiene and its effects on healthcare-associated infections (HAI)

Al Parker, Biostatistician, CBE; Asst. Research Professor, Mathematical Sciences, MSU

9:10-9:40

Product-specific method development to assess microbial contamination

Chris Jones, Director of R&D, Sharklet Technologies

9:40-10:10 Networking Break

10:10-10:40 Interlaboratory study results for the Drip Flow Reactor

Diane Walker, Research Engineer, CBE

10:40-11:10

Understanding your production facility's microbiome using 16S metagenomics

Michele Sayles, Executive Director, Food Safety and Quality, Diamond Pet Foods

11:10-11:35 CBE Address

Matthew Fields

Poster Pitches

11:35-12:00 Presented by CBE researchers

12:00-1:00 pm Lunch, Hilton Garden Inn

SESSION 2: Wound Biofilms

1:00-1:30

Architecture and phylogenetic structure of chronic wound biofilms

Garth James, Associate Research Professor, Chemical & Biological Eng., MSU; PI, Medical Biofilms Laboratory, CBE

1:30-2:00

Integrating symptom science with innovative molecular measures: Focus on understanding the trajectory of healing vs. non-healing in chronic venous leg ulcers

Joyce Stechmiller, Associate Professor, Behavioral Nursing Science, University of Florida

2:00-2:30

Shifting the Paradigm: Chronic wounds are chronic infections caused by biofilm

Randall Wolcott, MD, Medical Director, Southwest Regional Wound Center

CBE Open House: Poster session and lab demonstrations

3:00-5:00

3rd Floor Barnard Hall, MSU Schedule available onsite

Wednesday July 17

7:30-8:00 am Registration & continental breakfast

Larkspur Foyer, Hilton Garden Inn

SESSION 3: Alternative Biocides

8:00-8:30

Sustaining product microbial quality in a dynamic environment

Chuck Pettigrew, Principal Scientist, Procter & Gamble

8:30-9:00 Modern solutions for product protection

Ed Rolls, Global Account Director, Cosmetic Ingredients Division, Symrise

9:00-9:30 Supplier Perspective: Alternatives for preservation

Julie Vaughn Biege, Global Business Development Director, Industrial Products;

Rosanna Stokes, Business Development Manager, Consumer Products, Emerald Kalama Chemicals

9:30-10:00 Biocidal-free future in EU. Wood protection and coating. Why and how?

Berit Lindegaard, Product Mgr., Danish Technological Institute

10:00-10:30 Networking Break

10:30-11:00

HCPA Microbiology Preservative Subcommittee (MPS): Supporting and enhancing the microbiological quality of consumer, household, and industrial products

Tony Rook, R&D Associate Director, Microbiology, The Sherwin-Williams Co.

11:00-11:30

The design, synthesis, and evaluation of new classes of antimicrobials for the control of biofilms

Tom Livinghouse, Professor, Chemistry & Biochemistry, MSU

11:30-11:50 Presentation of CBE awards

Matthew Fields

11:50-1:00 pm Lunch, Hilton Garden Inn

SESSION 4: Young Investigators

1:00-1:30

Oral biofilm-stimulated human gingival epithelium differentially regulates inflammatory responses in co-cultured immune cells

Jason Brown, Research Assistant, University of Glasgow Dental School

1:30-2:00

Investigation of synovial fluid induced Staphylococcus aureus aggregate development and its impact on surface attachment and biofilm formation

Matthew Pestrak, Graduate Research Associate, Microbial Infection & Immunity, The Ohio State University

2:00-2:30 Evolution of *P. aeruginosa* in a chronic burn wound model

Erin Gloag, Postdoctoral Researcher, Microbial Infection & Immunity, The Ohio State University

2:30-3:00 CBE-NBIC scientific and collaborative opportunities

Jeremy Webb, Professor, Microbiology, University of Southampton; Co-Director, National Biofilms Innovation Center

3:30-5:00

Business Meeting

Hilton Garden Inn

Dinner

6:00 pm

Hart Ranch, Gallatin Gateway

Thursday July 18

7:30-8:00 am Registration & continental breakfast

Larkspur Foyer, Hilton Garden Inn

SESSION 5: Biofilms and Host Response

8:00-8:30 Mechanics of biofilm infection

Phil Stewart, Professor, Chemical & Biological Engineering, MSU, CBE

8:30-9:00

Early recruitment of neutrophils prevents Staphylococcus aureus biofilm formation

Brian Pettygrove, PhD Student, Microbiology & Immunology, MSU, CBE

9:00-9:30

P. aeruginosa and S. aureus biofilms and adaptations during chronic infections

> Dan Wozniak, Professor, Microbial Infection & Immunity, The Ohio State University

9:30-10:00 Breaking down the immunobiology of implant fibrosis/foreign body response

Joshua Doloff, Asst. Professor, Biomedical Engineering, Materials Sci. & Engineering, Johns Hopkins University School of Medicine

10:00-10:30 Networking Break

SESSION 6: Biofilms in Space

10:30-11:00

Development of nanoengineered materials for organisms (NEMO) to resist biofilm formation in space

Kasthuri Venkateswaran, Senior Research Scientist, California Institute of Technology, JPL

11:00-11:30

Management of biofilms in the operation of the ISS water recovery and management system

Layne Carter, ISS Water Subsystem Manager, NASA

11:30-12:00

Design considerations for mitigating biofilm growth on the ISS and future missions

Mononita Nur, Aerospace Engineer, NASA

12:00-12:10 Meeting wrap up

*1:30-4:30 NASA Session

Join our NASA speakers and attendees for a brainstorming session on maintaining wastewater systems for extended space flight Larkspur Ballroom A, Hilton Garden Inn