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

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
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 hospital-acquired infections (HAI)
Al Parker, Biostatistician, CBE; Asst. Research Professor, Mathematical Sciences, MSU
Jim Arbogast, VP, Hygiene Sciences & Public Health Advancements, GOJO Industries

9:10–9:40
Title TBA
Rebecca Pines, Biologist, Office of Pesticide Programs, US EPA

9:40–10:10
Networking Break

10:10–10:40
Product-specific method development to assess microbial contamination
Chris Jones, Director of R&D, Sharklet Technologies

10:40–11:10
Interlaboratory study results for the drip flow reactor
Diane Walker, Research Engineer, CBE

11:10–11:45
Understanding your production facility’s microbiome using 16s metagenomics
Michele Sayles, Executive Director, Food Safety and Quality, Diamond Pet Foods

Poster Pitches

11:45–12:00
Presented by CBE graduate students

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

Wednesday
July 17

7:30–8:00 am
Registration & continental breakfast
Larkspur Foyer, 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
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

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, Symrise

9:00–9:30
Greener alternatives for preservation
Julie Vaughn Biege and Rosanna Stokes, Emerald Materials

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
**SESSION 4: Young Investigators**

**1:00–1:30**
Multi-species oral biofilms stimulated human gingival epithelium differentially regulates inflammatory responses in co-cultured immune cells: A model to investigate cell signaling in host-pathogen response  
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 *Pseudomonas aeruginosa* in a chronic burn wound model  
Erin Glog, 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

**SESSION 5: Biofilm in 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**
*Pseudomonas aeruginosa* biofilms and adaptation 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

**10:00–10:30 Networking Break**

**Thursday**  
**July 18**

**3:00–3:15**
CBE Address  
Matthew Fields

**3:30–5:00**
**Business Meeting**  
Hilton Garden Inn

**Dinner**  
6:00 pm  
Hart Ranch, Gallatin Gateway

**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**
Impacts of biofilm on the International Space Station water management system  
Layne Carter, NASA

**11:30–12:00**
Design considerations for mitigating biofilm growth on the ISS and future missions  
Mononita Nur, 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