Center for Biofilm Engineering
a National Science Foundation Engineering Research Center

MONTANA STATE UNIVERSITY

CBE ENGINEERING

February 2-3, 2021

BIOFILM TECHNOLOGIES:
Pathways to Product Development

***All times are Mountain Standard Time**

FINAL AGENDA

Monday, February 1—WORKSHOP & POSTER SESSION		
Time	**Title**	**Presenter**
9:30–10:30 a.m.	A statistical assessment of standard methods: Case studies of ASTM, CDC, STM & MBEC biofilm methods	Al Parker, Biostatistician, CBE; Associate Research Professor, Mathematical Sciences, MSU
10:30–10:45 a.m.	CBE online biofilm resources	Diane Walker, Research Engineer, CBE
11:30 a.m.–1:30 p.m.	**Virtual Poster Session**	

Tuesday, February 2		
Time	**Title**	**Presenter**
9:15–9:25	Opening remarks	Matthew Fields, CBE Director; Professor, Microbiology & Immunology, MSU Paul Sturman, CBE Industrial Coord.
Session 1: Medical Technologies		
9:25–9:30 a.m.	Session Introduction	Garth James, PI, Medical Biofilms Laboratory, CBE; Associate Research Professor, Chemical & Biological Eng., MSU
9:30–10:00 a.m.	High-throughput microplate approach to study bacterial adhesion to topographic features on medical devices such as breast implants	Scott Phillips, Regulatory Research Scientist, Center for Device & Radiological Health US FDA
10:00–10:30 a.m.	Dynamic adaptive response of *Pseudomonas aeruginosa* to clindamycin/rifampicin-impregnated catheters	Kidon Sung, Staff Fellow, Div. of Microbiology, National Center for Toxicological Research, US FDA
10:30–11:00 a.m.	The shield hypothesis of biofilm chronic infections	Phil Stewart, Regents Professor, Chemical & Biological Engineering, MSU, CBE
11:00–11:30 a.m.	**Break**	
11:30 a.m.–12:00 p.m.	Testing standards for medical implants with an antimicrobial activity	John Rose, Principal Scientist Smith & Nephew
12:00—12:30 p.m.	Effects of a cadexomer iodine wound gel on viability, oxygen penetration and pH in mature in-vitro *Pseudomonas aeruginosa* and *Staphylococcus aureus* biofilms	Garth James
12:30–1:00 p.m.	**Break**	

1:00–2:00 p.m.	Panel Discussion *What are the components that a test method must contain to be considered relevant for FDA data submission?*	Moderator: Garth James, CBE Co-moderator: Phil Stewart, CBE Petra Kohler Riedi, 3M Scott Phillips, US FDA John Rose, Smith & Nephew Sousan Sheldon, Medical Devices Consultants, LLC

Wednesday, February 3		
Time	**Title**	**Presenter**
9:15–9:25	Opening remarks	Matthew Fields Paul Sturman
Session 2: Surface Technologies		
9:25–9:30 a.m.	Session Introduction	Darla Goeres, PI, Standardized Biofilm Methods Laboratory; Research Professor of Regulatory Science, CBE
9:30–10:00 a.m.	The secret life of DNA: A tale of DNA's many roles in bacterial biofilms	Rikke Louise Meyer, Assoc. Professor, Bioscience and Interdisciplinary Nanoscience Centre, Aarhus University, Aarhus, Denmark
10:00–10:30 a.m.	The power of nature's enzymes—Tailoring green solutions for biofilm control	Lorena Gonzalez-Palmen, Senior Scientist, Novozymes
10:30–11:00 a.m.	An update on antimicrobial product initiatives at the EPA Microbiology Laboratory	Steve Tomasino, Senior Scientist, Office of Pesticide Programs, US EPA
11:00–11:30 a.m.	**Break**	
11:30 a.m.–12:00 p.m.	Statistical techniques for analyzing presence and absence data from microbes: MPN and TCID50	Al Parker
12:00—12:30 p.m.	Pathways to innovation: Update on the CBE regulatory science program	Darla Goeres
12:30–1:00 p.m.	**Break**	
1:00–2:00 p.m.	Panel Discussion *Biofilm assessment technologies beyond the viable plate count*	Moderator: Darla Goeres, CBE Co-moderator: Al Parker, CBE Tajah Blackburn, US EPA Lise Duran, Sterilex Tony Rook, Sherwin-Williams Heidi Smith, CBE Steve Tomasino, US EPA

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