

Technical Advisory Conference AGENDA: July 23–26, 2007

Center for Biofilm Engineering

07/23/07

Monday July 23

6:00-8:30 p.m.

Pre-registration and
welcome reception

Hilton Garden Inn. Bozeman

Tuesday July 24

7:30–8:30 a.m.
Registration and
continental breakfast
Hilton Garden Inn reception area

8:30-8:45 Introductory remarks

Larkspur Ballroom
Paul Sturman, CBE Industrial
Coordinator
Ruth Cutright, W.L. Gore,
TAC Chair
Phil Stewart, CBE Director

SESSION 1: Wound Biofilms

8:45-8:50 Session introduction

Garth James, Medical Projects Manager, CBE

8:50-9:15

Biology of wound healing

John Olerud, MD, Professor of Dermatology, University of Washington

9:15-9:45

Advances in wound microbiology

Philip Bowler, Director, Anti-Infectives & Microbiology, Wound Therapeutics Global Development Centre, ConvaTec, Flintshire, UK

9:45-10:00 Overview of the Center for Wound Biofilm Research

Phil Stewart

10:00-10:30 Break

10:30–10:50 In vitro models of wound biofilms Garth James

10:50–11:10 Preclinical modeling: Studies on wound healing

Stephen Davis, Research Associate Professor of Dermatology, University of Miami, Miller School of Medicine

11:10-11:30

Biofilm models in acute wounds

Patricia Mertz, Professor of Dermatology, University of Miami, Miller School of Medicine

11:30-12:00

Biofilm based wound care

Randy Wolcott, MD, Southwest Regional Wound Care Center

12:00-1:00 Lunch at the Hilton Garden Inn

SESSION 2: Special Presentations

1:00-1:30

State of the CBE: 2007

Phil Stewart

1:30-2:00

Regulatory presentation: An update on federal activities

Stephen Tomasino, Senior Scientist, US EPA-OPP Microbiology Laboratory, Fort Meade, Maryland

2:00-2:30

Caserna, nanowires, signal vesicles and flying buttresses: Baroque architecture in biofilms

Bill Costerton, Director, Center for Biofilms, School of Dentistry, University of Southern California

2:30-2:50 Break

2:50-3:20

Biocide industry: Past, present and future challenges for biocontrol

Michael V. Enzien, Senior Research & Development Specialist, DOW Biocides, The Dow Chemical Company

SESSION 3: Biofilm Behavior and Control

3:20-3:40

Examination of scCO₂ effects against *Bacillus mojavensis* biofilms

Adie Phillips, Research Engineer, CBE

3:40-4:00

Influence of EPS and natural organic matter on biofouling of microfiltration membranes coupled with powdered activated carbon (PAC)

Mohiuddin Md. Taimur Khan, Assistant Research Professor, CBE

4:00-4:20

Investigations of dormant cells in *Pseudomonas aeruginosa* biofilms

Brenda Grau, Postdoctoral Researcher, CBE

SESSION 4: Biofilm Methods

4:20-4:45

Methods of assessing efficacy of antimicrobial surfaces: A review

Diane K. Walker, Research Engineer, CBE

4:45-5:10

Transcriptomes and proteomes: Identification of physiological constraints related to biofilm growth

Matthew Fields, Assistant Professor, Microbiology, Montana State University

7:30-9:00

Evening Session:Biofilm Methods Advisory Committee

Wednesday July 25

7:30–8:30 a.m. Registration and continental breakfast Hilton Garden Inn

Special Presentation

8:30-9:30

Predatory prokaryotes: Thinking outside the bug

Daniel Kadouri, Assistant Professor, Department of Oral Biology & the Center for Oral Infectious Diseases, University of Medicine and Dentistry of New Jersey, Newark

SESSION 5: Biofilms in Water Venues

9:30-9:40 Session introduction

> Darla Goeres, Senior Research Engineer, CBE

9:40-10:10

Disease outbreaks in recreational water

Michael J. Beach, Acting Associate Director for Healthy Water, National Center for Zoonotic, Vector-Borne and Enteric Diseases, Centers for Disease Control and Prevention

10:10-10:40 Break

10:40-11:10 Drinking water issues in developing countries

Tim Ford, Department Head, Microbiology, Montana State University

11:10-11:35

Drinking water treatment strategies and regulations

Anne Camper, Professor of Civil Engineering, CBE

11:35-12:00

Understanding the importance of biofilm in recreational water

Darla Goeres

Lunch: On your own

2:00-4:00 Laboratory open house exposition and poster session

CBE Laboratories, 3rd Floor, EPS Building

3:30-5:00 TAC Business Meeting 108 EPS Building, MSU

6:00-9:00

Dinner at the Rock'n TJ Ranch, Bozeman

Thursday July 26

7:30–8:30 a.m. Registration and continental breakfast Hilton Garden Inn

SESSION 6: Microscopy

8:30-8:45

Session introduction & new stains

Betsey Pitts, Research Associate, CBE

8:45-9:05

Examination of tissue specimens for biofilms

Alessandra Agostinho, Research Scientist, CBE

9:05-9:25

Use of laser capture microdissection microscopy and qRT-PCR to characterize gene expression in biofilms

Ailyn Lenz, PhD Candidate, Microbiology, Montana State University 9:25-9:45

Extended lifetime of unstable GFP in Escherichia coli colony biofilm

Audrey Corbin, Research Associate, CBE

9:45-10:05

Film Fest: Movies of biofilm obliteration, annihilation, doom and destruction

Willy Davison, PhD Candidate, Chemical Engineering, Montana State University

10:05-10:30 Break

SESSION 7: Fungal Biofilms

10:30-10:55

Functional subpopulations in *Candida albicans* biofilms

Peter Suci, Assistant Research Professor, Plant Sciences, Montana State University

10:55-11:20

Small novel molecules inhibit signaling pathways and hyphal formation in *Candida albicans*

Kurt Toenjes, Assistant Professor, Department of Biological and Physical Sciences, MSU-Billings

Special Presentation

11:20–11:50 Highlights from the ASM Biofilms 2007 Conference Phil Stewart

11:50-12:00 Meeting Wrap-Up

NEXT TAC: Feb. 7-8, 2008