

# Center for Biofilm Engineering

07/23/07

## Monday July 23

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**6:00–8:30 p.m.**  
**Pre-registration and  
welcome reception**  
Hilton Garden Inn, Bozeman

## Tuesday July 24

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**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 scCO<sub>2</sub> 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

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**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, 3<sup>rd</sup> 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

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**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