

Technical Advisory Conference and Wound Biofilm Retreat FINAL AGENDA: February 3-4, 2009

Center for Biofilm Engineering

02/01/09

Monday February 2

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

Tuesday February 3

7:30–8:15 a.m.
**Registration and
continental breakfast**
Hilton Garden Inn reception area

8:15–8:30
Introductory remarks
Larkspur Ballroom
Paul Sturman, CBE Industrial
Coordinator
Bill Schwingel, Masco, TAC Chair
Phil Stewart, CBE Director

SESSION 1: Quorum Sensing

8:30–9:10
**Session introduction and quorum
sensing review**
Phil Stewart

9:10–9:50
**Small organic antagonists of
bacterial quorum sensing that
disrupt the formation of mature
biofilms**
Hiroaki Suga, Professor, Research
Center for Advanced Science and
Technology, University of Tokyo,
Japan

9:50–10:20 Break

10:20–10:50
**Quorum sensing control of
dispersion in *Staphylococcus
aureus* biofilms**
Alex Horswill, Assistant Professor,
Microbiology, Carver College of
Medicine, University of Iowa

10:50–11:20
**Laser desorption post-ionization
mass spectrometry of quorum
sensing peptides and antibiotics
within intact bacterial biofilms**
Luke Hanley, Professor, Chemistry,
University of Illinois, Chicago

11:20–11:50
**Counterintuitive effects of quorum
sensing on biofilm antibiotic
tolerance**
Ross Carlson, Assistant Professor,
Chemical and Biological
Engineering, MSU-CBE

12:00–1:00
**Lunch catered at the Hilton
Garden Inn**

SESSION 2: Industrial & Environmental Biofilms

1:00–1:20
**Toxicity of copper and zinc to
aerobic and anaerobic
microorganisms**
James Moberly, PhD Candidate,
Chemical and Biological
Engineering, MSU-CBE

1:20–1:40
**Biofilm mediated calcite
precipitation: Controlling
hydraulic conductivity, carbon
sequestration, and the transport
of radionuclides**
Robin Gerlach, Associate Professor,
Chemical and Biological
Engineering, MSU-CBE

1:40–2:00
**Microbial conversions for the
production of bio-fuels and
chemical feedstocks**
Matthew Fields, Assistant Professor,
Microbiology, MSU-CBE

2:00–2:20
**Opportunistic pathogens in water
systems**
Anne Camper, Professor, Civil
Engineering, MSU-CBE

2:20–3:15
**Biofilm Methods Advisory
Committee**

Poster Session & Laboratory Open House

3:30–5:30
CBE Laboratories, 3rd Floor EPS
Building, MSU

**Dinner on your own for
networking opportunities**

Wednesday February 4

7:30–8:00 a.m.
**Registration and
continental breakfast**
Hilton Garden Inn reception area

SESSION 3: Wound Biofilms

8:00–8:15
**History of the biofilm hypothesis
in chronic wound healing**
Phil Stewart

8:15–8:40
**Ecology of biofilms in chronic
wounds**
Thomas Bjarnsholt, Associate
Professor, International Health,
Immunology and Microbiology,
Univ. of Copenhagen, Denmark

8:40–9:05
Wound microbiology and models
Stephen Davis, Research Associate
Professor, Dermatology and
Cutaneous Surgery, Miller
School of Medicine, University of
Miami, FL

9:05–9:40
**Role of bacteria in the healing of
chronic wounds**
Gerald Lazarus, MD, Director, Johns
Hopkins Wound Center, Bayview
Medical Center, Baltimore, MD;
and Jonathan Zenilman, MD,
Chief, Infectious Diseases,
Bayview Medical Center

9:40–10:05

**Rabbit and mouse models of
biofilm wound infections**

Thomas Mustoe, MD, Chief of Plastic
Surgery, Northwestern Memorial
Hospital, Chicago, IL

10:05–10:30 Break

10:30–10:55

MicroRNA in wound healing

Chandan K. Sen, Director, Ohio
State University Comprehensive
Wound Center, Columbus, OH

10:55–11:20

**Development of an *in vitro* pig
skin wound model of mature
biofilms and microbicidal effects
of wound dressings**

Gregory Schultz, Professor,
Institute for Wound Research,
College of Medicine, University of
Florida, Gainesville, FL

11:20–11:45

**Mouse model of biofilm wound
infection**

Ge Alice Zhao, Postdoctoral
Researcher, University of
Washington School of Medicine,
Seattle, WA

11:45–1:00

**Lunch catered at the Hilton
Garden Inn**

This concludes the TAC. See next
page for the continuation of the
Wound Biofilm Retreat.

See you at the Summer

2009 CONFERENCE

JULY 7-9, 2009

Center for Biofilm Engineering

01/30/09

Continuation of the Wound Retreat

Fees: Members, \$50;
Non-member, \$100

Wound Biofilm Retreat

1:00–1:20

Lactoferrin, xylitol and the inhibition of *Pseudomonas aeruginosa* biofilms

Mary Cloud Ammons, Research Scientist, CBE

1:20–1:40

Oxygen concentration gradients in biofilms formed by wound isolates

Haluk Beyenal, Assistant Professor, Chemical and Bioengineering, Washington State University, Pullman, WA

1:40–2:00

Scratch model of biofilm infection

Kelly Kirker, Research Scientist, CBE

2:00–2:20

Host/pathogen interactions in an *in vitro* chronic wound model

Pat Secor, PhD Candidate, Cell Biology, CBE

2:20–2:30

CBE strategy for moving forward

Phil Stewart

2:30–3:00 Break

3:00–4:00

New technologies: Posters from member companies

4:00–5:00

Roundtable discussion: Critical questions/steps

6:30–9:00 Dinner

Gallatin Gateway Inn, Bozeman

See you at the summer

2009 CONFERENCE

JULY 7-9, 2009