

# Center for Biofilm Engineering

01/30/08

## Tuesday February 5

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

## Wednesday February 6

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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

### Keynote Presentation

8:45–9:30  
**Biofilm dispersal: Molecular  
mechanisms to control strategies**  
Jeremy Webb, School of Biological  
Sciences, University of  
Southampton, UK

### SESSION 1: Industrial Biofilm Investigations

9:30–9:35  
**Session Introduction**  
Paul Sturman

9:35–10:10  
**Overview of biofilm detachment  
mechanisms**  
Brent Peyton, Professor,  
Chemical & Biological  
Engineering, CBE

#### 10:10–10:40 Break

10:40–11:05  
**Biofilms in bioenergy and carbon  
sequestration**  
Robin Gerlach, Assistant Professor,  
Chemical & Biological  
Engineering, CBE

11:05–11:30  
**Biocontrol studies at Novozymes  
Biologicals**  
Sarah McHatton, Novozymes

11:30–12:00  
**Transcriptomics and molecular  
techniques for biofilm  
investigation in industrial systems**  
Matthew Fields, Assistant Professor,  
Microbiology, CBE

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

### SESSION 2: Visualizing Biofilms

1:00–1:10  
**Session Introduction**  
Phil Stewart

1:10–1:35  
**A quantitative description at  
multiple scales of observation of  
accumulation and displacement  
patterns in single- and dual-  
species biofilms**  
Anne Camper, Professor, Civil  
Engineering, CBE

1:35–2:00  
**Recent advances in cellular  
automata modeling of  
multispecies biofilm systems**  
Al Cunningham, Professor, Civil  
Engineering, CBE

2:00–2:30  
**Fluorescence hyperspectral  
imaging of biofilms**  
Howland Jones, Sandia National  
Laboratories

2:30–3:00  
**Direct visualization of  
antimicrobial action within  
model oral biofilms**  
Phil Stewart

### Poster Session & Laboratory Open House

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

**Dinner: Restaurant of your choice**

7:30–9:00 Hilton Garden Inn  
**Evening Session:  
Biofilms Methods Advisory  
Committee Meeting**

## Thursday February 7

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7:30–9:00 a.m.  
**TAC Business Meeting** (Industrial  
Associate Representatives) with  
breakfast, Larkspur Ballroom  
8:00–9:00 a.m.  
**Continental breakfast**  
Hilton Garden Inn reception area

### SESSION 3: Health Care-Related Biofilms

9:00–9:10  
**Session Introduction**  
Garth James, CBE Medical Projects  
Manager

9:10–9:40  
**Bacterial biofilms contribute to  
pathogenesis of chronic  
rhinosinusitis (CRS): A new target  
for therapy**  
Martin Desrosiers, Associate  
Professor, Department of  
Otolaryngology, University of  
Montreal, Canada

9:40–10:10  
**Molecular characterization of  
wound biofilm communities**  
Pat Secor, PhD Candidate,  
Cell Biology & Neuroscience, MSU

10:10–10:30  
**Biofilm wound infection in a  
diabetic (db/db) mouse**  
Phillip Hochwalt, Department of  
Medicine, University of  
Washington

#### 10:30–11:00 Break

11:00–11:30  
**Staphylococcus aureus biofilms  
prevent scratch wound closure in  
vitro**  
Kelly Kirker, Research Scientist,  
CBE

11:30–12:00  
**Production of cell-cell signaling  
molecules by biofilm bacteria  
isolated from human chronic  
wounds**  
Alex Rickard, Assistant Professor,  
Biological Sciences, Binghamton  
University, Binghamton, NY

12:00–12:10 Meeting Wrap up