

# Center for Biofilm Engineering

01/30/06

## Wednesday February 1

6:00–8:00 p.m.  
Pre-registration and  
welcome reception  
GranTree Inn  
North 7<sup>th</sup> Ave, Bozeman

## Thursday February 2

8:00–8:45 a.m.  
Registration and  
continental breakfast  
Strand Union Building (SUB)  
Ballrooms B and C

8:45–9:00  
Introductory remarks  
SUB Ballroom D  
Paul Sturman, CBE Industrial  
Coordinator  
Mel Czechowski, Church &  
Dwight, TAC Chair  
Robert Marley, Dean, MSU  
College of Engineering  
Phil Stewart, CBE Director

### SESSION 1: Biofilm Control

9:00–9:10  
Session introduction  
Phil Stewart

#### 9:10–10:00 KEYNOTE PRESENTATION

Using iron to manipulate  
*Pseudomonas aeruginosa*  
biofilms

Peter Greenberg, Chair and  
Professor of Microbiology,  
University of Washington

10:00–10:30  
Enhancing antibiotic  
susceptibility of *Pseudomonas*  
*aeruginosa* biofilms by  
quorum sensing inhibition  
Caol Huff, CBE PhD Candidate,  
Chemistry

10:30–10:50 Break

10:50–11:10  
Dormant cells in *Pseudomonas*  
*aeruginosa* biofilms  
Lee Richards, CBE PhD  
Candidate, Chemical &  
Biological Engineering

### SESSION 2: Biofilm Structure

11:10–11:20  
Session introduction  
Zbigniew Lewandowski,  
CBE Professor, Civil  
Engineering

11:20–11:45  
Structure and activity of  
*Pseudomonas aeruginosa*  
PAO1 biofilms  
Raaja Raajan Angathevar  
Veluchamy, CBE MS  
Candidate, Environmental  
Engineering

11:45–12:00  
Characterization of  
*Campylobacter jejuni*  
biofilm formation  
Vildan Caner, Visiting Scientist,  
Assistant Professor in the  
Molecular Microbiology Lab,  
School of Medicine with  
Pamukkale University,  
Denizli, Turkey

12:10–1:00  
Lunch, catered  
SUB Ballrooms B and C

### SESSION 3: Phage Interactions with Biofilm

1:00–1:40  
Viruses/phage: Biofilm  
players...but what else?  
Rick Veeh, CBE Senior Research  
Associate

1:40–2:10  
Cage-based MRI contrast  
agents for diagnosis of biofilm  
infections  
Peter Suci, CBE Assistant  
Research Professor,  
Microbiology

2:10–2:40  
Display phage technology:  
Development of peptide  
aptamers for the detection  
and neutralization of toxins  
Joe Fralick, Professor,  
Microbiology, Texas Tech

2:40–3:00 Break

### SESSION 4: Medical Biofilms

3:00–3:30  
Plant derived biofilm  
inhibitors  
Garth James, CBE Medical  
Projects Manager and  
High throughput 96-well  
screening  
Amy Martin, CBE  
Undergraduate Researcher

3:30–4:00  
A laboratory model of wound  
biofilms  
Ellen Swogger, CBE Laboratory  
Technician, and  
Community analysis of chronic  
wounds using molecular  
techniques  
Pat Secor, CBE Undergraduate  
Researcher

### SPECIAL PRESENTATION

4:00–4:30  
The two-photon "capture"  
microscope: A slime guy's  
fervent dream  
Bill Costerton, Director, Center  
for Biofilms, School of  
Dentistry, University of  
Southern California

### FDA PRESENTATION

4:30–5:00  
FDA regulatory outlook:  
How to get a submission  
approved by the U.S. FDA  
Victoria Hitchins, Scientist  
Director, Division of Biologics,  
Office of Science and  
Engineering Laboratories,  
Center for Devices and  
Radiological Health, FDA

## Poster Session

5:00–6:00

Poster session  
Ballrooms B and C

6:00

Dinner  
Catered, Ballroom B and C

7:00

Business meeting  
Ballroom A  
(for Industrial Associate  
designated representatives only)

## Friday February 3

---

8:00–8:45 a.m.  
Registration and  
continental breakfast  
Strand Union Building (SUB)  
Ballrooms B and C

### SESSION 5: The Biofilm Matrix

8:45–9:30  
The biofilm extracellular  
matrix  
Phil Stewart

9:30–10:10  
Dyed and buried...how to use  
stains and dyes to uncover  
information in biofilms - an  
informal discussion of VERY  
recent CBE experience with  
microscope stains  
Betsey Pitts, CBE Research  
Associate/Facilities Manager,  
Microscopy

10:10–10:50  
The role of staphylococcal  
extracellular polymers in  
biofilm formation and immune  
evasion  
Michael Otto, Principal  
Investigator, Rocky Mountain  
Laboratories, National  
Institute of Allergy and  
Infectious Diseases, The  
National Institutes of Health

10:50–11:10 Break

11:10–11:30  
Exotoxin expression during  
biofilm growth of  
*Pseudomonas aeruginosa*  
Ailyn Lenz, PhD Candidate,  
Microbiology

11:30–11:50  
Manipulating the shear strain  
response through cation  
cross-linkage of the EPS  
Mike Sutton, CBE  
Undergraduate Researcher,  
Mechanical Engineering

11:50 – 12:00  
Session/Meeting wrap-up and  
industry comment

**NEXT TAC**  
**JUNE 20-22, 2006**