

02/07/07

Wednesday February 7

6:00–8:00 p.m.

Pre-registration and welcome reception
Hilton Inn, Bozeman
take North 19th Ave.
to 2023 Commerce Way

Thursday February 8

7:30–8:30 a.m.

Registration and continental breakfast
Strand Union Building (SUB)
Ballrooms B & C

8:30–8:50

Introductory remarks
SUB Ballroom D
Paul Sturman, CBE Industrial
Coordinator
Ruth Cutright, WL Gore,
TAC Chair
Phil Stewart, CBE Director
Robert Marley, Dean, College
of Engineering

SESSION 1: **Medical/Oral Biofilms**

8:50–9:00

Session Introduction
Garth James, Medical
Projects Manager, CBE

9:00–9:50

Keynote Presentation:
The role of autoinducer-2 in the development of oral multi-species biofilms
Alex Rickard, Assistant Professor,
Dept. of Biological Sciences,
Binghamton University,
State University of New York

9:50–10:15

In vitro models of oral biofilm
Elinor deLancey Pulcini,
Research Manager, Medical
Biofilm Laboratory, CBE

10:15–10:45 Break

10:45–11:00

Role of biofilms in chronic wounds
Garth James, Medical Projects
Manager, CBE

11:00–11:20

Molecular biology of chronic wound biofilms
Pat Secor, PhD Candidate,
Cell Biology, CBE

11:20–12:00

Biomaterials and bacteria: Strategies for medical devices
Buddy Ratner, Director,
University of Washington
Engineered Biomaterials (UWEB)

12:00–1:00

Lunch, catered

SESSION 2: **Biofilm Ecology**

1:00–1:10

Session introduction
Anne Camper, Professor,
Civil Engineering, CBE

1:10–1:30

Heterogeneity and distribution of biofilm on reverse osmosis and nanofiltration membranes
M.M. Taimur Khan, Research
Assistant Professor, CBE

1:30–1:50

***Escherichia coli* O157:H7 requires colonizing partner for biofilm formation and development**
Ben Klayman, PhD Candidate,
Environmental Engineering

1:50–2:10

Retention of a model pathogen in a porous media biofilm
Wesley Bauman, MS Candidate,
Environmental Engineering, CBE

SESSION 3: **Biofilm Methods**

2:10–2:20

Session Introduction
Darla Goeres, Senior Research
Engineer, CBE

2:20–2:40

Using flow cytometry to distinguish between live and dead cells
Anne Camper, Professor,
Civil Engineering, CBE;
Associate Dean of Research,
COE

2:40–3:00 Break

3:00–3:25

Use of propidium monoazide for live-dead distinction in microbial ecology
Andreas Nocker, Research
Assistant Professor, CBE

3:25–3:45

Magnetic resonance microscopy analysis of biofilm polymer dynamics and bioreactor transport
Sarah Codd, Assistant
Professor, Mechanical and
Industrial Engineering

SESSION 4: **Regulatory Session**

3:45–3:50

Session introduction:
Paul Sturman

3:50–4:15

Regulatory methods: The registration and efficacy evaluation of biofilm disinfectants
Marcus Rindal, Microbiologist, Office
of Pesticide Programs, EPA

4:15–4:40

Antimicrobial-coated medical devices: Regulatory perspective
Chiu Lin, Division Director,
Anesthesiology, General Hospital
Infection Control and Dental
Devices, Center for Devices and
Radiological Health, FDA

4:40–5:00

Strategic plan for creating standardized biofilm methods
Darla Goeres, Senior Research
Engineer, CBE

5:00 - 5:05

Hypertextbook update
Rocky Ross, Professor, Computer
Science

Poster Session

5:00–6:00

Hors d'oeuvres & Beverages,
Ballrooms B & C

6:00–7:00

Dinner, catered, Ballrooms B & C

7:00–8:00

Biofilm Methods Advisory Committee
Meeting

Friday February 9

7:30–9:00 a.m.

**TAC Business Meeting
(Industrial Associate
Representatives) w/breakfast**
Strand Union Building Room 275

SESSION 5: Biofilm Control

9:00–9:10

Session introduction
SUB Ballroom D
Phil Stewart, Director, CBE

9:10–10:00

**Activities of ceragenins in
eradicating biofilms and
preventing biofilm formation**
Paul Bennett Savage, Professor,
Department of Chemistry and
Biochemistry, Brigham Young
University, Utah

10:00–10:30

**Analysis of antibiotic tolerance
mechanisms in staphylococcal
biofilms**

Suriani Abdul Rani, recent MS
graduate, Chemical and Biological
Engineering; NovaCal
Pharmaceuticals

10:30–11:00 Break

11:00–11:25

**Visualization of antimicrobial
action in biofilms**

Willy Davison, PhD Candidate,
Chemical and Biological
Engineering, CBE

11:25–11:50

**A 3D computer model analysis of
three hypothetical biofilm
detachment mechanisms**

Jason Chambless, recent PhD
graduate, Chemical and Biological
Engineering, CBE

11:50–12:00

Meeting wrap-up

**NEXT TAC
July 24–26, 2007**