

■ Center for Biofilm Engineering

01/24/2011

Monday February 7

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

Tuesday February 8

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

8:00–8:10
Introductory remarks
Larkspur Ballroom
Paul Sturman, CBE Industrial
Coordinator
Harsh Trivedi, TAC Chair, Colgate-
Palmolive
Phil Stewart, CBE Director

SESSION 1: **Novel Antimicrobials**

8:10–8:15
Session introduction
Phil Stewart, CBE Director

8:15–8:45
**Next-gen antimicrobial strategies
enabled by synthetic biology**
Michael Koeris, President,
Novophage Therapeutics, Inc.

8:45–9:15
**Surface active systems afford
insights for biofilm control agents**
Joe Sauer, Senior R&D Advisor,
The Albemarle Corporation

9:15–9:45
**Research and development of
antimicrobial coatings using
combinatorial/high-throughput
methods**
Bret Chisholm, Senior Research
Scientist, Center for Nanoscale
Science and Engineering;
Director, Combinatorial Materials
Research Laboratory, NDSU

9:45–10:15 Break

10:15–10:45
**Antibacterial properties of cold
electrically generated plasma and
of plasma treated materials**
Gary Friedman, Professor, School of
Biomedical Engineering, Drexel
University

10:45–11:10
**The surprising biological activity
of volatile organic compounds
from *Muscodor* spp.**
Gary Strobel, Professor Emeritus,
Plant Sciences and Plant
Pathology, MSU

SESSION 2: **Biofilm Methods**

11:10–11:35
**Chlorine and chlorine dioxide:
Comparing the disinfection of
detached biofilm particles**
Sabrina Behnke, PhD candidate,
Microbiology, CBE

11:35–12:00
**Update on the validation of a
biofilm disinfectant efficacy test**
Darla Goeres, Assistant Research
Professor, CBE

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

SESSION 3: **Energy Related Biofilms**

1:00–1:10
Session introduction
Al Cunningham, Professor, Civil
Engineering

1:10–1:25
MSU energy research
Lee Spangler, Associate Professor,
Chemistry & Biochemistry, MSU

1:25–1:50
**Characterization of algal
triacylglycerol accumulation for
biodiesel production**
Brent Peyton, Professor, Chemical
and Biological Engineering, CBE

1:50–2:15
***Ascosoryne sarcoides*: Exploration
of potential fuel production**
Natasha Mallette, PhD candidate,
Chemical & Biological
Engineering, CBE

2:15–2:40
**Utility of biofilms and biologically
induced mineralization in geologic
carbon sequestration**
Robin Gerlach, Associate Professor,
Chemical & Biological
Engineering, CBE

Poster Session & Laboratory Open House

3:20–5:20
CBE Laboratories, 3rd Floor EPS
Building, MSU

Wednesday February 9

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

SESSION 4: **Biofilm Imaging/ Microscopy**

8:00–8:25
**Optical microscopy of biofilms:
The pursuit of more relevant
imaging conditions**
Betsey Pitts, Research Associate
and Microscope Facilities Manager

8:25–8:50

**Nanoscale manipulation by
immunoimmobilization of *living*
bacteria**

Recep Avci, Director of Imaging and
Chemical Analysis Laboratory
(ICAL) and Research Professor,
Physics, MSU

8:50–9:20

**In situ measurement of biofilm
activity by FISH: Implications for
the therapy of infective
endocarditis**

Judith Schmiedel, Institute for
Microbiology and Hygiene,
Charité University Hospital,
Berlin

SESSION 5:

**Healthcare Related
Biofilms**

9:20–9:50

**In vitro and in vivo testing of
antimicrobial central venous
catheters**

Garth James, CBE Medical Biofilm
Laboratory Manager

*See you at the
NEXT MEETING:
July 12–14, 2011*

9:50–10:20 Break

10:20–10:50

**Bacterial inter-species
interactions in multi-species
biofilm communities**

Alex Rickard, Assistant Professor of
Biological Sciences, University of
Michigan

10:50–11:20

**Urinary conditioning film
components—A new target for
preventing bacterial biofilm
formation on urinary devices**

Dirk Lange, The Stone Centre at
Vancouver General Hospital,
University of British Columbia,
Vancouver, Canada

11:20–11:50

**SaeR/S mediates pathogenesis in
*Staphylococcus aureus***

Tyler Nygaard, Postdoctoral
Researcher, Veterinary Molecular
Biology, MSU

11:50–12:00

Meeting Wrap up