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* 0157: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

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
Friday
February 9

7:30–9:00 a.m.
TAC Business Meeting
(Industrial Associate Representatives) w/breakfast
Strand Union Building Room 275

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