

PROGRAM

WEDNESDAY, 17 / June, 2015

Wesley J. Howe Center, Bissinger Room (4th Floor)

Time	Title	Presenter	Affiliation
8:15 - 9:00 a.m.	Registration and Continental Breakfast		
Session 1	<i>Session Chair: Matthew Libera, Stevens Institute of Technology</i>		
9:00 - 9:10 a.m.	Welcome and Overview	Matthew Libera	Stevens Institute of Technology
9:10 - 9:40 a.m.	Invited: Persistence and Initiation of Biofilms on Medical Devices	Phil Stewart	Montana State University
9:40 - 10:10 a.m.	Invited: Antimicrobial Surfaces for Contact Lenses - From the Laboratory to Clinical Trials	Mark Willcox	University of New South Wales
10:10 - 10:40 a.m.	Invited: From Bacterial Vibration Spectroscopy of Adhering Bacteria to Visco-Elasticity of Biofilms	Henk Busscher	University Medical Center Groningen
10:40 - 11:15 a.m.	Break and Posters		
Session 2	<i>Session Chair: Greg Caputo, Rowan University</i>		
11:15 - 11:30 a.m.	Hierarchical Assembly of Enzymes Leads to Novel Quorum Sensing Characteristics in Bacteria	Narendranath Bhokisham	University of Maryland
11:30 - 11:45 a.m.	Indwelling Devices with Bacteria Responsive Antibacterial Surfaces	James Liang	Stevens Institute of Technology
11:45 a.m. - 12:00 p.m.	Co-Immobilization of Antimicrobial Lipopeptide Palm and DNase I to Create Bi-Functional Antibacterial Coatings	Diana Alves	Centre of Biological Engineering, University of Minho
12:00 - 12:15 p.m.	Facile, Aqueous Synthesis of Hyaluronic Acid-Penicillin Conjugates Exhibiting Superior Antibacterial Efficacy	Nisha Hollingsworth	Brown University
12:15 - 1:15 p.m.	Working Lunch		
Session 3	<i>Session Chair: Gary Munk, Hackensack University Medical Center</i>		
1:15 - 1:45 p.m.	Invited: Interactions of Bacteria with Soft Materials	Scott Phillips	U.S. Food and Drug Administration
1:45 - 2:15 p.m.	Invited: Macrophage-Bacteria Interactions with Biomaterial Surfaces	Henny van der Mei	University Medical Center Groningen
2:15 - 2:30 p.m.	Computational Modeling of Bacteria-Material Interactions	Adriana Compagnoni	Stevens Institute of Technology
2:30 - 2:45 p.m.	Tethering of an Antimicrobial Peptide for the Development of an Antimicrobial Coating	Fabiola Costa	University of Porto
2:45 - 2:50 p.m.	RF: Improving Oral Health Benefits of Chewing Gum (P1)	Stefan Wessel	University Medical Center Groningen
2:50 - 2:55 p.m.	RF: Biofilm Measurements at NIST: Past, Present and Future (P2)	Joy Dunkers	National Institute of Standards & Technology (NIST)
2:55 - 3:30 p.m.	Break and Posters		

RF = Rapid Fire

Session 4		<i>Session Chair: Mark Ehrensberger, State University of New York (SUNY) Buffalo</i>	
3:30 - 4:00 p.m.	Invited: Nano-Engineered Surfaces for the Prevention of Bacterial Adhesion	Chang-Hwan Choi	Stevens Institute of Technology
4:00 - 4:30 p.m.	Invited: Biomechanics of Fracture Fixation: Does Implant Rigidity Play a Role in Infection?	Fintan Moriarty	AO Foundation
4:30 - 4:45 p.m.	Material Stiffness Affects Bacterial Adhesion and the Physiology of Attached Cells	Fangchao Song	Syracuse University
4:45 - 6:00 p.m.	Break and Transportation to Boat Cruise Location		
6:00 - 10:00 p.m.	New York City (NYC) Boat Cruise Reception and Dinner on the Hudson River		

THURSDAY, 18 / June, 2015
Wesley J. Howe Center, Bissinger Room (4th Floor)

Time	Title	Presenter	Affiliation
8:15 - 9:00 a.m.	Registration and Continental Breakfast		
Session 5		<i>Session Chair: Matthew Libera, Stevens Institute of Technology</i>	
9:00 - 9:30 a.m.	Invited: Clinical Perspectives of Infection Associated with Spinal Surgeries	Xuenong Zou, M.D.	1st Affiliated Hospital, Sun Yat-sen University
9:30 - 10:00 a.m.	Invited: Prevention of Infection in Combat-Related Extremity Wounds	Wade Gordon, M.D.	Walter Reed National Military Medical Center
10:00 - 10:30 a.m.	Invited: Soft-Tissue Biomaterials-Associated Infections	Philip Barie, M.D.	NewYork-Presbyterian, Weill Cornell Medical College
10:30 - 11:00 a.m.	Break and Posters		
Session 6		<i>Session Chair: Joseph Zitelli, Zimmer Trabecular Metals</i>	
11:00 - 11:30 a.m.	Invited: Antibacterial Activity of Silver, Zinc and Copper Ions	Chengyun Ning	South China University of Technology
11:30 - 11:45 a.m.	Silver Containing Oxide Films as Antibacterial Coatings	Greg Caputo	Rowan University
11:45 - 11:50 a.m.	RF: Antibacterial Activity of Silver-Based Coatings for Orthopedic Devices Triggered by an Activation Process (P3)	Isabel Ferreri	University of Minho
11:50 a.m. - 12:05 p.m.	Cathodic Voltage-Controlled Electrical Stimulation of Titanium Implants for Eradication of MRSA Biofilm Infections	Mark Ehrensberger	SUNY Buffalo
12:05 - 12:10 p.m.	RF: A Modular Approach to Supramolecular Antimicrobial Biomaterials (P4)	Sabrina Zaccaria	Eindhoven University of Technology
12:10 - 12:15 p.m.	RF: Tunable Antibacterial Gellan Hydrogels for Burn Infections (P5)	Shashank Shukla	Brown University

12:15 - 1:15 p.m.	Working Lunch		
Session 7	<i>Session Chair: Henk Busscher, University Medical Center Groningen</i>		
1:15 - 1:45 p.m.	Invited: Self-Defensive Antimicrobial Coatings	Svetlana Sukhishvili	Stevens Institute of Technology
1:45 - 2:15 p.m.	Invited: Addressing Antimicrobial Device Translational Challenges for Confidence in New Human Trials	David Grainger	University of Utah
2:15 - 2:30 p.m.	Break		
	<i>Panel Discussion: Matthew Libera, Moderator</i>		
2:30 - 3:30 p.m.	How Can We Bring New Materials-Based Infection-Control Strategies to Clinical Practice Quicker?	David Grainger	University of Utah
		Scott Phillips	U.S. Food and Drug Administration
		Tom Schaer	University of Pennsylvania Veterinary School
		Phil Stewart	Montana State
		Thelma Valdes	U.S. Food and Drug Administration
3:30 p.m.	Conference Closure		

POSTERS

	Title	Presenter	Affiliation
P1	RF: Improving Oral Health Benefits of Chewing Gum	Stefan Wessel	University Medical Center Groningen
P2	RF: Biofilm Measurements at NIST: Past, Present And Future	Joy Dunkers	National Institute of Standards & Technology (NIST)
P3	RF: Antibacterial Activity Of Silver-Based Coatings For Orthopedic Devices Triggered By An Activation Process	Isabel Ferreri	University of Minho
P4	RF: A Modular Approach to Supramolecular Antimicrobial Biomaterials	Sabrina Zaccaria	Eindhoven University of Technology
P5	RF: Tunable Antibacterial Gellan Hydrogels for Burn Infections	Shashank Shukla	Brown University
P6	Polymer-Induced Biofilm Formation: Physical and Biological Links in Biofilms	Leanna Foster	University of Michigan
P7	Cathodic Voltage-Controlled Electrical Stimulation of Titanium for Prevention of Biofilm Infections	Mary Canty	SUNY Buffalo
P8	Interactions of Bacteria with Soft Materials	Eva Wang	U.S. Food and Drug Administration
P9	Local Acidification Induced by Bacteria and Its Use as a Trigger for Antimicrobial Release	Victoria Albright	Stevens Institute of Technology
P10	PEG/Poly(acrylic acid) Semi-IPN Hydrogels for Post-Synthesis Antibiotic Loading and Controlled Release	Jing Liang	Stevens Institute of Technology
P11	Ca Glycerophosphate Impregnated with Ag Nanoparticles by Sodium Citrate Route: Characteristics and Antimicrobial Efficacy	Gabriela Fernandes	State University of Sao Paulo
P12	Ca Glycerophosphate Impregnated with Ag Nanoparticles by Na Borohydride Route: Characteristics and Antimicrobial Efficacy	Jackeline Gallo do Amaral	State University of Sao Paulo
P13	Advanced Scanning Electron Microscopy of Staphylococcal Biofilms	Jingzhe Niu	Stevens Institute of Technology
P14	Bactericidal Coatings for Medical Implants	Clarence Medina	Rowan University
P15	Microarray-Based Detection of Bacterial Bloodstream Infection	Youlong Ma	Stevens Institute of Technology
P16	Effects of 3D Nanostructures on the Antibacterial Efficacy of a Bacteria-Triggered Gentamicin-Releasing Coating	Ferdi Hizal	Stevens Institute of Technology
P17	Single/Multiple Bacterial Adhesive Interactions with Implant Materials	Martin Chiang	National Institute of Standards & Technology (NIST)