

## MONDAY, NOVEMBER 4

7:30am - 8:20am	Registration and Breakfast
8:20am - 8:30am	Opening Remarks (Simmons Auditorun)
	Luisa Hiller, PhD Carnegie Mellon University
	Michael Morowitz, MD University of Pittsburgh
8:30am - 9:10am	Keynote: Gut Microbiota and Atherosclerosis
	Stanley Hazen, MD, PhD Cleveland Clinic
9:10am - 9:30am	Rapid Fire Presentations
	A Cardiovascular Disease-linked Gut-microbial Metabolite Phenylacetylglutamine (Pagln) Acts via Adrenergic Receptors (Adrs)
	Prasenjit Saha, PhD Cleveland Clinic
	Paired Sinus Microbiome and Pseudomonas Aeruginosa Whole Genome Sequencing Reflects a Competition for Space and Resources During Cystic Fibrosis Chronic Rhinosinusitis
	Catherine Armbruster, PhD University of Pittsburgh
	Gut Microbiota and Liver Disease
	Marlies Meisel, PhD University of Pittsburgh
	Microbial Metabolite Signaling is Required for Systemic Iron Homeostasis
	Nupur Das, PhD University of Michigan
9:30am - 9:50am	Break
9:50am -12:10pm	Session 1: Microbiome in Heart and Lung Disorders
	Moderators:
	Alison Morris, MD, MS University of Pittsburgh
	Vaughn Cooper, PhD University of Pittsburgh
9:50 - 10:10	John McGinnis, MD University of Pennsylvania  Gut Microbiome and Cholesterol Metabolism
9:50 - 10:10	
10.10 10.20	Jonathan Mark Brown, PhD Cleveland Clinic
10:10 - 10:30	Gut Microbiome and Hypertension
	Jennifer Pluznick, PhD Johns Hopkins University
10:30 - 10:50	Polymicrobial interactions in Cystic Fibrosis
	Jennifer Bomberger, PhD University of Pittsburgh
10:50 - 11:10	Pneumococcal Signaling
	Luisa Hiller, PhD Carnegie Mellon University
11:10 - 11:30	The Lung Microbiome in Critical Illness

	Georgios Kitsios, MD, PhD University of Pittsburgh
11:30 – 11:50	Antimicrobial Delivery with Perfluorocarbon Emulsions
	Keith Cook, PhD Carnegie Mellon University
11:50 - 12:10	Panel Q&A
12:10pm - 1:10pm	Lunch
1:10pm - 1:50pm	Keynote: Otitis Media and Microbial Biofilms
	Lauren Bakaletz, PhD Ohio State University
1:50pm - 2:10pm	Rapid Fire Presentations
	Developing and Applying Microdroplet Co-Cultivation Technology for Elucidating Bacterial Interspecies Interactions in the Human Vaginal Microbiome
	Corine Jackman, BS University of Michigan
	Human Corynebacterium Isolates Colonize Ocular Mucosal Tissue and Influence Local Immunity
	Benjamin Treat, PhD University of Pittsburgh
	Cutibacterium Acnes Antibiotic Production Shapes Niche Competition in the Human Skin
	Microbiome
	Jan Claesen, PhD Cleveland Clinic
2:10pm - 2:30pm	Break and Poster Viewing (PNC Rooms)
2:30pm - 3:20pm	Moderated Poster Discussion (PNC Rooms)
3:20pm - 3:40pm	Break
3:40pm - 5:40pm	Session 2: Microbiome, Nutrition, and Human Performance (Department of Defense Focus Session)
	Moderators:
	Warren Ruder, PhD University of Pittsburgh
	J. Philip Karl, PhD US Army Research Institute of Environmental Medicine
3:40 – 4:00	Investigating the Role of the Intestinal Microbiome in Deployment-Associated Diarrhea  Blake Stamps, PhD Air Force Research Laboratory
4:00 - 4:20	Military Stressors, Diet and the Gut Microbiome
4.00 - 4.20	J. Philip Karl, PhD US Army Research Institute of Environmental Medicine
4:20 - 4:40	Designing Synthetic Microbial Consortia with Defined Social Interactions
	Ting Lu, PhD University of Illinois Urbana - Champaign
4:40 - 5:00	Performance Enhancing Microbes in Elite Athletes
5:00 - 5:20	Theodore A Chavkin, BS Harvard Medical School  Probiotics, An Alternative to Mitigate the Effects of Operational Stress?
3.00 - 3.20	Kim Beals, PhD, RD, CSSD, LDN University of Pittsburgh
5:20 - 5:40	Panel Q&A
5:40pm - 6:00pm	Break and Transportation to Reception
6:00pm - 8:00pm	Evening Reception, Carnegie Museum of Natural History

## TUESDAY, NOVEMBER 5

7.30am - 8.20am	Registration and Breakfast
8:20am - 9:30am	Session 3: Mother and Infant Microbial Cross-Talk
	Moderators:
	Dennis Simon, MD University of Pittsburgh
	Michael Morowitz, MD University of Pittsburgh
8:20 - 8:40	Human Milk and Gut Microbiome
	Diana Taft, PhD University of California, Davis
8:40 - 9:00	Maternal IgA, Microbiota and Necrotizing Enterocolitis
	Kathyayini Gopalakrishna, MBBS, University of Pittsburgh
9:00 - 9:20	Enteroviral Infections and Gut Mucosal Immunity
	Carolyn Coyne, PhD University of Pittsburgh
9:20 - 9:30	Panel Q&A
9:30am - 9:50am	Rapid Fire Presentations
	Plant Based Nutrition Decreases Severity and Duration of Antibiotic Induced Gut Dysbiosis in Mice
	Rafael Ramos-Jimenez, MD University of Pittsburgh
	Altered Intestinal Microbiome Induced by Inflammatory Bowel Disease is Sufficient to Render Mice

	Susceptible to Clostridioides Difficile Colonization
	Lisa Abernathy Close, PhD University of Michigan
	Microbial Dysbiosis Drives Elevated Serum IL-18 and Intestinal Epithelial Major Histocompatibility
	Class II Expression in Immunodeficient Mice
	Lauren Van Der Kraak, PhD University of Pittsburgh
	Evolutionary dynamics of vancomycin-resistant Enterococcus faecium during gastrointestinal trac
	colonization and bloodstream infection in pediatric patients
	Daria Van Tyne, PhD University of Pittsburgh
9:50am – 10:00am	Break
10:00am - 11:50am	Session 4: Gut Microbiome in Health and Disease
	Moderators:
	Bryan McVerry, MD University of Pittsburgh
	Stacy Wendell, PhD University of Pittsburgh
10:00 - 10:20	Vitamin D regulation of the microbiota, Regulatory T cells and gastrointestinal homeostasis
	Margherita Cantorna, PhD Pennsylvania State University
10:20 - 10:40	Relationship Between the Intestinal Microbiome and Risk of Hospital-acquired Infection
	David B Haslam, MD University of Cincinnati
10:40 - 11:00	Interplay Between Dietary Fiber and Gut Microbiota in Liver Cancer: The Dark Side of Fermentation
	Matam Vijay-Kumar, PhD University of Toledo
11:00 - 11:20	Gut Microbiome and Environmental Enteropathy
	Timothy Hand, PhD University of Pittsburgh
11:20 - 11:40	The biofilm inhibiting protein gastrokine-1 protects against inflammatory bowel disease
	David Boone, PhD Indiana University
11:40 - 11:50	Panel Q&A
11:50am - 12:30pm	Break – Preparation for Lunch
12:30pm - 1:10pm	Lunch and Keynote: Epigenomic regulation of the gut microbiota relationship during health and
	disease Thorong Alanghat VAAD BhD Haivareity of Cincinnati
1.10 2.00	Theresa Alenghat, VMD, PhD University of Cincinnati
1:10pm - 3:00pm	Session 5: Beyond the Bacteriome: Fungi and Viruses  Moderators:
	Barbara Methe Phi). University of Pittsburah
	Barbara Methé, PhD University of Pittsburgh Daria Van Tyne, PhD University of Pittsburgh
1:10 - 1:30	Barbara Methe, PhD University of Pittsburgh Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating
1:10 - 1:30	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating  Disease
	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating  Disease  Mahmoud Ghannoum, PhD Case Western Reserve University
1:10 - 1:30	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment
1:30 - 1:50	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment  Graham Hatfull, PhD University of Pittsburgh
	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment
1:30 - 1:50	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment  Graham Hatfull, PhD University of Pittsburgh
1:30 - 1:50	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation
1:30 - 1:50 1:50 - 2:10	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation Bruno Martorelli Di Genova, PhD University of Wisconsin
1:30 - 1:50 1:50 - 2:10	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment  Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation  Bruno Martorelli Di Genova, PhD University of Wisconsin  Gut Mycobiota and Inflammation
1:30 - 1:50 1:50 - 2:10 2:10 - 2:30	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation Bruno Martorelli Di Genova, PhD University of Wisconsin  Gut Mycobiota and Inflammation Illyan Iliev, PhD Weill Cornell Medical College
1:30 - 1:50 1:50 - 2:10 2:10 - 2:30	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment  Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation  Bruno Martorelli Di Genova, PhD University of Wisconsin  Gut Mycobiota and Inflammation  Illyan Iliev, PhD Weill Cornell Medical College  Symbiotic interactions among the core microbes of the scalp
1:30 - 1:50 1:50 - 2:10 2:10 - 2:30 2:30 - 2:50	Daria Van Tyne, PhD University of Pittsburgh  Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment  Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation  Bruno Martorelli Di Genova, PhD University of Wisconsin  Gut Mycobiota and Inflammation  Illyan Iliev, PhD Weill Cornell Medical College  Symbiotic interactions among the core microbes of the scalp  Wook Kim, PhD Duquesne University
1:30 - 1:50 1:50 - 2:10 2:10 - 2:30 2:30 - 2:50	Bacteriome-Mycobiome Interactions: A Model for Promoting Human Health and Combating Disease  Mahmoud Ghannoum, PhD Case Western Reserve University  Exploiting Mycobacteriophages for TB Treatment Graham Hatfull, PhD University of Pittsburgh  Host Fatty Acid Metabolism Modifies Toxoplasma Differentiation Bruno Martorelli Di Genova, PhD University of Wisconsin  Gut Mycobiota and Inflammation Illyan Iliev, PhD Weill Cornell Medical College  Symbiotic interactions among the core microbes of the scalp Wook Kim, PhD Duquesne University  Panel Q&A