Anaerobe 2024

July 8-11, 2024

Monday, July 8

0800-1800 REGISTRATION 1800 SESSION I: CONGRESS KEYNOTE

0900-1700 ANAEROBIC IDENTIFICATION AND Evolution of Thinking about the Role of Anaerobic Microbes in Gastrointestinal Health and Disease

Laura M. Cox, PhD Moderator: Vincent B. Young, MD, PhD

0900-1700 EXAMINING ANAEROBES IN THE MICROBIOME: R. Balfour Sartor, MD

METAGENOMIC AND CULTURE APPROACHES

University of North Carolina, Chapel Hill, NC USA

Anna Seekatz, PhD, Casey M. Theriot, PhD,

Evan S. Snitkin, PhD

MIXER/RECEPTION
BUFFET DINNER

TUESDAY, JULY 9

0730-0830 REGISTRATION / CONTINENTAL BREAKFAST

0820-0830 WELCOME

Vincent B. Young, MD, PhD

0830-0930 SESSION II: ANAEROBES: DISEASE ASSOCIATIONS

Moderator: Vincent B. Young, MD, PhD

Roles of Three Fusobacterium nucleatum Subspecies

in Colorectal Cancer

Sarah Kuehne[†]

Nottingham Trent University, Nottingham,

Clostridioides difficile Infection Triggers Late

Neuroinflammatory Response in the Brain

Suemin E. Yang

University of Virginia, Charlottesville, VA USA

Investigating the Role of the Gut Microbiota in the 3KL Model of Parkinson's Diseases Using Selective

Antibiotic Depletion Leah Beauchamp, PhD

Brigham and Women's Hospital, Boston, MA USA

0930-1030 SESSION III: ANAEROBIC INFECTIONS

Moderator: Yiping Han, PhD

Finding Fusobacterium necrophorum: A Journey of

Patient and Pathogen Discovery

Michael Perry[†]

Anaerobe Reference Unit, Public Health, Wales, UK

Fusobacterium nucleatum is Enriched in Invasive

Colorectal Cancer Biofilms

Jessica Queen, MD, PhD

Johns Hopkins University, Baltimore, MD USA

Strategic Drug Repurposing for Biofilm Associated

Bacterial Vaginosis

William Johnston, PhD

Glasgow Caledonian University, Glasgow, Scotland,

UK

1030-1045 BREAK / EXHIBITS

1045-1145 SESSION IV: ANAEROBIC CLINICAL INFECTIONS

Moderator: Kevin Garey, PharmD

Lifetime Achievement Lecture

Decreasing Needless "Self-Flagellation": Overuse of

Metronidazole in Aspiration Pneumonia

Ellie J.C. Goldstein, MD

University of California, Los Angeles, CA USA

R.M. Alden Research Laboratory, Santa Monica, CA

Serum and Stool Inflammatory Mediators are

Viable Indicators of Risk for Developing Recurrent

Clostridioides difficile Infection

Michael Dieterle, MD, PhD

University of Wisconsin, Madison, WI USA

Comparing Mortality of Sepsis Patients Administered Piperacillin-Tazobactam or Cefepime Using Instrumental

Variable Analysis

Rishi Chanderraj, MD

University of Michigan, Ann Arbor, MI USA

1145–1315 LUNCH / EXHIBITS

1200-1300 SATELLITE SESSION

How to Publish Your First Manuscript (in Anaerobe)

Emma Allen-Vercoe, PhD

University of Guelph, Guelph, ON Canada

1315-1415 SESSION V: ANAEROBES IN HEALTH & DISEASE

Moderator: Laura Cox, PhD

Deleted in Malignant Brain Tumors 1 Glycoprotein

is Lost in Colonic Dysplasia

Nicholas Markham, MD, PhD

Vanderbilt University, Nashville, TN USA

In silico Design of Bacterial Consortia Mitigates Clostridioides difficile Pathogenesis in a Murine Model

Glynis Kolling, PhD

University of Virginia, Charlottesville, VA USA

NOMMS: The Nasal and Oral Microbiome in

Multiple Sclerosis

Shuqi Li, PhD

Brigham and Women's Hospital Boston, MA

1415-1430 BREAK / EXHIBITS

1430-1530 SESSION VI: CLOSTRIDIOIDES DIFFICILE I:

CLINICAL/EPIDEMIOLOGY UPDATES

Moderator: Stuart Johnson, MD

Evolution of the Treatment of CDI—From

Metronidazole to FDA-Approved FMT

Krishna Rao, MD

University of Michigan, Ann Arbor, MI USA

Clinical Efficacy of Ibezapolstat in CDI: Results from

Phase 2 Trials

Kevin Garey, PharmD

University of Houston, Houston, TX USA

Molecular Epidemiology of Clostridioides difficile in

the United States, 2020 Michelle Adamczyk

Centers for Disease Control and Prevention,

Atlanta, GA USA

1530-1730 POSTER SESSION I

1730-1800 ASA BUSINESS MEETING

†Sponsored by European Society of Clinical Microbiology & Infectious Diseases (ESCMID)

DINNER ON YOUR OWN

The 17th Biennial Congress of the Anaerobe Society of the Americas University of Michigan, Ann Arbor, MI USA

Wednesday, July 10

0700-0800 REGISTRATION / CONTINENTAL BREAKFAST 0800-0900 SESSION VII: INTERSPECIES & MICROBE/

MICROBE INTERACTIONS

Moderator: Casey M. Theriot, PhD

Bioactive Compounds Produced by the Gut Commensal Enterocloster citroniae Modulate Enteric Pathogen Virulence

Caetano Antunes, PhD

University of Kansas, Lawrence, KS USA

Protection Against CDI Colitis in a Mouse Model by a Clinical Avriulent Clostridioides difficile Isolate Through Amino Acids Competition

Qiwen Dong, PhD

Tufts University, Boston, MA USA

Fusobacterium nucleatum and Clostridioides difficile Co-Colonization Increases Inflammation of the Gut **Epithelium**

Charles Booth, Jr., PhD

Medical University of South Carolina,

Charleston, SC USA

0900-1000 **SESSION VIII: OTHER ANAEROBES:** PHYSIOLOGY & CLINICAL ASSOCIATIONS

Moderator: Purnima Kumar, DDS, PhD

Analyzing the Treponema denticola Protease Complex (Dentilisin) in Clinical Isolates

J. Christopher Fenno, PhD

University of Michigan, Ann Arbor, MI USA

Bacteroides thetaiotaomicron Prevents Death from Clostridioides difficile Infection in Aged Host: Potential Role of Interferon Signaling

Jae Hynn Shin, MD

University of Virginia, Charlottesville, VA USA

Antimicrobial Susceptibility of Gram Negative Anaerobic Isolates in a High Complexity Pediatric Hospital from Buenos Aires, Argentina

Silivina Otera

Hospital Garrahan, Buenos Aires, Argentina

1000-1015 BREAK / EXHIBITS

1015-1115 SESSION IX: ONE HEALTH: ANAEROBES IN **ANIMALS & MAN**

Moderator: Francisco Uzal, DVM, PhD

The Epidemiology of Clostridioides difficile in a One-Health Context

Eliane de Oliveira Ferreira, PhD

Federal University of Rio de Janeiro, Rio de Janeiro,

Effects of Commonly Used Medications on the Growth of Commensal Gut Anaerobes and Pathobionts Associated with Domestic Cats and Dogs

Holly Ganz, PhD

AnimalBiome, Oakland, CA USA

The Microbiome & Resistome of Golden Jackals in

Katherine Winner

University of Michigan, Ann Arbor, MI USA

1115–1215 SESSION X: ANAEROBES IN REPRODUCTIVE **HEALTH**

Moderator: David Fredricks, MD

The Importance of Anaerobic Antimicrobial Therapy for Acute Pelvic Inflammatory Disease (PID)

Harold Wiesenfeld, MD

University of Pittsburgh, Pittsburgh, PA USA

Application of Endolysins as Novel Antimicrobials Against Bacterial Vaginosis

Ryan Kean, PhD

Glasgow Caledonian University, Glasgow,

Scotland, UK

Novel Eggerthellaceae Isolates from the Female Reproductive Tract

Sujatha Srinivasan, PhD

Fred Hutchinson Research Center, Seattle, WA USA

1215 **END OF GENERAL SESSIONS**

FREE TIME — EXPERIENCE ANN ARBOR

1245-1400 YOUNG INVESTIGATOR'S POSTER

PRESENTATIONS



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Thursday, July 11

0730-0830 REGISTRATION / CONTINENTAL BREAKFAST 0830-0930 SESSION XI: ADVANCES IN PUBLIC HEALTH/ EPIDEMIOLOGY

Moderator: Audrey Schuetz, MD

Genomic Epidemiology-Providing Insights into Transmission and Spread of Pathogens at Multiple Spatial and Temporal Scales

Evan Snitkin, PhD

University of Michigan, Ann Arbor, MI USA

Fusobacterium nucleatum: A Model Periodontal Pathogen in Intrauterine Infections

Yiping W. Han, PhD

Columbia University, New York, NY USA

Identification of Cryptic Clostridioides spp. among Clostridioides difficile Infection (CDI) Surveillance Isolates Collected Through the Emerging Infections Program (EIP), 2018-2020

Giulia Orazi, PhD

Centers for Disease Control and Prevention, Atlanta, GA USA

0930-1030 SESSION XII: HOST RESPONSES IN ANAEROBIC INFECTIONS

Moderator: Krishna Rao, MD

Deciphering Host Inflammation in *Clostridioides* difficile Infection: Unraveling the Effects of OLFM4 in Disease Severity

Rajat Madan, MD, PhD

University of Cincinnati, Cincinnati, OH USA

Loss of S100B Attenuates Severity of *Clostridioides* difficile Infection in Mice and Protects Enteric Glia

Deiziane Viana da Silva Costa

University of Virginia, Charlottesville, VA USA

Toxin-Mediated Alterations in Host Physiology Impact Clostridioides difficile Colonization and Pathogenesis Christopher Peritore-Galve, PhD

Vanderbilt University, Nashville, TN USA

1030-1045 BREAK / EXHIBITS

1045-1145 SESSION XIII: ANAEROBES IN THE ENVIRONMENT (NOVEL ANAEROBES)

Moderator: Cynthia Sears, MD

Barcoded Overexpression Libraries to Study Gene Functions in Gut Bacteroidales

Yolanda Yue Huang, PhD

University of Buffalo, Buffalo, NY USA

Exploring the Role of Sodium Membrane Energetics in *Bacteroides fragilis* Bile Acid Resistance

Matthew Schnizlein, PhD

Michigan State University, Lansing, MI USA

The Role of Bile Acid Conjugation in Gut Inflammation

Yousi Fu. PhD

Michigan State University, Lansing, MI USA

1145-1315 LUNCH / EXHIBITS

1200-1300 SATELLITE SESSION

Introducing the Stratus, Your Solution to Anaerobic Bacterial Growth Curves

Cerrillo

1315-1415 SESSION XIV: CLOSTRIDIOIDES DIFFICILE II: BASIC RESEARCH

Moderator: Aimee Shen, PhD

Novel Cell Wall Crosslinking Enzymes in *Clostridioides* difficile Produce Essential 3-3 Crosslinks

Kevin Bollinger

University of Iowa, Iowa City, IA USA

Siderophore Utilization in Clostridioides difficile

Jessica Hastie, PhD

U.S. Food & Drug Administration, Silver Spring, MD USA

Inhibition of *Clostridioides difficile* Sporulation by the Phosphotransfer Proteins PtpA and PtpB *Adrienne Edwards*, *PhD*

Emory University, Atlanta, GA USA

1415-1430 BREAK / EXHIBITS

1430-1530 SESSION XV: ANAEROBIC RESISTANCE AND NOVEL TREATMENTS

Moderator: Vincent B. Young, MD, PhD

The Implementation of FDA-Approved Microbiome Therapeutics: A Clinician Perspective for *Clostridioides* difficile Infections

Nirja Mehta, MD

Emory University, Atlanta, GA USA

Omics Evaluation of Omdacycline, A Low-Risk Antibiotic for *Clostridioides difficile* Infection

Jinhee Jo, PharmD

University of Houston, Houston, TX USA

Beta-Lactamase as a Predictor of Penicillin Susceptibility for Anaerobic Gram-Negative Bacilli Samantha Shannon, MLS (ASCP)^{CM} Mayo Clinic, Rochester, MN USA

1530-1730 POSTER SESSION II

1730 CONGRESS ADJOURNS

1745 CONGRESS RECEPTION / BANQUET / AWARDS

See Registration Form for Banquet Tickets

