

2014 Anaerobe

The 12th Biennial Congress of the
Anaerobe Society of the Americas

The 37th Congress of the Society for
Microbial Ecology and Disease

Westin River North Hotel, Chicago, IL USA — June 28-July 1, 2014

Preliminary Program

SATURDAY, JUNE 28, 2014

8:00 Registration (thru 17:00)
9:00 **Anaerobic Identification & Susceptibility Workshop**

SUNDAY, JUNE 29, 2014

7:00 Registration / Breakfast / Exhibits

8:00 **Welcome**
Dale Gerding, M.D. & Andrew Onderdonk, Ph.D.

8:10 **Session I: Ecology of the Microbiota**
Chair: Wendy Garrett, M.D., Ph.D.
GI Microbiome and Immune Modulation
Rick S. Blumberg, M.D.
Brigham and Women's Hospital
Boston, MA USA

Computational Approaches for the Human Microbiome in Health and Disease
Curtis Huttenhower, Ph.D.
Harvard University
Cambridge, MA USA

Functional Characterisation of a Unique Homologue of Ubiquitin Produced by the Commensal Gastro-Intestinal Bacterium Bacteroides fragilis
Maria T. Kowal, Ph.D.
University of Edinburgh
Edinburgh, United Kingdom

9:15 Break

9:30 **Session II: Keynote**
Chair: Dale Gerding, M.D.
Long-Term Consequences of Antibiotic Use
Martin J. Blaser, M.D.
Human Microbiome Program
New York University Langone Medical Center
New York, NY USA

10:30 Break

10:40 **Session III: Microbiota: Reaching Beyond the Gut**
Chairs: Cindy Sears, M.D. & Bennett Lorber, M.D.
Microbiota and Cancer Therapy
Romina S. Goldszmid, Ph.D.
Center for Cancer Research, NCI, NIH
Frederick, MD USA

What's Buggin You?: The Role of the Gut Microbiome in Central Nervous System Disease
Lloyd H. Kasper, M.D.
Geisel School of Medicine, Dartmouth College
Hanover, NH USA

The Role of Early-Life Microbiota in Shaping Adult Body Composition
Laurie M. Cox, Ph.D.
NYU Langone Medical Center
New York, NY USA

12:00 Lunch / Exhibits

13:00 Poster Session 1

14:00 **Session VI: Beneficial Microbiome Members**
Chair: Eugenia Bezirtzoglou, M.D., Ph.D.
Probiotics Rules and Problems
Tore Midtvedt, M.D., Ph.D.
Karolinska Institute
Stockholm, Sweden

Probiotics, Immunobiotics and Diet in Predictive, Attendance Unknown Preventive and Personalised Medicine
Nadiya Boyko, D.Sc.
Uzhhorod National University
Ukraine

Diversity of Intestinal Lactic Acid Bacteria and Health
Marika Mikelsaar, Ph.D.
University of Tartu
Estonia

Bifidobacteria and Rheumatism
Marie-Bénédicte Romond, Ph.D.
University of Lille Nord de France
Lille France

Probiotics in Prevention of Chronic Diseases
Alojz Bomba, D.Sc.
Pavol Jozef Šafárik University
Košice, Slovak Republic

In vitro Investigation of Brachyspira pilosicoli-Host Metabolic Interactions
Caroline I. Le Roy
The University of Reading
Reading, United Kingdom

15:40 Break

15:45 **Session V: Anaerobes in the Oral Cavity**
Chair: Purima Kumar, D.D.S., Ph.D.
Fusobacterium nucleatum: A Commensal-Turned Pathogen
Yiping Han, Ph.D.
Case Western Reserve University
Cleveland, OH USA

Oral Bacteria and Systemic Disease: P. gingivalis Can Cause What?!
Richard Lamont, Ph.D.
University of Louisville
Louisville, KY USA

Oral Anaerobes in Health and Disease: 2014 Highlights
Georg Conrads, Ph.D.
University Hospital
Aachen-Germany

Highly Diverse Root Canal Microbiota in Chronic Apical Periodontitis According to Illumina Sequencing
Reet Mändar, M.D., Ph.D.
University of Tartu
Estonia

17:15 **Anaerobe Society Meeting**

17:45 **Wine & Cheese Reception in Exhibit Area**



MONDAY, JUNE 30, 2014

- 7:00 Registration / Breakfast / Exhibits
- 7:30 **Satellite Symposium — Sponsor: bioMerieux**
A New Look at Anaerobes in the Clinical Laboratory
MALDI-ToF MS for the Identification of Anaerobes
Dave Pincus
*Research Fellow, Microbial Identification
R&D Microbiology, bioMérieux*
*The Importance of Susceptibility Testing of Anaerobes:
When, How, Why*
David W. Hecht, M.D., M.B.A.
*Senior Vice President, Clinical Affairs and Chief Medical Officer
Loyola University Health System
The John W. Clarke Professor and Chairman,
Department of Medicine, Loyola University Medical Center
Maywood, IL*
- 8:45 **Session VI: Biofilms in Anaerobic Infections**
Chair: David Fredricks, M.D.
*Biofilms vs Composition in Colon Cancer: Will There Be a
Victor?*
Cynthia L. Sears, M.D.
*Johns Hopkins University School of Medicine
Baltimore, MD USA*
Gardnerella vaginalis Biofilms in Bacterial vaginosis
Adam J. Ratner, M.D., M.P.H.
*Columbia University
New York, NY USA*
Clostridium difficile Biofilms (in vitro)
Adam Driks, Ph.D.
*Loyola University Medical Center
Maywood IL USA*
The Microbiome in Oral Health and Disease
Purnima Kumar, D.D.S., Ph.D.
*The Ohio State University
Columbus, OH USA*
- 10:25 Break
- 10:35 **Session VII: Diagnostic and Laboratory Techniques**
Chair: Diane Citron
*Oscillibacter Who? What Shall We Do with These
New Names?*
Diane Citron
*R.M. Alden Research Lab
Culver City CA USA*
*European Experience with Maldi-TOF MS in the Field of
Anaerobes*
Elisabeth Nagy, M.D., Ph.D., D.Sc.
*University of Szeged
Szeged, Hungary*
Animal Models for Clostridium difficile Infections
Vincent Young, M.D., Ph.D.
*The University of Michigan
Ann Arbor, MI USA*
- 11:50 Lunch / Exhibits
- 12:50 Poster Session 2
- 13:50 **Session VIII: The Care and Feeding of Our Intestinal
Microbiome**
Chair: Andrew Onderdonk, Ph.D.
Functional Dairy Foods and Flora Modulation
Eugenia Bezirtzoglou, M.D., Ph.D.
*Democritus University of Thrace
Orestiada, Greece*
*New Antimicrobial Strategy Based on Inhibition of Pathogen's
Cell-to-Cell Signaling and Consecutive Virulence Features Ex-
pression by Probiotic Signal Molecules*
Veronica Lazar, Ph.D.
*University of Bucharest
Bucharest, Romania*
- 14:40 **Session IX: Clostridium spp: Health and Disease**
Chair: Carl Erik Nord, M.D.
The Opportunistic Pathogen Clostridium septicum
David M. Aronoff, M.D.
*Vanderbilt University Medical Center
Nashville, TN USA*
Life Threatening Toxin Mediated Clostridial Infections
Dennis L. Stevens, M.D., Ph.D.
*VA Medical Center
Boise, ID USA*
*Spores of Clostridium Engineered for Clinical Efficacy and
Safety Cause Regression and Cure of Tumors In Vivo*
Nigel P. Minton, Ph.D.
*The University of Nottingham
Nottingham, United Kingdom*
*Clostridium sordellii Infections:
Insights into the Pathogenesis of Disease*
Mike J. Aldape, Ph.D.
*VA Medical Center
Boise, ID USA*
*Identification of the Host Receptor for Clostridium perfringens
TpeL Toxin Indicates a Two-Receptor Model of Clostridial
Glycosylating Toxins*
Panagiotis Papatheodorou, Ph.D.
*Albert-Ludwigs-Universität Freiburg
Freiburg, Germany*
- 16:00 Break
- 16:10 **Session X: Whole Genome Sequencing**
Chair: Ellen Jo Baron, Ph.D.
*Whole Genome Sequencing for Crohn's Disease Bacteria in the
Gut Mucosa*
Scot E. Dowd, Ph.D.
*MR DNA
Shallowater, TX USA*
Urine is Not Sterile: New Tools Lead to New Hypotheses
Alan J. Wolfe, Ph.D.
*Stritch School of Medicine
Loyola University Chicago
Maywood, IL USA*
- 17:10 **Session XI: Antimicrobials and Resistance**
Chair: Ellie J.C. Goldstein, M.D.
The Drug Pipeline for Anaerobic Infections
Ellie J.C. Goldstein, M.D.
*R.M. Alden Research Lab
University of California, Los Angeles
Santa Monica, CA USA*
Antimicrobial Susceptibility Testing in Europe
Carl Erik Nord, M.D.
*Karolinska Institute
Stockholm, Sweden*
*Emergence and Evolution of an International Clone of
Multiresistant Bacteroides fragilis Isolates*
József Sóki, Ph.D.
*University of Szeged
Szeged, Hungary*
*Evaluation of the Antimicrobial Susceptibility Profiling of
Tigecycline and Other Antibiotics against Clinical Isolates*
Grigoria Mitropoulou, Ph.D.
*Democritus University of Thrace
Orestiada, Greece*
- 18:00 Session Ends
- 18:15 **Symposium Reception**
- 19:15 **Congress Banquet & Awards Ceremony**

TUESDAY, JULY 1

- 7:00 Registration / Breakfast / Exhibits
- 7:30 **Satellite Symposium — Sponsor: BioK+**
Primary Prevention of C. difficile Infection with Specific Probiotics
Stuart Johnson, M.D.
*Loyola University Stritch School of Medicine
Hines VA Hospital
Maywood, IL USA*
- 8:30 Break
- 8:45 **Session XII: Vaginal Microbiome**
Chair: Raina N. Fichorova, M.D., Ph.D.
The Vaginal Microbiome: What's New Since Anaerobe 2012?
Jeanne Marrazzo, M.D.
*University of Washington
Seattle, WA USA*
Which Members of the Vaginal Microbiome are Associated with Amniotic Fluid Infections and PID?
Sharon Hillier, M.D.
*Magee Women's Research Institute
Pittsburgh, PA USA*
The Differential Roles of Vaginal Bacteria in Tuning Mucosal Immunity
Raina N. Fichorova, M.D., Ph.D.
*Brigham and Women's Hospital
Boston, MA USA*
Effect of Intrauterine Contraception on Vaginal Microbiota
Christine M. Bassis, Ph.D.
*University of Michigan
Ann Arbor, MI USA*
- 10:00 Break
- 10:15 **Session XIII: Clostridium difficile Epidemiology & Prevention**
Chair: Stuart Johnson, M.D.
Update on the Epidemiology of C. difficile Infections from the CDC
L. Clifford McDonald, M.D.
*Centers for Disease Control and Prevention
Atlanta, GA USA*
New Insights into Clostridium difficile Transmission in the Hospital, Based on Whole Genome Sequencing
Mark Wilcox, M.D.
*University of Leeds
Leeds, UK*
Developmental Progress of a Clostridium difficile Vaccine
Patricia J. Freda Pietrobon, Ph.D.
*Sanofi Pasteur
Swiftwater, PA USA*
Laboratory-Based Surveillance of Clostridium difficile Strains
Thomas V Riley, Ph.D.
*The University of Western Australia
Nedlands, Western Australia*
Does Binary Toxin Contribute to Clostridium difficile Infection?
Sarah Kuehne
*University of Nottingham
Nottingham, United Kingdom*
- 11:45 Lunch / Exhibits
- 12:45 Poster Session 3
- 13:45 **Session XIV: Clostridium difficile Treatment & Immunity**
Chair: David M. Aronoff, M.D.
Optimizing Existing Therapies for Clostridium difficile Infections
Stuart Johnson, M.D.
*Loyola University Stritch School of Medicine
Hines VA Hospital
Maywood, IL USA*
- Emerging Drugs and Vaccines Against Clostridium difficile*
Kevin Garey, Pharm.D.
*University of Houston College of Pharmacy
Houston, TX USA*
- A New Strategy for the Prevention of Clostridium difficile Infections*
Ernesto Abel-Santos, Ph.D.
*University of Nevada, Las Vegas
Las Vegas, NV USA*
- Global Analysis of the Role of Inflammation in Clostridium difficile Colonization and Disease*
Gary B. Huffnagle, Ph.D.
*University of Michigan
Ann Arbor, MI USA*
- 15:00 Break
- 15:10 **Session XV: Bacterial Therapy**
Chair: Vincent Young, M.D., Ph.D.
Non-toxicogenic Clostridium difficile to Prevent Recurrent Clostridium difficile Infections
Dale Gerding, M.D.
*Hines VA Hospital
Loyola University Chicago Stritch School of Medicine
Maywood, IL USA*
Treatment Approaches for Resolving Recurrent Clostridium difficile Infection (RCID)
Johan Bakken, M.D., Ph.D.
*St. Luke's Hospital
Duluth, MN USA*
- 16:10 **Session XVI: New Insights into Clostridium difficile Pathogenesis**
Chair:
In-Depth Proteomic Analysis of the Toxigenic and Non-Toxigenic Clostridium difficile Secretome
Hercules Moura, Ph.D.
*Centers for Disease Control and Prevention
Atlanta, GA USA*
Different Ways to Die: Epidemic-Associated Clostridium difficile Remodels Its Cell-Surface, and Manipulates the Host Innate Immune System to Cause Severe Disease
Gayatri Vedantam, Ph.D.
*University of Arizona
Tucson, AZ USA*
Intersection of Metabolism and Pathogenesis in Clostridium difficile
Laurent Bouillaut, Ph.D.
*Tufts University School of Medicine
Boston, MA USA*
Conserved Oligopeptide Permeases Modulate Sporulation Initiation in Clostridium difficile
Adrienne N. Edwards, Ph.D.
*Emory University
Atlanta, GA USA*
Defining the Early Stages of Clostridium difficile Spore Germination
Joseph A. Sorg, Ph.D.
*Texas A&M University
College Station, TX USA*
Complex Regulation of Clostridium difficile Biofilms
Meera Unnikrishnan, Ph.D.
*The University of Warwick Medical School
Coventry, United Kingdom*
Mechanisms of Iron Acquisition in Clostridium difficile
Paul Carlson Jr., Ph.D.
*University of Michigan
Ann Arbor, MI USA*
- 17:40 Congress Ends