Center for the Study of Inflammatory Bowel Disease (CSIBD)
Co-host: Center for Microbiome Informatics and Therapeutics at MIT
27th Annual Workshop

Genetics, Microbes and Immunity in Inflammatory Bowel Disease
Friday, November 3, 2017
7:00 a.m. – 5:30 p.m.

November 3, 2017

7:00 – 7:40  Registration and Breakfast

7:45 – 7:55  Welcome and Opening Remarks:
Ramnik J. Xavier, M.D., Director, CSIBD
Eric Alm, Ph.D., Director, CMIT

Session I: Computation to Small Molecules
Moderators: Andrew Chan, M.D. and Andrew Luster, M.D., Ph.D

8:00 – 8:25  Integrating Dynamic Profiles of the Microbiome in Inflammatory Bowel Disease
Curtis Huttenhower, Ph.D. Harvard School of Public Health, Boston, MA

8:30 – 8:55  Metabolic Profiling through Mass Spectrometry
Elizabeth Kujawinski, Ph.D. Woods Hole Oceanographic Institute, Wood Holes, MA

9:00 – 9:25  Our Intestinal Microbiota as a Source of Next-Generation Probiotics to Prevent and to Treat Inflammatory Bowel Diseases?
Philippe Langella, Ph.D., Micalis Institute, France

9:30 – 9:55  Discovering, Understanding, and Harnessing Microbiota-Drug Interactions
Emily Balskus, Ph.D., Harvard University, Cambridge, MA

10:00 – 10:15  Break

Session II: Mucus, Phage, and IBD
Moderators: Mark Daly, Ph.D. and Gail Hecht, M.D.

10:20 – 10:45  Probing Microbial Interactions with the Mucus Barrier
Katherine Ribbeck, Ph.D., MIT, Cambridge, MA

10:50 – 11:15  New Insights on Microbiome-Based Diagnostics, Cholesterol Metabolism and Virus Dynamics
Sepideh Pakpour, Ph.D., MIT, Cambridge, MA
11:20 – 11:45  
A Humanized Fecal Transplantation Mouse Model to Study the Functionality of the Gut Microbiome  
Fabio Cominelli, M.D., Ph.D., Case Western Reserve University, Cleveland, OH

11:50 – 12:15  
Modulation of Inflammation and Intestinal Damage in the Intestine but Host Factors.  
Thaddeus Stappenbeck, M.D., Ph.D., Washington University School of Medicine, St. Louis, MO

12:20 – 1:15  
LUNCH BREAK

Session III: Systems Biology and IBD  
Moderators: Hera Vlamakis, Ph.D. and Charles Elson, M.D.

1:20 – 1:45  
Molecular Details of Glycan Scavenging by Human Gut Bacteroidetes  
Nicole Koropatkin, Ph.D., University of Michigan, Ann Arbor, MI

1:50 – 2:15  
Genomic Profiling of the Inflamed Colon at Single Cell Resolution  
Aviv Regev, Ph.D., The Broad Institute, Cambridge, MA

2:20 – 2:45  
Bioactive Small Molecules Metabolized by Human Gut Bacteria  
Sloan Devlin, Ph.D., Harvard Medical School, Cambridge, MA

2:50 – 3:15  
Butyrate: a link between us and our microbiome  
Mohit Verma, Ph.D., Purdue University, West Lafayette, IN

3:20 – 3:35  
Break

Session IV: Signaling Circuits and Microbiome in Health and Disease  
Moderators: Shiv Pillai, Ph.D. and Hans-Christian Reinecker, Ph.D.

3:40 – 4:05  
Causes and Consequences of Microbiome Variation  
Andrew Goodman, Ph.D., Yale University, New Haven, CT

4:10 – 4:35  
Engineering in vivo Non-invasive Diagnostics via the Microbiome  
Timothy Lu, M.D., Ph.D., MIT, Cambridge, MA

4:40 – 5:05  
Synthetic Biology Diagnostics for the Gut Microbiome  
Jim Collins, Ph.D., MIT, Cambridge, MA

Simches Research Building at Charles River Plaza  
185 Cambridge Street, 3rd floor  
The Workshop is open to the research community at no charge  
To register, please e-mail lblizard@partners.org

CSIBD 27th Annual Workshop agenda