

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

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

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**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, 3<sup>rd</sup> floor  
The Workshop is open to the research community at no charge  
To register, please e-mail [lblizard@partners.org](mailto:lblizard@partners.org)***