Eras of the microbiome



Thursday, April 25

Eric P. Newman Education Center (EPNEC)

MORNING

8:00 am - OPENING COMMENTS

David H. Perlmutter, MD – Dean and Executive Vice Chancellor for Medical Affairs

Organizers – Brian Muegge, Peter Turnbaugh, Meng Wu

8:15 am - SESSION 1

Exploring gut microbial ecology and function

How human is the human microbiome

Ruth Ley Max Planck Institute for Biology

Saying BHB-ye bye to autoimmunity

Peter Turnbaugh University of California, San Francisco

Microbial contributions to digestive health - perspectives from your inner fish

John F. Rawls Duke University

10:15 am - SESSION 2

Gnotobiotic models, mechanisms and translation

Uncovering the metabolic secrets of anaerobes for therapeutic applications

Lynn Bry Harvard University

Regulation of metabolism and immunity by the microbiome

Lora Hooper University of Texas, Southwestern

From identification of a microbially produced metabolite to development of a potential novel treatment modality

Fredrik Bäckhed University of Gothenburg

AFTERNOON

1:00 pm - SESSION 3

Bacteroides as model symbionts and a paradise for glycobiologists

Studying gut bacterial dietary habits: Getting into a sticky situation

Justin Sonnenburg Stanford University

Mucus-degrading human gut bacteria in inflammatory bowel disease

Eric Martens University of Michigan

Microbiome dynamics during infection

Andy Goodman Yale University

Recent insights into carbohydrate-active enzymes of the microbiome

Bernard Henrissat Technical University of Denmark

3:15 pm - SESSION 4

The microbiome, global health & interdisciplinary science

Going farther, together: Views on a Global Partnership

Tahmeed Ahmed International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)

Catalyzing change: Collaborative efforts to improve infant health through microbiome and undernutrition solutions

Vanessa Ridaura The Bill & Melinda Gates Foundation

How listeria outsmarts its host

Marc Lecuit Institut Pasteur

Statistical design of functional microbiomes

Arjun Raman University of Chicago

4:45 pm - REFLECTION

Caroline Ash Senior Editor, Science
Jeffrey Gordon WashU Medicine

Eras of the microbiome



Friday, April 26 Moore Auditorium

MORNING

8:00 am - SESSION 5

Characterizing microbes in diverse habitats

RACS-Seq and FlowRACS: Developing instruments for mapping microbiome @ single-cell resolution

Jian Xu Qingdao Institute of Bioenergy and Bioprocess Technology

Microbe-microbe interactions at nutrient depots in the gut

Michael Patnode University of California, Santa Cruz

Modeling intestinal eukaryotic microbes in mice and microfluidic devices

Laura Knoll University of Wisconsin

Tripartite interactions among the microbiota, stromal cells and the immune system

Meng Wu WashU Medicine

10:00 am - SESSION 6

Metabolism!

Gut bacterial metabolism and cardiometabolic disease

Federico Rey University of Wisconsin

Protective interorgan, intercellular, and intercompartmental metabolite shuttles in obesity

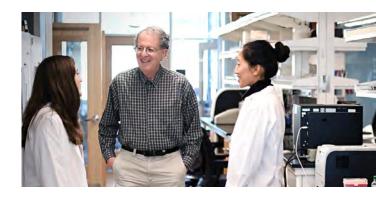
Peter Crawford University of Minnesota

Mining the edible plant microbiome to develop medical foods for managing postmenopausal bone loss and rheumatoid arthritis

Mark Charbonneau Solarea Bio

Transcriptional and epigenetic control of intestinal metabolism

Brian Muegge WashU Medicine



AFTERNOON

1:30 pm - SESSION 7

Career trajectories

ROUNDTABLE DISCUSSION

The many paths to becoming a cancer biologist

Michelle Hermiston University of California, San Francisco

Neel Dey Fred Hutchinson Cancer Center

Marios Giannakis Dana Farber Cancer Institute

Advancing microbiome sciences in LMICs

Alejandro Reyes Universidad de los Andes, Colombia

From protein N-myristoylation to the enteric nervous system

Robert Heuckeroth Children's Hospital of Pennsylvania

3:15 pm - CLOSING REMARKS

Jeffrey Gordon WashU Medicine