

VIRTUAL WORKSHOP

Surveying Microbiome Connections to Healthcare with Implications for Long-Duration Human Space Flight

Join this one-day workshop exploring the connection between the microbiome, healthcare and the future of human exploration. How can an interdisciplinary understanding and application of the microbiome enhance astronaut health on a mission to Mars?

This event is co-hosted by the California Institute of Technology (Caltech) and Translational Research Institute for Space Health (TRISH). TRISH is a consortium led by Baylor College of Medicine with Caltech and MIT. Presentations are 30 minutes long. All sessions are free to attend and open to the public.





OVERVIEW

Perspective on the field and effects of radiation on microbiome

Rob Knight, Ph.D., UCSD

IMMUNOLOGICAL HEALTH AND DISEASE

Gut microbes in Multiple Sclerosis: Structural, Functional and Integrative Analysis

Sergio Baranzini, Ph.D., UCSF

BEHAVIORAL/MENTAL/NEUROLOGICAL HEALTH AND DISEASE

Gut-Brain Connections to Behaviors in MiceSarkis Mazmanian. Ph.D., Caltech

Gut-Brain Connections to Behaviors in Humans Emeran Mayer, M.D., Ph.D., UCLA

DIAGNOSTICS/CHARACTERIZATION

Microbial Pathways to Metabolite Production Michael Fischbach, Ph.D., Stanford

Microbiome Sequencing Technologies

Joe Petrosino, Ph.D., Baylor College of Medicine

HEALTHCARE INTERVENTIONS

Autism Clinical Trials

Rosa Krajmalnik-Brown, Ph.D., ASU

Biomarkers for Depression and Alzheimer's

Rima Kaddurah-Daouk, Ph.D., Duke

RADIATION EFFECTS

Radiation Effects on Microbiome / Metabolome

Amrita Cheema, Ph.D., Georgetown

INVESTMENT AND DRUG DEVELOPMENT

Investment in Microbiome Space

Denise Kelly, Ph.D., Seventure

Microbiome in Cancer and COVID-19

Stephanie Culler, Ph.D., Persephone Biosciences

Regulatory Considerations for Microbiome-based Therapeutics

Paul Carlson, Ph.D., FDA

