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 Mice
Sarkis 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
Gut Bacteria Human co-Metabolism - Implications in Neuropsychiatric Diseases
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

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