

A Science Strategy for the Human Exploration of Mars: Panel on Biological and Physical Sciences and Human Factors Open Meeting #1

August 6-8, 2024

Hybrid Meeting

In Person at Keck 209

Online via Zoom and Livestream

TUESDAY, AUGUST 6, 2024

OPEN SESSION

Livestream: <https://vimeo.com/event/4470384>

[CLICK HERE TO JOIN](#)

10:00 AM	Microbiomes in Space and Exploration Environments <i>(30 minute presentation & 15 minute discussion period)</i>	Christopher Mason (virtual) Weill Cornell Medicine
10:45 AM	The Behavioral Health Challenges of Martian Missions <i>(30 minute presentation & 15 minute discussion period)</i>	Sandra Whitmire NASA
11:30 AM	Break (30 minutes)	
12:00 PM	Panel: Astronaut Selection Processes & Considerations <i>(20 minute presentations & 20 minute discussion period)</i> Panelists: Robert Mulcahy, NASA Johnson Space Center (virtual) James Picano, NASA Johnson Space Center (virtual)	
1:00 PM	Working Lunch for Members, Speakers, and Staff (60 minutes)	
2:00 PM	Panel: Human Health Impacts of Traveling & Living Off-Earth <i>(20 minute presentations & 20 minute discussion period)</i> Panelists: Susan Bailey, Colorado State University (virtual) Kim Prisk, University of California San Diego	
3:00 PM	Panel: Using Microbes for Space Exploration <i>(20 minute presentations & 20 minute discussion period)</i> Panelists: Luke Roberson, NASA Kennedy Space Center (virtual) Rosa Santomartino, University of Edinburgh (virtual)	
4:00 PM	Break (15 minutes)	

A Science Strategy for the Human Exploration of Mars: Panel on Biological and Physical Sciences and Human Factors Open Meeting #1
August 6-8, 2024

4:15 PM **Panel: The Martian Radiation Environment**
(20 minute presentations & 20 minute discussion period)
Panelists: **Jeff Chancellor, Louisiana State University**
 Lisa Simonsen, NASA

5:15 PM Meeting Adjourns to Executive Session; Break (15 minutes)

WEDNESDAY, AUGUST 7, 2024

OPEN SESSION

Livestream: <https://vimeo.com/event/4470391>

[CLICK HERE TO JOIN](#)

10:00 AM **Panel: Growing & Using Plants on Mars**
(20 minute presentations & 20 minute discussion period)
Panelists: **Amy Grunden, North Carolina State University**
 Karen McDonald, University of California, Davis (virtual)

11:00 AM **Food Systems for Space Exploration** **Grace Douglas (virtual)**
(30 minute presentation & 15 minute discussion period) **NASA Johnson Space Center**

11:45 AM Break (15 minutes)

12:00 PM **Science Prioritization on the Martian Surface** **Darlene Lim (virtual)**
(30 minute presentation & 15 minute discussion period) **NASA Ames Research Center**

12:45 PM Working Lunch for Members, Speakers, and Staff (45 minutes)

1:30 PM **Panel: Lessons from Analog Research Missions**
(20 minute presentations & 20 minute discussion period)
Panelists: **Dale Andersen, SETI Institute**
 Chris McKay, NASA Ames Research Center (virtual)

2:30 PM Break (30 minutes)

3:00 PM **Panel: Human-Systems Integration for Space Exploration**
(20 minute presentations & 20 minute discussion period)
Panelists: **Mica Endsley, SA Technologies (virtual)**
 Valerie Gawron, MITRE (virtual)

4:00 PM **Non-Invasive Monitoring of Astronaut Health** **Mathias Basner (virtual)**
(30 minute presentation & 15 minute discussion period) **University of Pennsylvania**

4:45 PM Meeting Adjourns to Executive Session; Break (15 minutes)

**A Science Strategy for the Human Exploration of Mars: Panel on Biological and Physical Sciences
and Human Factors Open Meeting #1
August 6-8, 2024**

IMPORTANT NOTES

Members of the General Public:

- Remote access will be provided through a live stream. This will also be publicly available and posted on the Board website. You do not need to register.

Thank you all for your cooperation, and we look forward to a successful meeting.