

Committee on Biological and Physical Sciences in Space (CBPSS)

Disclaimer: These slides represent a personal assessment of the issues discussed by the CBPSS. This document should not be cited or quoted because the views expressed do not necessarily reflect those of CBPSS, SSB, ASEB, or the Academies.

DR. ELIZABETH R. CANTWELL Arizona State University	MR. DANIEL L. DUMBACHER Purdue University
DR. ROBERT J. FERL University of Florida	DR. ROBERT J. FERL University of Florida
DR. KENNETH M. BALDWIN University of California, Irvine	DR. REZA ABASCHIAN University of California, Riverside
DR. MINA J. BISSELL Lawrence Berkeley National Laboratory	DR. ALAN R. HARGENS University of California, San Diego
DR. STEVEN H. COLLICOTT Purdue University	DR. YIGUANG JU Princeton University
DR. OFODIKE (DK) A. EZEKOYE The University of Texas at Austin	DR. DOMINIQUE LANGEVIN Laboratoire de Physique des Solides of the University Paris Sud
DR. MOHAMMAD KASSEMI Case Western Reserve University	DR. GLORIA R. LEON University of Minnesota
DR. WAYNE L. NICHOLSON University of Florida	DR. W. CARL LINEBERGER University of Colorado Boulder
DR. JAMES A. PAWELCZYK The Pennsylvania State University	DR. ELLIOT MEYEROWITZ California Institute of Technology
DR. MARYLYN D. RITCHIE Geisinger Health System	DR. TODD J. MOSHER Syncroness
DR. POL D. SPANOS Rice University	DR. ELAINE ORAN University of Maryland
DR. KRYSTYN J. VAN VLIET Massachusetts Institute of Technology	DR. JAMES A. PAWELCZYK The Pennsylvania State University
DR. PETER W. VOORHEES Northwestern University	DR. JAMES T'IEN Case Western Reserve University
DR. ERIKA WAGNER Blue Origin	DR. MARK M. WEISLOGEL Portland State University
DR. HAI WANG Pennsylvania State University	DR. GAYLE WOLOSCHAK Northwestern University
DR. DAVID A. WEITZ Harvard University	

CBPSS Status

- After an interruption in funding the committee is active
- Meeting
 - Met the new Director of NASA's Division of Space Life and Physical Sciences Research and Applications
 - Program briefings from NASA to bring new CBPSS members up to speed and update returning members
- Status of Mid-term review of decadal study

Key Science & Issues for CBPSS

- The science portfolio is progressing nicely
 - Key aspects of long duration biology and life support
 - Unique combustion progress
 - Cryogenics and fluids
 - Unique confluence of biology and physical, biofilms
- The successful transition of microgravity research from ISS to a post-ISS era continues to be a central issue, with ever crystallizing nuances, including 2024
- Increasing focus on Gateway and transition to deep space
- Crew time, Soyuz and commercial crew relating to science
- Predicting how much science will get done before 2024 or before deep space or before/for Gateway and on Gateway

Mid-Term Assessment of Decadal

- Almost mid way through process
- Second meeting April, community input event
- Very active and engaged committee
- Two more meetings planned, target complete end of 2017
- Some aspects of this mid-term review:
 - Focus on *challenges and opportunities* provided by changing program landscape for microgravity research
 - Will map previous decadal priorities against human exploration needs
 - Deep engagement with SLPSRA on program data

