

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES AERONAUTICS AND SPACE STUDIES BOARD

Committee on Biological and Physical Sciences in Space (CBPSS)

Disclaimer: These slides are a personal assessment of issues discussed during recent Committee on Biological and Physical Sciences in Space meetings, and should not be cited or quoted - as the views expressed do not necessarily reflect those of Committee, the SSB, the ASEB or the Academies.

CBPSS Status

- Membership
- Workshop report released
- Fall meeting
- Top Level Issues



CBPSS Membership

Dava J. Newman, Massachusetts Institute of Technology (Chair)

Mary L. Bouxsein, Harvard Medical School

Steven Collicott, Purdue University

Vijay K. Dhir, University of California, Los Angeles

Alain Karma, Northeastern University

Mohammad Kassemi, Case Western Reserve University

Douglas M. Matson, Tufts University

Wayne Nicholson, University of Florida

James A. Pawelczyk, The Pennsylvania State University

Marylyn D. Ritchie, University of Pennsylvania

Jessica Scott, Memorial Sloan Kettering Cancer Center

Pol D. Spanos, Rice University

Jana Stoudemire, Axiom Space

James T'ien, Case Western Reserve University



Workshop: Using Commercial Lunar Payload Services (CLPS) to Achieve Lunar Biological and Physical Science Objectives,

March 23-25

Using Commercial Lunar Payload Services (CLPS) to Achieve Lunar Biological and Physical Science Objectives

- Workshop organized at the request of NASA
- BPS community is new to CLPS opportunities
- Extensive planning and organizational effort by committee, including coordination with NASA on educating the BPS community on CLPS prior to workshop
- Meeting was intended to focus on how BPS community can support and utilize commercial lunar payload services.
- A rapporteur-written summary of the workshop proceedings was published in October 2021



CBPSS Status

Fall meeting

- Committee met (virtually) on Oct. 13-14, 2021
- Status briefing from chairs of *Decadal Survey on Biological and Physical Sciences Research in Space 2023-2032*
 - Thanked committee for work in laying groundwork for the Decadal
- Updated program briefings from NASA BPS, including an update on CLPS plans, expected Decadal budget wedge starting in 2023
- Focus of the meeting was on in-depth discussions with program scientists
- NASA BPS program leaders posed questions to solicit feedback from committee on program needs, concerns, and issues
- Also received briefings from programs with synergies with the BPS program, including the Human Research Program, Planetary Protection, and Astrobiology
- Committee explored topics for its spring meeting





Top Level Issues for CBPSS

- Continuing to engage on the transition of microgravity research from ISS to a post-ISS era, including commercial research platforms and the lunar surface
 - In 10 years time BPS LEO research may have moved entirely to commercial platforms
 - What are Keystone facilities for new platforms
 - NASA BPS engaging in CLPS and Artemis programs
- The level of standing committee activity is decreasing during the ongoing decadal survey, but we are working to engage with NASA BPS on near term issues outside the survey
- NASA BPS looking at growing and strengthening community with IDEA in mind

