

## MExAG Final Findings from the 2023 Annual Meeting

Approved: February 3, 2023

Presented to the NASA Planetary Science Advisory Committee: March 1, 2023

1. Discover Program
  - a. MExAG is disappointed that problems with the Psyche mission have led to substantial negative consequences for other PI-led missions. The MExAG community supports the principle that each competitively selected, PI-led mission should have the opportunity to proceed through the development process, including reviews and key decision points, on its own merits to achieve the science for which it was selected.
  - b. Further, MExAG notes that within the context of the recommended program for missions in the most recent Decadal Survey, Origins, Worlds, and Life, it is the only AG community for which Discovery is the sole potential avenue for exploration in the next decade. This fact, compounded by the long cruise times for missions to Mercury, means that any delays or reductions in the Discovery AO cadence will disproportionately impact opportunities for exploration of the innermost planet and the health of the Mercury community.
2. Decadal Survey Mission Assessment Process
  - a. The Decadal Survey applied independent cost and risk (TRACE) assessments of the mission concepts. However, the extraordinarily brief TRACE outcomes presented in Appendix C of Origins, Worlds, and Life lacks documentation of the specific drivers of cost and risk in their assessments. These drivers are vital for NASA and the planetary science community to identify technologies in need of investment.
  - b. MExAG encourages NASA to ensure that all future assessments of cost and risk of mission concepts associated with the Decadal Survey be disclosed with at least the same level of detail as any pre-Decadal Survey mission study programs. Decadal Survey related mission studies and their results should be disclosed consistent with all Open Science expectations at NASA, without exception.
3. Gratitude for Decadal Survey
  - a. The MExAG community is extraordinarily thankful for the incredible efforts of everyone who served on the Decadal Survey and produced such a detailed and comprehensive strategy for astrobiology and planetary science in the coming decade.