

Curation and Analysis Planning Team for Extraterrestrial Materials

Kevin D. McKeegan Dept. of Earth, Planetary, and Space Sciences UCLA

Planetary Science Advisory Committee meeting Sept. 24, 2019

<u>CAPTEM</u>

- a community-based, interdisciplinary forum for discussion and analysis of matters concerning the collection and curation of extraterrestrial samples, including planning for future sample return missions.
- a standing review panel, charged with evaluating proposals requesting allocation of all extraterrestrial samples contained in NASA collections.
- allocation sub-committees are each responsible for one or more of NASA collections of ET samples.
- In its role as an analysis group, CAPTEM may also organize ad hoc or standing subcommittees to address specific issues. In principle, this includes supporting human exploration objectives and their implications for architecture planning and activity prioritization for future exploration of planetary surfaces.

<u>CAPTEM 2019</u>

- <u>Chair</u>: Kevin McKeegan (UCLA), <u>Vice-chair</u>: Hope Ishii (UH)
- <u>Secretary</u>: Liz Rampe (JSC)

Sub-committee chairs

- Lunar: Juliane Gross (Rutgers U)
- Genesis: Larry Nittler (CIW)
- Stardust: Rhonda Stroud (NRL)
- Asteroids: Munir Humayun (FSU)
- Cosmic Dust: Hope Ishii (UH)
- Informatics: Sam Lawrence (JSC)
- Meteorite Working Group: Noriko Kita (U Wisconsin)

at-large members

• Jessica Barnes* (UA), Jemma Davidson* (ASU), Arya Udry (UNLV)

<u>coordinators</u>

- Facilities: Kevin McKeegan (UCLA)
- Space Exposed Hardware: Jeff Taylor (UH)

* new member

recent novel CAPTEM activities

- Approved changes to CAPTEM charter, new appointments
 - Expansion to 15 voting members
 - In next decade, Curation will receive 5 new collections:
 - O-rex, Hyabusa-2, lunar, martian, MMX
 - Created a Mars returned sample subcommittee
 - co-chaired by American, European scientists
 - Justin Filiberto (LPI), Caroline Smith (NHM, London)
 - Populate subcommittee for start in 2020
 - Will formally invite JAXA representative to spring meeting
- Provided integrated reviews for Apollo Next Generation Sample Analysis (ANSGA) proposals
- Completed review of OSIRIS-Rex initial curation plan
 - Asteroid subcommittee (M. Humayun)
 - Findings provided to J. Grossman to send to O-rex team
 - Final Sample Analysis Plan from mission due in 2021
- continued discussions of advanced curation initiatives



current CAPTEM issues for PAC

analytical capabilities and facilities

 CAPTEM will continue to anticipate working with NASA HQ on developing an investment strategy for needed future analytical capabilities and facilities. No change from last year.

informatics

- a community survey on data formats and practices was put on hold because the Planetary Science Division asked ARES to define requirements for a notional Astromaterials submissionbased data repository for NASA-funded research.
- Pl's supported for data archiving?
- Mars: curation facility preparation Questions/potential issues for MSR:
- JSC/Astromaterials planning and CAPTEM support.
 needs defined? resources, budget appropriate?
- Interface of CAPTEM with mission(s) and with ESA curation and allocation plans need to be defined and developed.