

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES  
SPACE STUDIES BOARD

**Committee on Extraterrestrial Sample Analysis Facilities**

**Meeting #1: November 19-21, 2017**

Beckman Center, Irvine, CA

**Monday, November 20, 2017**

Beckman Center  
100 Academy Way

Board Room  
Irvine, CA 92617

**OPEN SESSION**

**Remote Access**

WebEx: <https://nationalacademies.webex.com/nationalacademies/j.php?MTID=ma80f3a908c6f35299cc8ff30e59ad32d>

Meeting Password: sciencesample

Dial In: 1-866-668-0721

Telecon Conference Code: 410 356 8429

7:00 a.m.	<i>Room Opens (Working breakfast available in the dining hall)</i>	
8:15 a.m.	Meeting Convenes and Opening Remarks	Roberta Rudnick, Chair
8:30 a.m.	CAPTEM	Kevin McKeegan University of California, Los Angeles
9:30 a.m.	Mars Sample Return Architecture	Michael Meyer, NASA <i>via WebEx</i>
10:15 a.m.	General Discussion	Committee and Guests
11:00 a.m.	<i>Break</i>	
11:15 a.m.	Comet Surface Sample Return concept	Scott Sandford, NASA Ames <i>via WebEx</i>
12:00 p.m.	<i>Working lunch available in the dining hall</i>	
1:00 p.m.	OSIRIS-REx	Dante Lauretta, U of Arizona, LPL <i>via WebEx</i>
2:00 p.m.	<i>Review of the Restructured Research and Analysis Programs of NASA's Planetary Science Division</i>	Steven Mackwell, USRA <i>via WebEx</i>
2:30 p.m.	Johnson Space Center	David Draper and Ryan Zeigler Johnson Space Center <i>via WebEx</i>
3:15 p.m.	<i>Break</i>	

3:45 p.m.	Smithsonian Institution	Tim McCoy Smithsonian Institution
4:30 p.m.	General Discussion	Committee and Guests
5:30 p.m.	<i>Adjourn for the Day</i>	

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**Tuesday, November 21, 2017**

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**OPEN SESSION**

**Remote Access**

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7:00 a.m.	<i>Room Opens (Working breakfast available in the dining hall)</i>	
8:00 a.m.	Follow up discussion and questions with Jim Green, NASA	<i>via WebEx</i>
8:30 a.m.	EURO-CARES	Sara Russell Natural History Museum, London <i>via WebEx</i>
9:00 a.m.	NSF Geosciences Instrumentation and Facilities Program	David Lambert NSF Geosciences, <i>via WebEx</i>
9:30 a.m.	MoonRise Sample Curation and Analysis	Charles Shearer University of New Mexico
10:00 a.m.	<i>Break</i>	
10:30 a.m.	General Discussion	Committee and Guests
12:00 p.m.	<i>Working lunch available in the dining hall</i>	

**CLOSED SESSION**

1:00 p.m.	Closed Committee Discussion
4:00 p.m.	<i>Meeting adjourns</i>

## Statement of Task

To prepare for the analysis of diverse extraterrestrial samples in the coming decade, NASA requires information on the current capabilities of the planetary science community's analytical laboratory facilities, their future requirements, and any associated challenges. Therefore, the National Academies of Sciences, Engineering, and Medicine will assemble a committee to perform a study addressing the following questions:

- What laboratory analytical capabilities are required to support the NASA Planetary Science Division's (and partners') analysis and curation of existing and future extraterrestrial samples?
- Which of these capabilities currently exist, and where are they located (including international partner facilities)?
- What existing capabilities are not currently accessible that are/will be needed?
- Whether the current sample laboratory support infrastructure and NASA's investment strategy meets the analytical requirements in support of current and future decadal planetary missions.
- How can NASA ensure that the science community can stay abreast of evolving techniques and be at the forefront of extraterrestrial sample analysis?

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## NOTES

**Note to Observers:** This meeting is being held to gather information to help the committee conduct its activities. The committee will examine the information and material obtained during open sessions in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn at this time. Therefore, observers who draw conclusions about the committee's work based on discussions during this meeting will be doing so prematurely. Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the committee's activities.

**Note to Presenters:** If your presentation contains unpublished data, ITAR controlled and/or other sensitive information, please be aware that the open sessions at the meeting will be webcast and presentation materials given to the committee may be posted on a publicly accessible website. Please edit your presentations accordingly.

**Working Dinner:** All meeting participants can attend. The Academies will only pay for members of the committee and guest speakers. Unfortunately, the Academies cannot pay for civil servants. The cost of the dinner is \$50.00. Checks, payable to the National Academy of Sciences, are preferred.

**Beckman Center:** Is located on the campus of the University of California, Irvine, and is approximately 3 miles from Orange County/John Wayne Airport. See the following website for more information, including directions: <http://www7.nationalacademies.org/beckman/>.

## REMOTE CONNECTION DETAILS

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