

*The National Academies of*  
**SCIENCES • ENGINEERING • MEDICINE**

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES  
SPACE STUDIES BOARD

**Committee on Astrobiology and Planetary Sciences**  
**Meeting No. 2 on Biosignature Standards of Evidence White Paper Review**

**January 26, 2022**

**Virtual Meeting**

**ALL TIMES IN US EASTERN STANDARD TIME (UTC-4:00)**

This agenda is a draft, subject to change, and was last updated on 1/24/2022 9:37 AM

**AGENDA**

**WEDNESDAY, JANUARY 26, 2022**

**OPEN SESSION**

*Open to Public Viewing*

**Livestream Link:** <https://livestream.com/accounts/7036396/events/10095998>

<b>1:30 PM</b>	<b>Welcome and Introductions</b>	<i>Dr. Martha Gilmore, CAPS Co-Chair / Dr. Christopher House, CAPS Co-Chair</i>
<b>1:35 PM</b>	<b>Standards of Evidence Framework and Potential Impact on Program Decisions*</b> (20 minute presentation & 15 minute discussion period)	<i>Dr. Mary Voytek, Senior Scientist for Astrobiology, NASA-SMD</i>
<b>2:10 PM</b>	<b>Update and Progress on Standards of Evidence Workshop White Paper by Workshop Leaders*</b> (20 minute presentation & 15 minute discussion period)	<i>Dr. Vikki Meadows, Professor, Dept. of Astronomy, U. of Washington / Dr. Heather Graham, Research Scientist, NASA-GSFC</i>
<b>2:45 PM</b>	<i>Break</i> (20 minute break period)	
<b>3:05 PM</b>	<b>Detecting Life on Exoplanets in the Context of Biosignature Standards of Evidence</b> (25 minute presentation & 10 minute discussion period)	<i>Dr. Giada Arney, Research Scientist, Planetary Systems Laboratory, NASA-GSFC</i>
<b>3:40 PM</b>	<b>Biosignature Gases and Phosphine on Venus</b> (25 minute presentation & 10 minute discussion period)	<i>Dr. Sara Seager, Professor, Planetary Sciences and Physics, Massachusetts Institute of Technology</i>
<b>4:15 PM</b>	<b>Roundtable Discussion with Invited Speakers and Committee</b> (25 minute discussion)	
<b>4:40 PM</b>	<i>Meeting Adjourns to Closed Session (or at a time at the discretion of the Co-Chairs)</i>	

\* Placeholder Title – To Be Updated by Speaker



**The following information is provided for any members of the general public who may be in attendance:**

This meeting is being held to gather information to help the committee in its charge. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn nor will recommendations be made. Observers who draw conclusions about the committee's work based on this meeting's discussions 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 project. Any inference about an individual's position are therefore also premature.

**NOTES FOR PRESENTERS**

Your presentation may not include unpublished data, ITAR controlled and/or other sensitive information.

At some point a staff member will be asking you to sign a consent form allowing us to use your presentation, specifically to post it on our website.

## STATEMENT OF TASK

### Task Initiated on 25 August 2021

The National Academies of Sciences, Engineering, and Medicine's Committee on Astrobiology and Planetary Sciences will convene to conduct an independent review of the White Paper on Standards of Evidence for Life Detection and issue a short report addressing the following questions:

- Does the white paper include a clear and transparent description of the process?
- Does the report accurately reflect the scientific literature? Are there any crucial content areas detrimentally underrepresented in the report?
- Are the assumptions valid and reasonable?
- Are the conclusions valid and supported?
- Are there potential limitations or data gaps that would substantially impact the conclusions?

## TENTATIVE SCHEDULE FOR REPORT COMPLETION (AT PROJECT INITIATION)

Late October 2021	Task Initiation and Kick Off Meetings
November 2021 – March 2022	Committee Meetings to Discuss Task, Gather Information and Input from Experts; Discuss, Deliberate, and Draft Report
2 April 2022	Target Draft Report Completion Date; Sent Draft Report to Reviewers
16 April 2022	Reviews Due from Reviewers
24 May 2022	Target Date for Response to Review Submission to DEPS Report Review Officer
8 June 2022	Target Sign-Off Date
15 June 2022	Approved Report to DEPS Editor
Late June 2022	Deliver Report to NASA in Prepublication Format