

National Aeronautics and
Space Administration



EXPLORE SOLAR SYSTEM & BEYOND

Lori Glaze

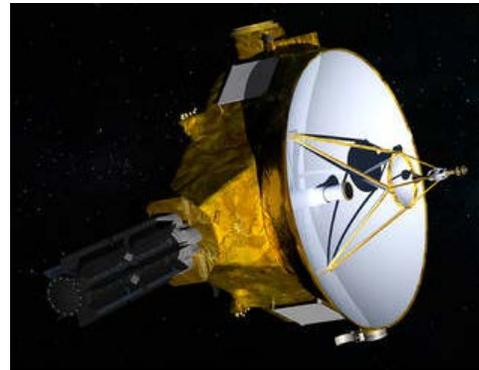
NASA Planetary Science Division

Decadal Survey in Planetary Science and Astrobiology

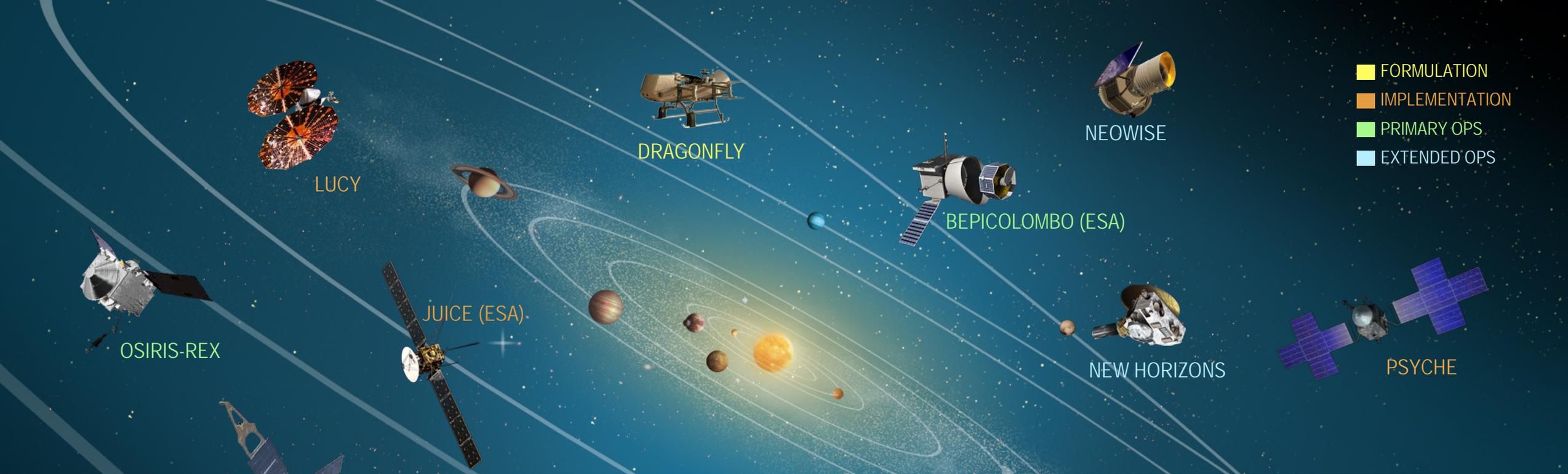
Early Career Professionals Kick-Off

March 27, 2020

What makes up PSD?



- Research & Analysis (R&A) Programs
 - Astrobiology
- Planetary Defense Coordination Office
- Mars Exploration Program
- Discovery
 - SIMPLEX
- New Frontiers
- Outer Planets
- Ocean Worlds
 - Europa Clipper



LUCY

DRAGONFLY

NEOWISE

BEPICOLOMBO (ESA)

OSIRIS-REX

JUICE (ESA)

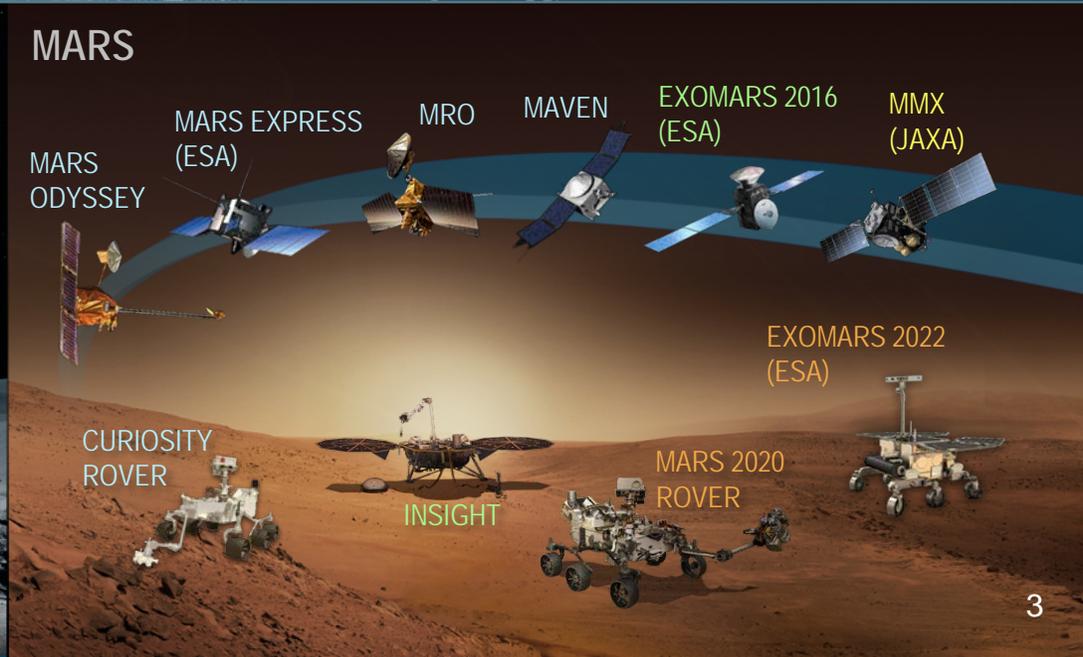
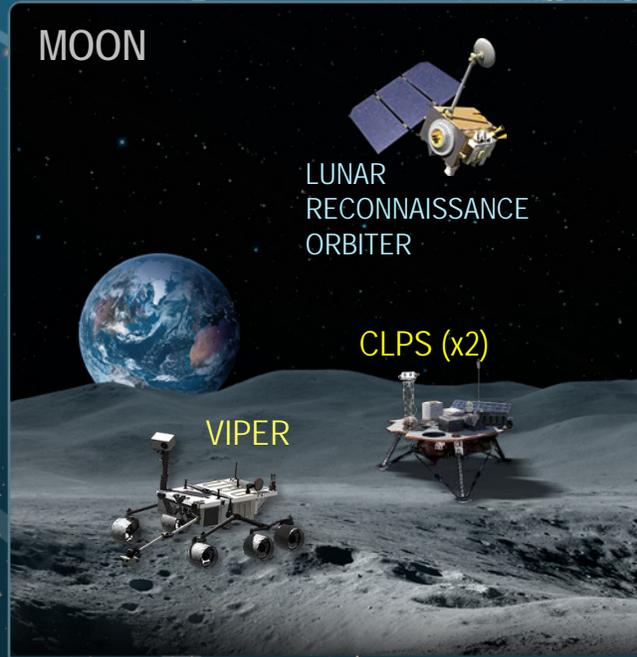
NEW HORIZONS

PSYCHE

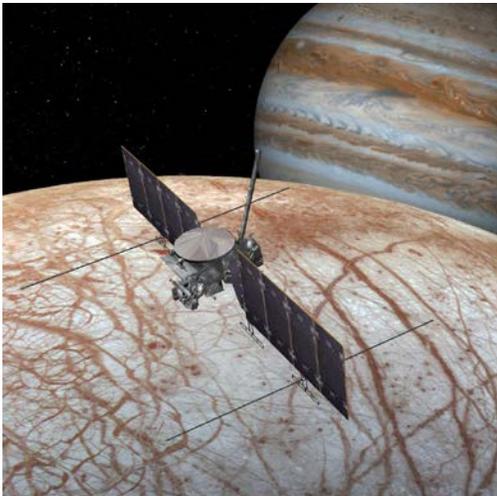
JUNO

EUROPA CLIPPER

DART



Importance of community involvement



- Survey recommendations can heavily influence future planetary science initiatives
 - Sponsoring Agencies (NASA & NSF) and Congress give highest priority to missions identified in survey
- Highest recommendations from previous Survey:
 - *“A major accomplishment of the program... will be taking the first critical steps toward returning carefully selected samples from the surface of Mars”* → **Mars Sample Return**
 - *“NASA should... find major cost reductions for Jupiter Europa Orbiter...”* → **Europa Clipper**
- Long development times mean **today’s early-career professionals are the leaders of tomorrow**—of the community and missions

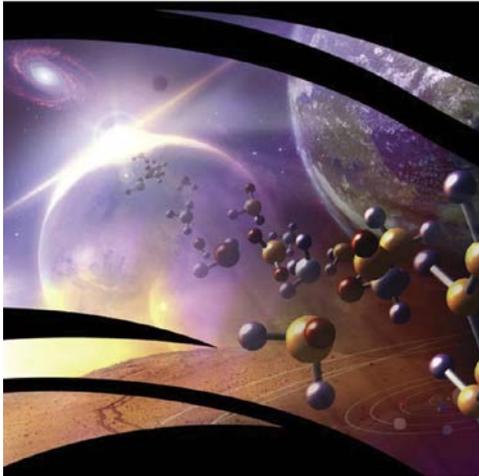
Planetary Science & Astrobiology Decadal Survey 2023–2032

“The new decadal survey shall broadly canvas the field of space- and ground-based planetary science to determine the current state of knowledge and to identify the most important scientific questions to be addressed during the interval 2023–2032.”

Statement of task:

- Guiding document for the new Decadal Survey
- Outline of what the sponsors—NASA & NSF—and the National Academies want the survey committee to do
- Committees are required to do no more and no less than what is specified
- Full text & additional information:
https://sites.nationalacademies.org/SSB/SSB_198165

Statement of Task



Same as before:

- Inventory of top-level science questions & research activities
- Recommendations on optimum balance between:
 - Target bodies
 - Large/medium/small missions
 - Ground/space-based activities
- Ranking of:
 - Large/medium space missions
 - Ground-based facilities
 - Supporting research

New:

- Higher profile for astrobiology and planetary defense
- Consideration of human exploration activities undertaken by NASA & international partners



“The report should also provide a clear exposition of:

The **state of the profession** including issues of **diversity, inclusion, equity, and accessibility, the creation of safe workspaces, and recommended policies and practices to improve the state of the profession.** Where possible, provide specific, actionable and practical recommendations to the agencies and community to address these areas.”





Panel structure

- **Last Survey:** ~70 members of the community served on the panels/committee
- One representative from each panel will serve on the steering committee.
 - Composition of the steering group and panels will take full advantage of the diversity of the planetary science, astrobiology, and planetary defense communities, in factors such as **gender, race, ethnicity, career stage, types and sizes of institutions, geographic distribution**
 - It is important to PSD that the panels include early career participation
- National Academies' procedures for reducing and balancing biases, and for ensuring that the steering group and panels have the needed expertise will be followed



How to get involved

- Sign up to mailing list – for updates on calls for input and other study activities: www.nas.edu/planetarydecadal
- Make (self) nominations for the steering committee/panels
- Lead/contribute to community White Papers (submissions to begin shortly)
 - Current list of planned papers:
https://www.lpi.usra.edu/decadal_whitepaper_proposals/index.cfm
- Apply for a Survey Support Role with the NASEM
- Attend (virtual) Planetary Missions Concept Studies Workshop (rescheduled date, TBC)



QUESTIONS?





BACK-UP SLIDES



Conflict of Interest Statement

Prospective members of all National Academies' committees and panels have their financial relationships reviewed to prevent actual or perceived conflicts of interest. Additionally, the National Academies evaluates whether each prospective member is a strong, publicly known advocate for a specific project—broadly defined as a plan, mission, initiative, architecture, or the equivalent—that the committee or panel may evaluate. Such evaluation is necessary to avoid possible bias or a perception thereof.

Nominations and self-nominations to the decadal survey committee—i.e., the steering group and supporting panels—are welcome. Nominees with the following characteristics are encouraged:

- *Scientific and technical expertise, and objectivity;*
- *Experience in the management of a project, organization, or equivalent enterprise is desirable;*
- *Must be broad thinkers, open-minded, and not active proponents of a specific project; and*
- *Be able to participate in-person in survey committee activities.*

Conflict of Interest Statement – Continued

Additional considerations include the following:

- *All authors of science-focused whitepapers prepared for the survey are eligible to be considered as members of the steering group and its supporting panels;*
- *First authors of mission-focused whitepapers prepared for the survey cannot serve on the steering group or on any panel considering that mission; and*
- *Principal Investigators of the NASA-funded, pre-decadal mission-concept studies to be evaluated by the survey cannot serve on the steering committee or on any panel considering that mission.*