

# NASA PSD Early Career Award



LPSC Workshop  
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# Overview of this session



- Program overview/background
- Eligibility
- How review process works
- Questions

**I am very informal and hate the sound of my voice,  
so please feel free to ask questions at any point.  
My goal is to not talk at you for an hour.**



# About the Early Career Award (ECA) program



- Newer PSD program, first solicited in ROSES-2019 (in year 5)
- Evolved from previous (2007–2016) Early Career Fellowship
- Established to:
  - Support the research and professional development of outstanding early-career scientists
  - Stimulate research careers in areas supported by PSD (stretch your research/project!)
  - Allow promising individuals to play an increasing and meaningful role in the planetary science community
- We aim to award *up to* 5 awards/year
- Awards are *up to* \$200,000 total to be used over five years (max)
  - Can be shorter; think carefully about how/when you want to use the monies
  - Number of years could be a factor in the panel's findings depending on project
  - Remember overhead! Comes out of the &200k...



# About the Early Career Award (ECA) program



- Please read the program element carefully (QR code to right)
- These are FIVE (5) page proposals that need to:
  - Describe your project
  - How that work would enhance your career
  - How that work would enhance the community
- Project needs to be different than the parent award
  - NOT an extension of parent award
  - Look at previously awarded ECAs



# About the Early Career Award (ECA) program

## ● Last year's recipients

- **Lynnae Quick (GSFC):** A Historically Black College and University (HBCU) Pilot Program to Aid in the Diversification of the Planetary Science Pipeline
- **Michael Sori (Purdue University):** Enabling the Future of Planetary Geodesy at Mars
- **Xinting Yu (UT San Antonio):** The Next-Generation Laboratory Experiments on Planetary Materials
- **David Welch (Columbia University):** Development of an Inexpensive UV Spectrometer for Science Education
- **Jamie Molaro (PSI):** Efficacy of thermally driven regolith creep on lunar, martian, and asteroid surfaces

# Eligibility for the ECA program (ROSES 24)



- PI must have received their PhD no earlier than **January 1, 2014**  
(unless a waiver was granted; would be an included letter/email from PO)  
-Within 10 years from terminal degree = Early Career
- PI (or Science-PI) must be the PI, or Science-PI, on a selected ROSES grant from **ROSES-22** or **ROSES-23**; parent awards must therefore have proposal numbers consistent with 22-PROGRAM22 or 23-PROGRAM23
- PI cannot have *received* Early Career Fellowship funds



# Required Proposal Components



ECA proposals must have the following sections (full details in the [ECA Solicitation](#))

- Parent proposal information
  - Parent award program (ROSES year, title, award number, award start date)
  - ECA applicant on parent award
- Science/Technical/Management (STM) section (max. 5 pages)
  - Description of the applicant's future research and career plans
  - How the proposed activities would serve to enhance the applicant's career
  - How the proposed activities would support the planetary science community (e.g., service activities, dedication to diversity and inclusion, mentorship)
- Curriculum vitae (max. 2 pages) and publication history (no page limit)
- Open Science Data Management Plan (OSDMP; max. 2 pages) OR explanation as to why one is not needed.
- Budget Information (same as all other ROSES proposals)



# How ECA review process works



- We received **29 proposals** to this year's program (ROSES 23)
  - 2 proposals were found to be non-compliant and will not be reviewed
  - NO Triage for these proposals
  - Split among multiple groups for review (a bit eclectic)
  - Will select **5 proposals** total; ~18% selection rate
- Each group will discuss each of the proposals assigned to them
  - Each proposal evaluated with equal care
  - Proposals are not compared or ranked
- Findings in the panel evaluation are used by the Program Officers to make funding *recommendations* to selecting official (Delia Santiago-Materese/Kathleen Vander Kaaden)



# Evaluating the Proposals



- Panel will make their evaluations based on these criteria:
  1. Potential Impact: Career Development (*merit*)
  2. Potential Impact: Community Support (*merit*)
  3. Data Management Plan (if applicable; *merit*)
  4. Relevance to NASA's Planetary Science Division (*relevance*)
  5. Cost reasonableness (*cost*)
- Will then vote on the proposal based on the Merit, Relevance, and Cost

*Panel will always evaluate what is written in the proposal*

They do not guess, infer, interpolate, extrapolate, or read between the lines

# Potential Impact: Two Criteria



## ● Career Development

- Would the proposed activities significantly enhance and/or expand the research skills of the PI, as needed to achieve the PI's career goals?
- Would the proposed activities significantly contribute to improved job performance and career advancement, as needed to achieve the PI's stated career goals?

## ● Community Support

- Did the proposal demonstrate the PI's potential for future, ongoing leadership and engagement in the planetary science community?
- Would the proposed work enable the PI to play an increasing and meaningful role in the planetary science community?

● Example questions **not exhaustive**; you may consider other aspects

● Organize findings into key **strengths** and **weaknesses**



# Potential Impact: Things to Keep in Mind



- Not all ECA applicants are at the same stage of their career
  - Evaluate the potential impact given the current career stage of the PI
  - Are the achievement and ambitions of the PI above/below what you would expect at their current career stage?
- Things to consider (as/if outlined in the proposal) when evaluating these criteria:
  - Publication rate/indices
  - Number (rate) of grants awarded
  - Media exposure/coverage (of their research/activities)
  - Social media presence
  - Public engagement activities
  - Commitment to inclusion and diversity
  - Involvement in 'high-impact' science projects (e.g., missions)
  - Leadership roles (at all levels)
  - Community involvement/service



# Open Science Data Management Plan (OSDMP)



- Proposals must present a plan for making scientifically appropriate data resulting from federally funded research freely available to the public.
  - Max. 2 pages, located after the STM section
  - Proposals may also explain why an OSDMP is not needed for the proposed work
- The OSDMP must cover:
  - **Data** needed to validate the scientific conclusions of peer-reviewed publications
  - **Software** that enables future research or replication/reproduction of published results
  - **Physical materials/samples** planned for collection, purchase, or production
- The OSDMP must include:
  - Description of data types, volume, formats, and standards,
  - Description of the schedule for data archiving and sharing,
  - Description of the intended repositories for the archived data, including mechanisms for public access & distribution,
  - Discussion of how the plan enables long-term preservation of data, &
  - Discussion of roles and responsibilities of team members in accomplishing the OSDMP.

# Potential Impact: Scores & Adjectival Ratings



For these two criteria panelists will vote on a 1 to 5 scale (half votes allowed):

1. **Poor:** A proposal of **no merit**; if selected, the activities would have **no impact**, or would **not advance** the PI's research career and/or standing in the planetary science community
2. **Fair:** A proposal of **low merit**; if selected the activities would be **unlikely to have much impact**, or would be **unlikely to advance** the PI's research career and/or standing in the planetary science community
3. **Good:** A proposal of **modest merit**; if selected the activities would likely have a **minor impact**, or would **somewhat advance** the PI's research career and/or standing in the planetary science community
4. **Very Good:** A proposal of **high merit**; if selected the activities would likely have a **strong impact**, or would **strongly advance** the PI's research career and/or standing in the planetary science community
5. **Excellent:** A proposal of **outstanding merit**; if selected, the activities would likely have a **great impact**, or would **significantly advance** the PI's research career and/or standing in the planetary science community

**Half votes are allowed!**

# Relevance



- The proposal should describe how the applicant's past, current, and planned activities support, and are relevant to, the goals of NASA's Planetary Science Division (PSD)
  - PSD supports investigations to help ascertain the content, origin, and evolution of the Solar System and the potential for life elsewhere
  - See the outlined [science strategy](#)
  - See the [C.1 Planetary Science Research Program Overview ROSES-2024](#)
  - Vote for this criterion is either **relevant** or **not relevant**
  - If found to be not relevant, provide a brief explanation as to why; if relevant, put N/A



# Cost



- Proposers were asked to provide a budget with a max of \$200k
- Examples of things to consider:
  - Are the levels of work effort, travel, and other items commensurate with those required to accomplish the proposed work?
  - Are the stated costs (not salaries) justified and appropriate?
  - DO NOT worry about smaller things (e.g., \$30 cost)
- Vote for this criterion is either **reasonable** or **unreasonable**
  - If found to be unreasonable, provide a brief explanation as to why



# Big Advice to Panelists

**Please keep the big picture in mind – do not get distracted by the weeds. Please look *past* the weeds!  
Remember these are 5 page proposals – some details will need to have been cut by necessity.**





**Thank you!!**

Questions?

