

## C.18 PLANETARY SCIENCE EARLY CAREER AWARD

**NOTICE: This program element differs from the ROSES defaults in a few ways: 1) Parent award information must be provided before the Science/Technical/Management (S/T/M) section of the proposal 2) the S/T/M section is limited to 5 pages, see Section 3, and 3) the definition of Merit varies from that given in the Guidebook, see Section 4.**

### 1. Scope of Program

The Planetary Science Early Career Award (ECA) program is intended to help promising young scientists play an increased and meaningful role in the planetary science community and pursue professional development in areas relevant to the Planetary Science Division (PSD).

### 2. Eligibility for the ECA

To be eligible to propose to this ECA program, all of the following must be met:

- a. The applicant must be the Principal Investigator (PI), or a Co-investigator designated as the Science-PI, on an award (referred to below as the "parent award") from a participating program element solicited in ROSES-2021 or ROSES-2022. See Section 5.1 (role of PIs and Science-PIs) and Section 2.1 (ECA-participating programs) for more information. If both the PI and Science PI are early career according to Section 2.b, only the Science PI is eligible for an award under the ECA program.
- b. The applicant must have received their terminal degree (held at the time of the parent award) no earlier than January 1, 2013. Time taken away from career activities for family or health reasons, or for military service, will not be counted against this time limit for eligibility. See Section 5.2 for more information.
- c. The applicant must be affiliated with a U.S. institution.
- d. A ROSES parent award may be used a second time as the basis for a proposal to the ECA program if the first submission is declined.
- e. The applicant may only submit one proposal to the ECA program per ROSES year.
- f. The applicant may not be a previous recipient of NASA-managed early-career funding that is similar in scope and size to the ECA (e.g., the PSD Early Career Fellowship Program, other SMD early career programs, Presidential Early Career Awards for Scientists and Engineers, etc.).

### 2.1 Participating ROSES Program Elements for the ECA

ROSES-2023 ECA proposals may be submitted on the basis of ROSES-2022 and ROSES-2021 parent awards from the Exoplanet Research Program, Habitable Worlds, and all Appendix C program elements except Planetary Science Enabling Facilities.

### 3. ECA Proposal Content and Submission Process

Proposals to this program must be submitted via NSPIRES or Grants.gov. Formatting rules laid out in program element C.1 (Section 3.1) and the *ROSES Summary of Solicitation*, apply to this program, unless superseded by information in Section 3.1 of this element. Similarly, in addition to any modifications or additions to the content

described below in Subsections 3.1-3.3, any other default parts of the proposal (Open Science and Data Management Plan, budget, current and pending etc.) are still required even if they are not explicitly mentioned. If anything is not required, the text will say so explicitly.

### 3.1 Parent Award Information

The proposal must contain information about the eligible parent ROSES award that is the basis of the ECA proposal. The parent award information must be provided before the Science/Technical/Management (S/T/M) section of the proposal and is not included within the S/T/M page limit. The parent award information must include only the following:

- Parent award program;
- Parent award ROSES year;
- Parent award title;
- Parent award PI
- ECA applicant role on parent award (PI or Science PI);
- Parent award number;
- Parent award start date; and
- Parent award abstract (as provided in the parent award proposal, without modification).

### 3.2 Science/Technical/Management Section

The proposal's S/T/M Section may be no more than five pages and must include the following:

- A description of the applicant's future research plans.
- How the proposed activities would support the planetary science community (for example, service activities, dedication to diversity and inclusion, mentorship, science communication).
- How the proposed activities would serve to enhance the applicant's career.

To be relevant, the proposed activities must support the goals and scope of PSD, e.g., see the strategy for Planetary Science Exploration embodied in the [latest Science Plan](#).

The S/T/M section of the proposal should clearly convey the likely positive impact of the proposed use of ECA funds on the future career of the proposer.

The S/T/M section of the proposal must convey the applicant's potential for future impact, leadership, and involvement in the *planetary science community* - based on their career goals, engagement in the community, and previous leadership experience (at all scales). Information of interest includes, but is not limited to: invited and/or public lectures, awards received, participation on scientific program committees, conference or workshop organization, professional society activities, special international or industrial partnerships, review or editor activities, as well as significant education and public outreach activities (especially activities aimed at broadening participation and inclusion of under-represented groups in planetary science).

If scientific research activities are proposed, the scientific scope/focus of an ECA proposal must be different from that of the parent award(s). The ECA program is not

intended as a mechanism to continue or extend the research pursued by the PI with current planetary awards. Therefore, only the merit of scientific endeavors that would significantly broaden the scope of topics investigated by the early career PI will be considered, since the value of the PI's current scientific endeavors has already been validated through the selection of the parent award. The level to which proposed scientific research broadens the expertise of the PI will be a key evaluation factor.

### 3.3 Curriculum Vitae and Publication History

The proposal must contain a Curriculum Vitae (CV) for all team members. The CV may not exceed two pages for the PI (or Science-PI) and may not exceed one page for any other team members. The CV may include details of collaborative activities (e.g., involvement on large scientific teams, including mission teams), awards, service, and any other relevant information. The PI's publication history should be provided separate from the CV, with no page limit.

## 4. Evaluation Criteria

Proposals to the ECA program will be evaluated independently of the parent research proposals (which will not be available to reviewers of the ECA proposals).

Intrinsic merit will be evaluated based exclusively on the factors below, in lieu of the standard definition:

- the applicant's potential for future impact, leadership, and involvement in the planetary science community (Section 3.2);
- the potential for significant impact in the career development of the applicant, through the proposed use of ECA funds including how the proposed work would broaden the expertise of the PI (Section 3.2).

Consistent with the *ROSES Summary of Solicitation*, the table of work effort and redacted budget justification and details will be used to evaluate the reasonableness of the proposed costs.

Consistent with NASA's *Guidebook for Proposers* and the *ROSES Summary of Solicitation*, relevance will be based on whether proposed activities would support the goals and scope of PSD, e.g., see the strategy for Planetary Science Exploration embodied in the [latest Science Plan](#).

Those proposals that demonstrate high impact of the proposed use of ECA funds will be given programmatic priority.

## 5. Programmatic Information

### 5.1 Role of Early Career Applicant on Proposal vs. Organizational Rules

Some institutions do not allow non-tenured researchers (e.g., post-doctoral researchers) to hold the role of the PI on proposals to NASA, which might prevent early-career researchers from proposing to this program. At either stage of the ECA process (i.e., either for the parent research proposal or for the full ECA application package) the proposal may therefore list the early-career researcher as the "Co-I/Science PI" and include an organizationally approved individual as the "PI" to allow the application to be submitted by the Authorized Organizational Representative.

## 5.2 Time Since Degree

To be eligible for the ECA program, applicants must have received their terminal degree (held at the time of the parent award) no earlier than January 1, 2013. Time taken away from career activities for family (e.g., for the birth or adoption of a child, or for the care of a dependent) or health reasons, or military service will not be counted against this time limit for eligibility. Applicants who received their terminal degree before January 1, 2013, but who may therefore still be eligible for the ECA should email the point of contact for this program (see Section 6), before submitting their proposal, to request a waiver for eligibility. This waiver should subsequently be included as an appendix in the ECA proposal. See Section 5.4 for more information about the window of eligibility.

## 5.3 Amount and Duration of Awards

We anticipate making 5 selections totaling \$1M over up to five years, although awards 1-3 years in duration are preferred. The ECA will only be awarded one time to any given proposer and will be issued for award periods up to five years in duration. Each award, summed over all project years, is capped at \$200K, but may be distributed as needed over the duration of the award period. Please refer to Section 3.4 of C.1, for instructions on submitting requests for more than three years.

## 5.4 Relation to the Previous Early Career Fellowship Program

The previous PSD Early Career Fellowship (ECF) program was not solicited in ROSES-2017 and ROSES-2018, while the program was evaluated and reformulated. The following information is relevant to the change of programs (see also Section 5.2):

- The period of eligibility for the new ECA program has been expanded, from seven to ten years post-terminal degree to allow PIs who 'aged out' of eligibility during the hiatus to apply for the new ECA. It is therefore anticipated that the window of eligibility will again be reduced in future ROSES years.
- Unlike the previous ECF program, the new ECA program places no restriction on the type of position held by the ECA applicant. To be eligible for the ECA, applicants may hold a "permanent" position, but this is no longer required. Awards, however, must be made to a U.S. institution with which the applicant is affiliated.
- Individuals previously named ECF fellows are eligible to propose to this ECA program for funding, provided they (1) meet all other eligibility requirements and (2) have not yet received ECF funding under the prior program. ECF fellows who have received ECF funding are not eligible to propose to the ECA program.

## 5.5 Future feedback from awardees

For the purposes of evaluating the impact of the ECA program, please note that successful ECA applicants may be asked, going forward, to provide PSD with general feedback regarding the award and their career development.

## 6. Summary of Key Information

Expected program budget for first year of new awards	See Section 5.3 above.
Award size	One-time award of up to \$200K total
Number of awards	~ five per year

Maximum duration of awards	Five years; shorter-term proposals (1-3 years) are preferred; fourth and fifth year must be well justified.
Due date for Notice of Intent (NOI) to propose	NOIs are not requested for this program element.
Due date for proposals	See Tables 2 and 3 of this ROSES NRA
Planning date for start of use of ECA funds	Six months after ECA proposal due date
Page limit for S/T/M section of the proposal	5 pages. See also Section 3
Relevance	Proposed use of ECA funds must be relevant to the Planetary Sciences Division.
General information and overview of this solicitation	See the <i>ROSES Summary of Solicitation</i> .
General requirements for content of proposals	See <a href="#">C.1 the Planetary Science Research Program Overview</a> , and Section IV and Table 1 of <i>the ROSES Summary of Solicitation</i> .
Detailed instructions for the submission of proposals	See <a href="#">NSPIRES Online Help</a> , Sections 3.22-4.4 of the <a href="#">NASA Guidebook for Proposers</a> and Section IV(b) of <i>the ROSES Summary of Solicitation</i> .
Submission medium	Electronic proposal submission is required; no hard copy is permitted.
Web site for submission of proposal via NSPIRES	<a href="http://nspires.nasaprs.com/">http://nspires.nasaprs.com/</a> (help desk available at <a href="mailto:nspires-help@nasaprs.com">nspires-help@nasaprs.com</a> or (202) 479-9376).
Web site for submission of proposal via Grants.gov	<a href="https://www.grants.gov/">https://www.grants.gov/</a> (help desk available at <a href="mailto:support@grants.gov">support@grants.gov</a> or (800) 518-4726).
Funding opportunity number for downloading an application package from Grants.gov	NNH23ZDA001N-ECA
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