## **NASA Advisory Council Recommendation**

# Establish a Program Management Training Bootcamp for Early Career Initiative (ECI) Awardees 2023-01-01

| Name of Committee:                   | Technology, Innovation,<br>and Engineering Committee     |
|--------------------------------------|----------------------------------------------------------|
| Chair of Committee:                  | Mr. Michael Johns                                        |
| Date of Council Public Deliberation: | January 18, 2023                                         |
| Short Title of Recommendation:       | Program Management Training<br>Bootcamp for ECI Awardees |

### **Recommendation:**

The Space Technology Mission Directorate (STMD) and the Agency should establish comprehensive training in project management, accounting, and financial reporting, purchasing, contracts, and other critical skills that will be necessary to run a successful Early Career Initiative (ECI) program. This could take the form of an ECI bootcamp that could be implemented after project selection but before award, or shortly after the award of project funds.

## Major Reasons for the Recommendation:

The ECI program provides NASA early career civil servants with an opportunity to competitively propose two-year technology development projects that engage with industry, academia, and other government agency partners with the opportunity to gain valuable management skills while leading a multidisciplinary project team. Feedback from ECI awardees is consistent that the program provides valuable development opportunities, but they find themselves unprepared for the challenges of running a large multidisciplinary program. ECI participants would benefit from early training in program management fundamentals such as project management basics, accounting and finance, contracts, procurement processes, and others. Early training in these areas allows for more focused research efforts and more efficient program execution.

### **Consequences of No Action on the Recommendation:**

ECI awardees will not be as prepared as they could be and will spend valuable time and resources learning program management skills on their own that could otherwise be spent achieving their project goals.

#### **NASA Response:**

NASA concurs with the recommendation to establish a comprehensive training program within the ECI to provide NASA early career civil servants selected for an ECI award with the skills needed to successfully perform these multiyear technology development projects.

In FY 2022, in response to lessons learned and ECI awardee feedback, NASA STMD developed a pilot training initiative for ECI through the NASA Academy of Program/Project and Engineering Leadership (APPEL). The pilot included a set of four instructor-led online courses on management, leadership, budget formulation, and strategy. At the start of FY 2023, APPEL offered these courses to ECI Principal Investigators (PIs) and project team members. While a significant first step to addressing the need for ECI training, the pilot admittedly had limited impact, given that management plans and partnership agreements were already in place for these projects. Additionally, we noted that the APPEL course suite would benefit from tailoring to better address specific ECI needs. Moving forward, we plan to focus and integrate training earlier in the ECI process so that ECI awardees may more fully realize the benefits.

Currently, NASA solicits for ECI in March, selects proposals in late August, and starts the projects on October 1 each year. We will retain this schedule for FY 2024, while a new ECI-specific APPEL curriculum is developed and ECI program budgets are restructured. For FY 2025, we plan to adjust the ECI schedule to accommodate selections in April 2024, several months before the October 1, 2024, project start date. This additional time between selection and project start will allow ECI awardees to participate in tailored project management training and to initiate (often lengthy) procurement processes with partners, prior to initiating the project.

Funded by ECI, a new comprehensive set of APPEL-developed training courses will be provided to the newly selected FY 2025 PIs and teams following project selection. FY 2024 will serve as a transition year. Specifically, FY 2024 PIs and project teams will be provided an initial set of APPEL courses at project start in October 2023, with the opportunity to participate in the more comprehensive training offered the following spring. The FY 2025 ECI budget has been restructured to support these early training activities, and the NASA Centers have been informed of the impending changes.

We thank the NAC for their interest in the ECI and their continued support in developing our NASA early career workforce and future Agency leaders.