

2021 CALL FOR THE DoD HPCMP HIGH PERFORMANCE COMPUTING INTERNSHIP PROGRAM (HIP) MENTOR PROJECT PROPOSALS

Submissions due: 4 Dec 2020

INTRODUCTION:

The use of high-performance computing (HPC) resources requires unique knowledge, skills, and abilities. These qualifications are rarely introduced or obtained in school. The HPC Modernization Program's (HPCMP) Workforce Development (WD) initiatives provide future workforce candidates with the computational skills and experience necessary to close the gap between the technological capability and skills necessary to support the DoD's future Warfighter needs, making progress towards achieving one of the HPCMP's goals.

The HPC Internship Program (HIP) focuses on providing outstanding mentors with challenging and rewarding HPC projects that will leverage existing government-wide and local programs to attract the best intern candidates and prospective DoD employees. HIP provides funds for these interns working with HPCMP systems, or on HPCMP projects utilizing HPC tools, resources, and methods.

THE CALL:

In continuing support of this goal, the **HPCMP is issuing the 2021 Call for the DoD HPCMP HPC Internship Program (HIP) mentor project proposals**. Contingent upon funding availability, the HPCMP plans to sponsor projects to provide selected interns the opportunity to work on scientific or engineering projects using HPCMP tools, resources, and methods. Qualifying HIP mentor projects will be funded up to \$25K per internship to offset some, or all, of the costs of the internship.

ELIGIBILITY:

- A DoD government scientist/engineer in a DoD laboratory or test center (hereinafter referred to as mentor) that will apply, or plans to apply HPCMP tools, resources, and methods to their project; *or* an HPCMP component (i.e., DSRCs, Networking, Security, Software Applications) or initiative (CREATE, Frontier Projects, Institutes, etc.) government scientist/engineer (hereinafter referred to as mentor) that will apply HPCMP tools, resources, and methods to their project.
- Mentors who will utilize their DoD laboratory's or test center's existing processes and hiring vehicles to identify and select interns from any of the following categories: high school, undergraduate, and graduate school students; post-doctoral fellows; wounded warrior and veteran programs; under-represented minorities; and engineering and science development programs (STEM).
- In addition to any government-wide/local program requirements specific to the selected program/vehicle, the HPCMP HIP requires ALL interns to be US citizens with a GPA of 3.0 or higher.
- Mentor organizations that participated in HIP during FY 2020 must have completed that effort and closed out funding to be considered for FY 2021 mentorships.
- Mentor organizations must be able to accept funds for the internship effort. Funds cannot be redirected by the HPCMP to a "third-party" organization on behalf of the mentor organization.

RESPONSIBILITIES:

- Mentor and mentor organizations are responsible for the hiring, financial reporting, and for obtaining the security clearances and workspace required for the internship, as is usual and customary at the mentor organization, and in accordance with the internship program/vehicle leveraged. In the event of continued COVID-19 restrictions, telework internships will be considered on a case-by-case basis.
- The HPCMP, via the WD Office, will provide an HPCMP account for the intern to access HPCMP resources. At a minimum, a NACI investigation will be required to give access to HPCMP resources. The HPCMP will assist the mentor, if necessary, in obtaining a NACI for the intern.

PROCESS:

• **Proposal Submission:**

- DoD government scientists/engineers interested in submitting a proposal must use the attached proposal form – substitutions **will not** be accepted.
- Submitters will ensure that their proposal submissions have their performing organization's confirmation of intent to accept funds. This confirmation is provided by the proposed mentor, performing organization's Approving Official, and the Financial Point-of-Contact digital signatures in Section 2 of the proposal form.
- Local organizations may have additional proposal processing requirements, and submitters should allow sufficient time to accommodate these additional requirements to meet the deadline.
- When submitting the proposal, the following file naming convention will be used for the document: <mentor's last name>_org>_<date> (for example: Cooke_NRL_24Sep2021.pdf). HIP Mentor Proposals must be submitted by e-mail to the HPCMP WD Office using: HIP@HPC.mil by.

• **Evaluation:** The proposals will be reviewed by an evaluation panel against the following criteria:

- 1 – **Mission Impact to the Service/Agency:** Does the proposal clearly state the value of the project to the mentor's Service/Agency organization? Are specific Service/Agency RDT&E and/or acquisition engineering activities (such as key Mission Priorities or Programs of Record) supported and impacted by this project? Are any of the HPCMP interest areas (Hypersonics, Big Data Analytics, Autonomy, Radar/Antenna Modeling, Directed Energy, Missile Defense, Advanced Rotorcraft or Ship Acquisition, HPC operations) supported and impacted by this project? (20 points)
- 2 – **Proposal Quality:** Does the proposal identify appropriate HPC tools and resources to be used for the project? What is the technical quality of the work proposed in the project? Does the proposal have a project plan and clearly defined outcome? Is there a realistic project schedule, and is the proposed work achievable in the time period specified? (20 points)
- 3 – **Importance to the Intern:** Is the proposed work challenging to the intern? Does the project have relevance to a STEM student's professional goals? Are plans for professional networking activities, training, and touring the local laboratory/test center specified? Will this project enhance an intern's skills, knowledge, and abilities to improve career opportunities? (30 points)
- 4 – **Potential for Mentor Success:** Is there a reasonable expectation that the mentor identified in the proposal has a clear understanding of the roles and responsibilities required to successfully mentor a HIP intern? What experience does the mentor have as a mentor in such intern programs as HIP? Is this project well-coordinated with the technical work performed by the mentor and his/her research group? How well does the proposal place this project in the appropriate context of DoD Workforce Development? (30 points)

• **Selection:** All evaluations will be used to formulate a proposed set of HIP awards for consideration by the Director, HPCMP. Award announcements are planned for early January 2021.

• **Financials:** Funds will be issued for the FY2021 HIP Internship program only. Funds **must** be fully expended by 31 December 2021. Funds not fully expended by 31 December 2021, must be returned. All prior year HIP funds must be fully expended/closed out to be eligible for FY2021 funds.

QUESTIONS:

There is a Frequently Asked Questions (FAQ) sheet available on the HPC website: [HPC Workforce Development page](#).

All additional questions regarding the Call for the DoD HPCMP High Performance Computing Internship Program (HIP) mentor project proposals should be directed to HIP@HPC.mil.