



DEPARTMENT OF DEFENSE
HIGH PERFORMANCE COMPUTING
MODERNIZATION PROGRAM

2014 CALL FOR PROPOSALS FOR HIGH PERFORMANCE COMPUTING INTERNSHIP PROGRAM (HIP)

INTRODUCTION:

The Department of Defense High Performance Computing Modernization Program (DoD HPCMP) has a rich history of over 20 years in providing computational resources to the DoD's scientists and engineers. Return-on-Investment (ROI) studies and success stories, gathered over the years from the Services, consistently demonstrate the benefits to the DoD of using high-performance computing (HPC) resources (better, faster, and cheaper).

Users of HPC resources, whether via HPCMP, other federal agencies, academic institutions, or contractor organizations, consistently demonstrate significant engineering and scientific achievements using HPC resources. However, use of HPC resources requires unique knowledge, skills and abilities, to deploy, support and use these high-performance computers. The HPCMP's Next Generation Workforce Development (NGWD) initiatives provide the future science and engineering workforce 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.

In order to achieve the HPCMP vision of widespread use of computational tools as a solution of first-choice within DoD, the future workforce must be prepared to design, develop, deploy, and utilize current and future high-performance computing architectures. In support of this vision, the **HPCMP is issuing a call for the HPC Internship Program (HIP)**. HPCMP plans to sponsor 30 - 40 Service laboratory and test center interns to work on scientific or engineering projects using HPC tools, resources and methods.

The HIP is a revamping of the former DoD HPCMP Joint Educational Opportunities for Minorities (JEOM) Internship program. The Federal Government has a number of programs which target audiences ranging from high school to graduate school, Wounded Warriors, Veterans, and under-represented minorities. These programs provide individuals with opportunities to explore Federal Government careers via

internships, while being paid for work performed. The purpose of the HIP is not to add another intern program to the Federal Government register of science, technology, engineering and mathematics (STEM) intern programs; it is to focus and introduce HPC as an essential tool for engineering and science to our future workforce by providing funds to off-set the cost of internship to the laboratory, test center or DoD Supercomputing Resource Center (DSRC) for interns working on projects utilizing HPC tools, resources and methods. Qualifying Service laboratory and test center projects that utilize HPC tools, resources and methods can off-set the cost of the internship(s) with an HIP.

ELIGIBILITY REQUIREMENTS:

All HIPs must be initiated by a DoD government scientist/engineer (hereinafter referred to as the mentor) in a DoD laboratory, test center or DSRC. Mentors will apply or plan to apply HPC tools, resources and methods to their project. Mentors will utilize their DoD laboratory's or test center's existing processes and vehicles to identify and select interns from high school, college, graduate school, wounded warriors, veterans and/or under-represented minorities. Existing government-wide/local programs that can be leveraged include, but are not limited to, Pathways, SMART and other Student Educational Employment Programs.

The mentor and the mentor's home organization are responsible for obtaining any security clearance, workspace, computer assets and financial reporting required for the internship, as is usual and customary and in accordance with the program used. The NGWD Office will provide an HPCMP account for the intern to access HPCMP resources. At a minimum, a NAIC clearance will be required to give access to HPCMP resources. The HPCMP will assist the mentor, if necessary, in obtaining a NAIC for the intern.

In addition to the government-wide/local program requirements peculiar to the program, the HPCMP HIP requires all recipients to be US citizens and to have a GPA of 3.0 or higher. Funding up to \$30K per internship (dependent upon intern program costs) will be provided to the DoD laboratory, test center or DSRC to off-set the cost of the internship. Further, an additional \$7K will be provided to off-set a portion of the costs associated with mentoring and reporting.

PROCESS:

To apply for HIP to fund an internship, mentors should submit a proposal using the proposal template provided, anytime up to 15 April 2014. **REMINDER: Because deadlines, start- and end-dates vary, depending on the internship vehicle used, awards will be made until the 30-40 HIP internships are funded.**

Proposals must be submitted to NGWD@HPC.mil.

GUIDELINES FOR HIP PROPOSAL PREPARATION:

Those interested in submitting a High Performance Computing Internship Program (HIP) Proposal, should provide the following information using the attached template:

Project Title; Mentor name and contact information (must be a DoD government scientist/engineer); DoD laboratory, test center or DSRC (name, site location, address); Project description (brief description of the project and the intern's role in the project); Anticipated intern program vehicle to be used (Pathways, SMART, a local Student Educational Employment Program, etc.); Anticipated cost of internship (as specified by the program vehicle identified above); Total number of interns being requested

To assist with the proposal submission process, a checklist is also provided.

All proposal submissions must be submitted using the attached template and follow the file naming convention noted in the template. The DoD government mentor should submit the proposal to NGWD@hpc.mil anytime up to 15 April 2014. Questions regarding this Call should be directed to NGWD@hpc.mil.