2016 CALL FOR MENTOR PROPOSALS FOR THE
HIGH PERFORMANCE COMPUTING INTERNSHIP PROGRAM
(HIP)

Submissions due: 7 January 2016

INTRODUCTION:

The use of HPC resources requires unique knowledge, skills and abilities (KSA), to deploy, support and use high-performance computing resources. These KSAs are rarely introduced or obtained in school. The HPCMP's 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's (HIP) focus: high-caliber 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. The HIP provides funds for these interns working with High Performance Computers or on HPC projects utilizing HPC tools, resources and methods.

> *"...I was provided with resources and mentoring that allowed me to finish my project... the results could be used in a publication. A little further work is expected to allow for an additional publication focusing on the results themselves."*
> *"I am actively looking for a full-time position. I was able to connect with more people and have face-time with those who are hiring...became much more efficient at CFD setup and analysis, something I had been lacking in my undergraduate career."*
> *"...networking resulted in a...job offer."*
>
> *– Comments from 2014 and 2015 HIP Interns*

THE CALL:

In continuing support of this goal, the **HPCMP is issuing the 2016 Call for Mentor Proposals for the HPC Internship Program**. Contingent upon funding availability, the HPCMP plans to sponsor projects to provide up to 30 interns the opportunity to work on scientific or engineering projects using HPC tools, resources and methods. Qualifying HIP mentor projects will be funded up to $24K per internship to off-set some or all of the costs of the internship.

ELIGIBILITY:

- A DoD government scientist/engineer in a DoD laboratory or test center supporting a Service/Agency key mission priority or program of record (hereinafter referred to as mentor) that will apply, or plans to apply HPC tools, resources and methods to their project; *or*
  HPCMP component (i.e., DSRCs, Networks, Security, Software Application) or initiative (CREATE, Frontier projects, HASI, etc.) government scientist/engineer (hereinafter referred to as mentor) that will apply HPC 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: undergraduate and graduate school students; post-doctoral fellows; wounded warrior and veteran programs; under-represented minorities; and engineering and science development programs.

- In addition to any government-wide/local program requirements specific to the selected program/vehicle, the HPCMP HIP requires <u>ALL</u> interns to be US citizens with a GPA of 3.0 or higher.

- Mentor organizations that participated in the HPC HIP during FY2015 must have completed that effort and closed out FY2015 funding, or have been approved for an extension of that effort by the HPCMP.

- Mentor organizations <u>must</u> be able to accept funds for the internship effort within seven (7) days of receipt of MIPR. **NOTE:** 1) Funds will be issued reimbursable unless otherwise requested.
  2) The HPCMP cannot redirect funds to a "third-party" organization on behalf of the mentor organization.

RESPONSIBILITIES:

- Mentor and mentor organizations are responsible for the financial reporting and obtaining the security clearance, workspace, and computer assets required for the internship, as is usual and customary at the mentor organization, and in accordance with the internship program/vehicle being leveraged.
- The HPCMP, via the WD Office, will provide an HPCMP account for the intern to access HPCMP resources. At a minimum, an NACI clearance will be required to give access to HPCMP resources. The HPCMP will assist the mentor, if necessary, in obtaining an NACI for the intern.

PROCESS:

- **Proposal Submission:**
  - DoD government scientists/engineers interested in submitting a proposal will use the attached proposal form – substitutions **will not** be accepted.
  - The submitters will ensure that their proposals have their performing organization's confirmation of intent to accept funds. This confirmation is provided by the performing organization's Approving Official and the Financial Point-of-Contact digital signatures in Section 2 of the proposal.
  - Services/Agencies may have additional requirements. Submitters should allow sufficient time to accommodate these additional requirements in order to meet the **7 January 2016** 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_07Nov2015.pdf). HIP Mentor Proposals must be submitted by e-mail to the HPCMP Office using **2016-HIP@HPC.mil** by **7 January 2016.**

- **Evaluation:** The proposals will be reviewed by an evaluation panel against the following criteria:
  - 1 – ***Importance to the Service/Agency Key Mission Priority or Program of Record:*** Does the proposal identify the Service/Agency Key Priority (KMP) or Program of Record (PoR) this project will support/impact; and does it specify the impact to the KMP or PoR? (10 points)
  - 2 – ***Proposal Quality:*** Does the proposal identify HPC tools and resources as well as the value of the project to the mentor's organization/work? How well does this proposal identify the intern roles/responsibilities/tasks, and are the intern tasks challenging and achievable? Does the proposal have clearly defined outcomes, and is it achievable in the time period specified? (30 points)
  - 3 – ***Importance 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 an HIP Intern. How well does the proposal place this project in the appropriate context of 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 late January 2016.

QUESTIONS:

All questions regarding the call for Mentor Proposals for the High Performance Computing Internship Program (HIP) should be directed to **2016-HIP@HPC.mil**.