

# 2015 CALL FOR MENTOR PROPOSALS FOR THE HIGH PERFORMANCE COMPUTING INTERNSHIP PROGRAM (HIP)

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*Develop and provide materials and experiences that create both a computationally literate technical workforce for the DoD, and a cadre of computational professionals to provision HPC services.*

*- HPCMP Workforce Development Goal*

## **INTRODUCTION:**

The use of HPC resources requires unique knowledge, skills and abilities (KSA), to deploy, support and use high-performance computing resources. KSAs are rarely introduced or obtained in school. The HPCMP's Next Generation Workforce Development (NGWD) 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.

In 2014, the HPCMPO restructured its undergraduate internship program and launched the HPC Internship Program (HIP). Its focus: high-caliber mentors with challenging and rewarding HPC intern projects that are leveraging existing government-wide and local programs to attract the best intern candidates. The HIP provides funds for interns working with HPC or on HPC projects utilizing HPC tools, resources and methods.

"...introduction to massively-parallel computing was invaluable, since it's not available in my coursework."

"...great extension of knowledge to previous coursework in chemical simulations."

"...became much more efficient at CFD setup and analysis, something I had been lacking in my undergraduate career."

"...mentors were very good ... my work was relevant and useful to their research."

*- Comments from 2014 HIP Interns*

## **THE CALL:**

In continuing support of this goal, the **HPCMP is issuing the 2015 Call for Mentor Proposals for the HPC Internship Program (HIP)**. HPCMP plans to sponsor about 35-40 interns 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 (dependent upon internship program costs) to off-set the cost 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) who 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, etc.) government scientist/engineer (hereinafter referred to as mentor) who 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, graduate school students; wounded warrior and veteran programs; and under-represented minorities.
- 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 the HPC HIP during FY2014 must have completed that effort and closed out FY2014 funding or have been approved for an extension of that effort by the HPCMP.
- 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:***

- The mentor and the mentor's organization are responsible for the financial reporting and obtaining any security clearance, workspace, and computer assets required for the internship, as is usual and customary and in accordance with the internship program/vehicle being leveraged.
- The HPCMP via the NGWD 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 a NACI for the intern.

### ***PROCESS:***

HIP Proposals must be submitted by email to the HPCMPO at [2015-HIP@HPC.mil](mailto:2015-HIP@HPC.mil), with cc to the mentor's performing organization approving official and financial point-of-contact specified in Section 1 of the proposal. HIP Proposals are due by close of business on **6 March 2015**. Award announcements are planned for mid/late March 2015.

### ***GUIDELINES FOR HIP PROPOSAL PREPARATION:***

Mentors interested in submitting a HIP Proposal should use the attached template. The proposal document should be single-spaced; using a standard 12 point font, one-inch margins, and should include all of the elements specified in the template. When submitting the proposal, the following file naming convention will be used for the document: <mentor's last name>\_<org>\_<date> (for example: Bradley\_ARDECBenet\_06Feb2015.doc).

### ***HIP PROPOSAL SUBMISSION:***

All proposal submissions must be sent by email to [2015-HIP@HPC.mil](mailto:2015-HIP@HPC.mil), using the attached template and file naming convention mentioned above, and received no later than **6 March 2015**.

Questions regarding this call for proposals should be directed to [2015-HIP@HPC.mil](mailto:2015-HIP@HPC.mil).