Opportunity Summary:
The intent of this solicitation is to request proposals from organizations willing to serve as service providers (SPs) within the NSF Innovative High-Performance Computing (HPC) program to provide advanced cyberinfrastructure (CI) capabilities and/or services in production operations to support the full range of computational- and data-intensive research across all of science and engineering (S&E). The Advanced Computing Systems & Services program is intended to complement previous NSF investments in advanced computational infrastructure by provisioning resources, broadly defined to include systems and/or services, in two categories.

Category I, Capacity Systems: production computational resources maximizing the capacity provided to support the broad range of computation and data analytics needs in S&E research; and

Category II, Innovative Prototypes/Testbeds: innovative forward-looking capabilities deploying novel technologies, architectures, usage modes, etc., and exploring new target applications, methods, paradigms for S&E discoveries.

This solicitation welcomes only Category II proposals.

Resources supported through awards from this solicitation will be incorporated into and allocated as part of NSF’s Innovative HPC program. This program complements investments in leadership-class computing and funds a federation of nationally-available HPC resources that are technically diverse and intended to enable discoveries at a computational scale beyond the research of individual or regional institutions of higher education. NSF anticipates that at least 90% of the provisioned system or services will be available to the S&E community through an open peer-reviewed national allocation process and be supported by community and other support services [such as those currently supported through eXtreme Science and Engineering Discovery Environment (XSEDE) 2.0 project-managed allocations recommended by the XSEDE Resource Allocation Committee (XRAC), and other activities intended to foster efficient coordination across resources], or an NSF-approved alternative that may emerge. If this is not feasible for the proposed system/services, proposers must clearly explain in detail why this is the case and how they intend to make the proposed system/services available to the national S&E community.

Eligibility & Requirements:
- An individual may be the PI or co-PI on no more than one proposal that responds to this solicitation.

Internal Nomination Process:
Interested applicants should submit the following documents:

1. JHU Limited Submission Cover Sheet
2. Proposal (maximum of two pages of text only, single spaced: 12-pt font and one-inch margins) (Note: figures, tables, and other reference material may be included in addition to the 2 pg. text limit)
3. Curriculum Vitae of investigator, including current external research support and publications
4. Budget (two pages maximum)

Questions? Comments? Email the Research Development Team at resapp@jhu.edu.