Internal Selection Procedures
for
2015 ORAU/ORNL High Performance Computing (HPC) Grant Program

**Summary:** Oak Ridge Associated Universities (ORAU) has partnered with the Oak Ridge National Laboratory (ORNL) to provide opportunities for meaningful faculty and student engagement with ORNL’s leadership-class computing capabilities through the ORAU/ORNL High-Performance Computing (HPC) Grant Program. This is a competitive grant program managed and funded by ORAU and open only to ORAU’s member institutions, including UAH. Each grant awarded to a faculty member provides potential funding of up to $50,000 ($25,000 per year for up to two years). The goals of the joint ORAU/ORNL HPC Program include:

- Provide the opportunity for faculty to create or expand collaborative research with ORNL in scientific areas of discovery requiring HPC capabilities; and
- Provide ORAU member institutions the opportunity to create a strategic partnership with ORNL through alignment of faculty proposals with ORNL’s science agenda; and
- Enhance the development of the future workforce in scientific discovery through computing by providing real-world experiences for students.

Proposals must be submitted in collaboration with an ORNL research staff member listed as a principal investigator on one of the research projects identified on the ORNL 2015 Research Projects page (See Section 8 of the 2015 ORAU/ORNL High Performance Computing Program Solicitation attached).

These research projects are aligned with ORNL’s major leadership positions in Neutron Science and Technology, Computing and Computational Science, Advanced Materials, and Nuclear Science and Engineering. The joint HPC proposals should focus on filling gaps and addressing opportunities in support of ORNL’s Science & Technology Laboratory Agenda, which includes the following nine focus areas:

- Integrated Energy Systems
- Science and Informatics for Energy and Urban Infrastructure
- Science for Transformational National Security Capabilities
- Next Generation Neutron Source and Instrumentation
- Computer Science and Math for Exascale Computing
- Materials by Design
- Integrated Studies of Complex Biological Systems
- Transformational Nuclear science and Technology
- Discovery Science and Innovation
Proposal Limitations: Only one proposal per ORAU member institution may be submitted.

Selection Process: Faculty interested in proposing to ORAU should submit a Notice of Intent (NOI) to the UAH Office of the Vice President for Research (OVPR) through the Office of Sponsored Programs (OSP). Should more than one NOI be received from across the University, they will be reviewed by a process established by the VPR. The VPR will notify each applicant whether or not their proposal has been selected to move forward and represent the University.

Proposal Schedule: Internal NOI due to OSP on 2 September 2014, 5:00 p.m. CDT
Final Proposal due to OSP on 30 September 2014, by 11:00 a.m. CDT
Final Proposal due to ORAU 3 October 2014, by 12:00 noon. EDT
Winners Announced on 17 November 2014
Project start date 1 Jan 2015

Direct any questions about the internal NOI preparation or process to your OSP Contract Administrator.

NOI Format and Content: Proposal pages should have at least 1” margins all around, and use no smaller than an 11-point Times New Roman font for the text. Tables and figures are exempt from the 11-point font requirement, but must be clearly legible.

Number of NOI copies: Submit original and 5 copies

NOI Contents:

1. Cover Page:
   a. Include “2015 ORAU/ORNL High Performance Computing”
   b. Project title should convey the primary purpose of the proposal.
   c. Names, departments/centers, campus address and email address for each PI, Co-I, and key personnel proposed.
   d. List of other partnering institutions and entities.
   e. Name of ORNL Partner (see Sections 7.1 and 8 of the 2015 ORAU/ORNL High Performance Computing Program Solicitation attached)

2. Executive Summary: (Limit: 2 pages double-spaced) Describe the concept of the proposed HPC project and a summary of the project description as outlined below.
3. Project Description\footnote{See Sections 7.1 and 7.4 of the 2015 ORAU/ORNL High Performance Computing Program Solicitation attached for more information}: (Limit: 6 pages, double-spaced) Please include in this section the following information, each in its own subsection with the following headings:

**Subsection 3.a. Project Objectives**

**Subsection 3.b. Scientific Merit**

- Scientific significance
- Potential to develop or expand faculty member’s research program
- Alignment with ORNL’s Research Projects requiring HPC capabilities and a need for ORNL staff collaboration

**Subsection 3.c. Faculty-student approach**

- Describe the faculty-student team who would spend some time during the summer of each award period in working with the LDRD PI. You can mention past history as examples, but briefly describe your plans during the actual award period – 2015-2017.

4. One to two-page bio for each PI, Co-I and key personnel proposed.