UAHuntsville Internal Selection Procedures for Integrative Graduate Education and Research Traineeship Program – CIF21 Track (IGERT – CIF21) NSF 12-555

Summary:

The Integrative Graduate Education and Research Traineeship (IGERT) program has been developed to meet the challenges of educating U.S. Ph.D. scientists and engineers with interdisciplinary backgrounds, deep knowledge in chosen disciplines, and technical, professional and personal skills. The program is intended to establish new models for graduate education and training in a fertile environment for collaborative research that transcends traditional disciplinary boundaries. It is also intended to facilitate diversity in student participation and preparation, and to contribute to a world-class, broadly inclusive, and globally engaged science and engineering workforce. The purpose of this amendment to IGERT (NSF 11-533) is to support new models in graduate education in which students are engaged in an environment that supports innovation to learn through hands-on experience how their own research may contribute in new ways to benefit society and to learn the processes for the successful implementation of such contributions.

Within the Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21) and IGERT, NSF recognizes the need to educate and support a next generation of researchers able to address fundamental challenges in 1) core techniques and technologies for advancing big data science and engineering; 2) analyzing and dealing with challenging computational and data enabled science and engineering (CDS&E) problems, and 3) researching, providing, and using the cyberinfrastructure that makes cutting-edge CDS&E research possible in any and all disciplines.

Through this amendment, a new IGERT- CIF21 track has been created as a mechanism to address the training and education needs in CDS&E and cyberinfrastructure research.

Proposal Limitations:

Because the University is limited to submitting one proposal to NSF in response to this solicitation where we are the lead institution, we will utilize the following procedures for an internal Notice of Intent (NOI) process to select the project that will be submitted on behalf of the University.

Internal NOI Due Date: 18 May 2012, COB 5:00 p.m. CDT, to OSP

Selection Process:

The University is limited to the submittal of one Letter of Intent to NSF. Therefore, should more than one NOI be received by the deadline of 18 May, the Office of The Vice President for Research (OVPR) will implement a review of the NOI submissions, and one applicant will be selected in consultation with the Provost to submit a Letter of Intent to NSF representing the University. The OVPR intends to make this selection by COB 25 May.

The Letter of Intent is due to NSF on 4 June 2012, and the Full Proposal will be due 6 August 2012.
**Number of copies:** Original and 5 copies

**Internal NOI Format:**

Proposal pages should have at least 1-inch margins all around, and use no smaller than an 11-point font.

The internal NOI will reflect the content of the Letter of Intent to NSF and some of the key aspects of the full proposal described in the solicitation, NSF 12-555, Section V.A.

**Part 1.** A one-page LOI including each of the following categories ONLY:

a. Name and departmental affiliation of the Principal Investigator
b. Names and departmental affiliation(s) of the Co-I(s)

**Part 2.** (limited to 5 pages, double-spaced, minimum 11-point font, minimum one-inch margins)

a. Project Summary: a succinct summary description of the IGERT project, including its research theme and key education and training features.

b. Organization and Management: Describe the plans and procedures for the organization and management of the proposed IGERT effort.

c. Project Evaluation: Describe the evaluation plan that will be used by the team to evaluate success in meeting project goals.

d. Recruitment, Mentoring, and Retention: Describe plans for recruitment, mentoring, and retention of U.S. graduate students, including specific provisions aimed at members of groups underrepresented in science and engineering.

e. International Collaboration: Describe the intentions, if any, for international collaboration.

f. Facilities and Equipment: Provide a brief description of facilities and major instruments that will be made available to the project and which require no additional support from the NSF.

g. Intellectual Merit: a succinct summary of the intellectual merit of the proposed IGERT effort.

h. Broader Impacts: a succinct summary of the broader impacts of the proposed IGERT effort.

**Cognizant Program Officers**

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