

## **Council of Graduate Schools Request for Proposals The Project for Scholarly Integrity in Graduate Education**

The Council of Graduate Schools (CGS) is soliciting proposals from CGS member institutions to participate in a collaborative project on scholarly integrity. A new CGS project supported by the Office of Research Integrity (ORI) will award \$50,000 to five institutions who will be selected through a competitive process of external review. Participating universities will develop, assess, and disseminate educational models for promoting responsible conduct of research (RCR) and integrity in professional scholarship, education, and research. Participants will share instruments, resources, and models for curricular and administrative integration with each other throughout the project and with the graduate community through CGS meetings and workshops, online resources, and publications. CGS will feature university projects on an enhanced interactive website that will also serve as a clearinghouse of relevant resources and provide electronic forums for exchanging information and advice. As in other CGS best practice initiatives, universities who are not selected to receive awards will be invited to participate as affiliates. A monograph detailing the institutionalization efforts of five major research universities with particular emphasis on what is scalable and transferable to other institutional contexts will be released in conjunction with a capstone conference in October 2010. This culminating event will bring together graduate deans, researchers, corporate leaders, national agencies and private foundations to discuss future trends and showcase best practices in comprehensive institutional approaches to research and scholarly integrity.

### **I. Project Rationale**

In the broader academic context, integrity is a concept rich with connotations that encompass the minimal standards of compliance in research, the personal ethical decision-making processes of individuals, and ultimately the ways in which our institutions reflect the highest aspirations and broadest commitment on the part of the academic profession to the principles of truth, scholarship, and the responsible education of future scholars. Research integrity is not simply an individual value, it is also an institutional value reflected in the culture that is reinforced by the processes in place and the daily decisions of individual researchers, faculty and mentors, campus leaders, and administrative staff. Recent efforts to place greater emphasis on research integrity in graduate education are important in the context of three phenomena: (a) an increase in the number of reported cases of misconduct, nationally and internationally; (b) the encroachment of external pressures upon academic research as interaction and interdependence intensifies among academic, commercial, and government sectors; and (c) the expanding scope of researchers' responsibilities as a consequence of the globalization of the scientific community and the accelerating pace of change. The growing interaction among academic, business, and government sectors and the globalization of the scientific community both have the potential to provide enormous public benefits, but they also mean that the next generation of scholars faces new challenges. What is needed now, more than ever, is for university leaders and scholars to work together to ensure that a strong tradition of research integrity evolves to meet these new challenges. This project represents a continuing collaboration between CGS and member universities on research integrity and is designed to provide models for institutions seeking to take a comprehensive approach to embedding the ethical and responsible conduct of research into the fabric of graduate education.

### **II. Project Background**

This project builds upon two prior CGS pilot projects. An initial project funded by ORI supported the generation and testing of strategic interventions and assessment strategies in the behavioral and biomedical fields at ten universities. The resultant CGS monograph on Graduate Education

for the Responsible Conduct of Research focused on program “start up,” or the key elements required to launch an effective program. A subsequent NSF-funded CGS initiative supported the integration of RCR into the regular practice of graduate education. That project addressed the needs of students in science and engineering for enhanced skills and competencies in deliberate ethical reasoning about issues that arise in interdisciplinary research and in public-policy arenas. CGS will release the monograph from that project in summer 2008. The project described in this request for proposals builds upon results from both prior projects by drawing on resources created and lessons learned to develop institutional models for expanding and embedding research integrity and responsible conduct of research education programs.

The objectives of this new CGS initiative are: to expand the cadre of graduate deans who will serve as leaders in fostering a climate of research integrity in graduate education; to generate information about what works best in promoting a comprehensive institutional approach to RCR education; to document the results of the funded projects online and in a best practice monograph series; and to promote community-wide activity building on this initiative through publications, frequent meetings, a CGS scholarly integrity Website, and interactive media.

### III. Selection Criteria

A selection committee will evaluate proposals based upon the following criteria:

- Institutional Commitment
  - Key leadership of the project by the senior academic officer for graduate education (graduate dean or equivalent) who will serve as principal investigator (PI).
  - Letter of endorsement by president or provost and, where appropriate, senior research administrator
  - Plan and budget reflecting appropriate allocation of resources needed to initiate the program and to sustain and expand it after the end of the project period
  - Plan for securing commitment of faculty effort and responsibility to achieve program goals
- The potential of the project to impact graduate education in the behavioral and biomedical sciences (see also *Eligibility*, p.5).\*
- Quality of action plan to implement a comprehensive, integrated approach to research integrity meeting the requirements in section IV below.
- Ability to develop metrics to measure accomplishment of objectives (see section V below).
- Evidence of innovative ideas for fully integrating the responsible conduct of research into the research environment, as opposed to limiting the presentation of RCR issues into orientation sessions or other activities conducted as an adjunct to the conduct of research and research training.
- Priority will be given to proposals that address the need for improved education in the responsible conduct of research in three core areas of activity:
  - (1) Interdisciplinary activity
  - (2) Intercultural activity
  - (3) Interaction between and among units or groups

\*In order to ensure meaningful and sustainable improvement in the behavioral and biomedical disciplines chiefly targeted by this initiative, universities may find it important and even necessary to include a forum within the project to involve other fields, such as the humanities and social sciences.

#### **IV. Proposal Plan and Activities**

Each proposal should present a plan of activities that covers five core areas described below. Each of these areas, as well as questions pertaining to each, should be addressed in every proposal. Proposals should indicate a commitment to the bulleted minimum required activities and address any additional activities that will be undertaken. Innovative approaches are encouraged. [For a more comprehensive list of possible activities, see “The Project for Scholarly Integrity for Graduate Education: A Framework for Collaborative Action” [http://www.cgsnet.org/portals/0/pdf/PSI\\_framework\\_document.pdf](http://www.cgsnet.org/portals/0/pdf/PSI_framework_document.pdf).]

##### ***(1) Engage the community in identifying needs.***

Key strategies for engaging the graduate community on any improvement initiative are: (a) creating a sense of “vulnerability” linked to opportunity and (b) rewarding excellence in research and education, including mentoring.

Questions:

1. What is the local context on campus for this project? How will the graduate school establish recognition of the local context for the need to promote scholarly integrity through this project?
2. How are proposed activities in this phase of the project designed to encourage recognition of vulnerabilities and/or excellence in research and education?
3. What is your experience with each approach, and why is the proposed approach and respective activities the best for your local institutional context?

##### ***(2) Invite key stakeholders to reflect on a plan for action.***

- Solicit a clear, public endorsement of the project by senior university leaders.
- Appoint a planning or steering committee.

##### ***(3) Act on stakeholder reflections.***

Proposals should address how, under the leadership of the senior academic officer for graduate education (graduate dean or equivalent), the design and follow through on a plan for action will involve activities in three areas: a) Content; b) Sequencing of Content and Pedagogy; and c) Collaboration.

###### **a) Content**

One of the core features of this project is to encourage approaches that embed, in a rich curriculum, education in the professional standards pertaining to the nine core areas of responsible conduct of research as identified below. This should include focus on skills and competencies in the following areas, as well as bedrock principles and values behind them: 1) Data Acquisition, Management, Sharing, and Ownership; 2) Conflicts of Interest and Commitment; 3) Human Subjects; 4) Animal Welfare; 5) Research Misconduct; 6) Publication Practices and Responsible Authorship; 7) Mentor and Trainee Responsibilities; 8) Peer Review; and 9) Collaborative Research. Other areas that might be considered in a comprehensive approach include: lab management; classroom management and practice; financial stewardship; ethical decision-making and deliberation processes; ethical principals.

Questions:

1. What content areas will your project address? On which areas will it focus, and why?
2. Will your institution be creating new curricular content or adapting existing curricular materials to meet the needs of the local contexts?
3. Where creating new materials, what opportunities will key stakeholders have for

providing input into identifying the shortcomings of existing materials and suggesting concrete areas for improvement? Who are the potential collaborators and what are the resources available for this effort?

4. If your project will be adopting and/or adapting existing resources, what are the reasons for choosing the particular curricular content that will be considered?

#### b) Sequencing of Content and Pedagogy

Projects should move beyond minimal training in proper conduct and professional standards. Aspects to consider include: the sequencing of content to address professional development needs of students and/or to expose students to situations of escalating complexity and encouraging consideration of the broader implications of decisions and deliberations. Institutions proposing to develop original curricular content or to innovate in the area of pedagogy and learning should articulate how proposed activities are grounded in theories of learning.

- Face to face and interactive learning opportunities are an essential requirement of instruction in this project.

#### Questions:

1. How will content, activities, and resources be sequenced to address the developmental needs of students and/or faculty at appropriate stages in their graduate paths or careers?
2. What pedagogical methods or activities do you anticipate being undertaken or encouraged?

#### c) Collaboration

- Proposals should identify: key collaborators who will be involved in the project, potential collaborators who will be invited to participate in the project, and the anticipated role for each.

#### ***(4) Disseminate to the broader community information about activities and their ongoing impact.***

Communication among the leadership group of PI's as well as to the broader CGS community about project achievements is a core requirement. Participation in the following is required:

- Eight PI telephone conferences per year (from September 2008 to September 2010).
- Project sessions convening participants and affiliates at CGS summer and annual meetings (July 2009 to December 2010)
- A capstone conference in October 2010 highlighting project achievements and bringing together key stakeholders from business, government, and non-profit sectors.
- Two face-to-face meetings of graduate deans and affiliates per year (April 2009-August 2010) [*travel expenses paid by CGS; do not include in budgets*].

#### ***(5) Integrate curricular and administrative activities, where appropriate, to ensure greatest impact and sustainability.***

Proposals should address how curricular resources and content will be integrated into the graduate research experience. Proposals are encouraged to address how administrative processes and procedures may be tuned to reinforce a climate of scholarly integrity. Key considerations should include: sustainability, scalability, and the potential transportability of materials, lessons, and/or resources to other institutions.

Questions:

1. How will resources be developed or adapted to meet the local university context(s)? And what administrative resources will assist in this process?
2. Will curricular content or resources currently serving a small population be scaled up to a larger one?
3. Beyond CGS vehicles for dissemination, how will your institution work to make feasible the transportability of your materials or resources to other universities?

## **V. Assessment Requirements**

Institutions are required to conduct assessment in three areas during the course of the project:

1. Activities assessment
2. The climate for scholarly integrity
3. Student learning

All participants will be required to complete an *activities assessment* using a template provided by CGS: (a) pre-implementation, to be submitted by October 30, 2008, and (b) post-implementation, to be submitted in conjunction with final reports. [Assessment instruments and instructions are available online at: <http://www.cgsnet.org>.]

Proposals must also indicate a commitment to administering a survey, created by CGS in consultation with PI's, on *the climate for scholarly integrity* within the first six months of receipt of the awards and, again, within the six months period prior to the conclusion of the subaward period. These instruments will be common to participants in the project and will reflect activities in the required areas as well as the elective innovations that universities propose. Support documentation for obtaining campus IRB exemption for survey #2 will be provided by CGS. These assessment instruments will be used to measure the progress of projects over time against their own goals and to gather comparable information across participating institutions about the scope, impact, integration, visibility, and potential sustainability of funded projects.

Projects will also be required to address how *student learning* will be assessed during the course of the project. [Optional student learning assessment tools developed as a result of prior CGS RCR initiatives will be available on the CGS RCR project website, accessible through <http://www.cgsnet.org/Default.aspx?tabid=123>.]

Beginning in January 2009, CGS project staff will conduct site visits to participating universities.

### **Eligibility**

All U.S. CGS member institutions are eligible to apply for awards. Priority will be given to proposals from institutions that can provide evidence of the project's potential to have a direct and significant impact on behavioral and biological sciences and biomedical research as indicated by the scope of the proposed project (e.g. number of students expected to participate) and relevant national rankings, for example, in receipt of NIH funding.

### **Reporting Requirements**

Annual narrative and financial report due July 30, 2009. Final narrative and financial report due July 30, 2010.

### **Deadlines**

Applications for a CGS/ORI award must be **received at CGS no later than July 30, 2008**. Awards will be announced by September 20, 2008 for projects that will be implemented in

September 2008 and conclude in July 2010.

**Application Materials**

- A proposal (no more than 10 pages, single spaced) outlining proposed activities and demonstrating the applicant institution’s ability to meet selection criteria, including a budget specifying the uses for requested funds of \$50,000. Indirect costs are not allowable on CGS subawards. (A sample financial reporting form is available upon request if you would like to use this form to structure your budget).
- Letters from departments and faculty demonstrating interest in and commitment to the incorporation of RCR issues into departmental/lab research activities.
- Letter of endorsement by the president or chief academic officer that the activities and intent of the grant are consistent with and complementary to the institutional mission and strategic plans.

Send completed proposals via e-mail (preferred) to: [ddenecke@cgs.nche.edu](mailto:ddenecke@cgs.nche.edu)

Proposals sent via U.S. mail will also be accepted (*must be accompanied by an e-mail notice that a proposal is being shipped*):

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