



## Hope College Policy for Providing Training in Ethics and Responsible Conduct of Research (RCR)

Faculty and staff who receive federal funding to conduct research or to supervise student researchers are responsible for ensuring all work is done in compliance with Hope College's Research Misconduct Policy and Procedures (adopted by the Academic Affairs Board on May 5, 2009), and governmental policies (see below). Hope College's policy for providing training on ethics and responsible conduct of research (RCR) is outlined as follows:

### **Policy:**

- The academic departments at Hope College will have the primary responsibility to provide training in ethics and RCR for their students. Accordingly, Hope College will comply with federal requirements (see below) by having each department/discipline develop its own training plan that will include the relevant core areas of RCR.

### **Core Areas in Responsible Conduct of Research**

- Responsibility of Integrity
- Ethical Challenges of Academic Research and Projects
- Professional Obligations and Peer Review
- Authorship, Data Sharing, and Management
- Responsibility to the Subjects of Research (Human, and Animal, see resources below)
- Guidelines for Mentoring and Advising Students in Research

### **Implementation:**

- Students must sign in at each training session and the instructor will keep the attendance record.
- Training must be completed within the first year or by the end of the summer research program (10 weeks). Ideally, training will be offered twice a year, once during the academic year and once during the summer.

- Upon completion of the ethics and RCR training, the department (chairperson or a designated person such as the departmental research director) will send the list of students who have completed their training to the Director of Sponsored Research Office.
- This policy, as well as the departments' ethics and RCR training plans will be posted on the following websites: Departmental, Summer *Hope Academic Research Program (SHARP)*, respective Division, and the Sponsored Research Office. It will also be referred to in the *Faculty Handbook*.
- The departments' training plans must be updated periodically with the goal to keep the content up-to-date and relevant. The current training plans for departments are given below.

### **Examples of Departmental Training Plans**

- RCR Training – Biology.doc
- RCR Training – Chemistry.doc
- RCR Training – Engineering-CS-GES.doc
- RCR Training – Mathematics.doc
- RCR Training – Nursing.doc
- RCR Training – Physics.doc
- RCR Training – Psychology.doc

### **Governmental Policies:**

#### *National Institutes of Health (NIH) Policy*

Requirement for Instruction in the Responsible Conduct of Research in National Research Service Award and Institutional Training Grants, NIH Guide, Volume 21, Number 43

The National Institutes of Health requires that all applicants for Institutional National Research Service Award (NRSA) Research Training Grants (T32, T34) include explanation of an educational program in the responsible conduct of research. Applications that do not include a plan for RCR instruction are considered incomplete. The NIH suggests that the RCR instructional program include the following topics: conflict of interest, responsible authorship, policies for handling misconduct, policies regarding the use of human participants and animal subjects, and data management. The proposed plan must include the subject matter of instruction, the format of the instruction, the degree of faculty participation, trainee attendance, and the frequency of instruction.

#### *Public Health Service (PHS) Policy*

In December of 2000, the Public Health Service issued a policy requiring all researchers supported by PHS funding to complete a program of instruction in the responsible

conduct of research. Congress has suspended the policy and has asked the PHS to review the format and content of the policy. The Office for Research Integrity (ORI) is currently revising the policy and plans to re-release the policy in the future. The suspended policy required PHS supported researchers to engage in education on the following topics: data management and integrity, mentor/trainee responsibilities, publication practices and responsible authorship, peer review, collaborative science, human subjects, research involving animals, research misconduct, and conflict of interest and commitment. Research institutions nationwide are taking steps to implement RCR educational programs prior to the re-release of the policy.

### *National Science Foundation*

In addition, the recently enacted America COMPETES (America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science) Act, will affect the National Science Foundation in several ways. Section 7009 requires that institutions receiving NSF grant funds in which undergraduate, graduate students, or postdocs are listed, as research personnel must provide RCR training to those individuals. This section of the America COMPETES act will be implemented on January 4th, 2010. Please see the Federal Register announcement of the implementation of Section 7009 of America COMPETES Act. [Federal Register: August 20, 2009, Volume 74, Number 160, Page 42126.

(<http://edocket.access.gpo.gov/2009/E9-19930.htm>) Alternatively, go to <http://www.gpoaccess.gov/fr/> and click on Page Number (1995 forward), enter 42126 and click submit. The "getpage.cgi" file will be downloaded. Change the file type to .pdf and open the file accordingly.

### **Internal Resources:**

#### *Human Subjects*

Research projects that use humans as subjects must be reviewed and approved by Hope College's Human Subjects Review Board (HSRB) prior to the grant proposal submission. Information is available on our Human Subjects web page (<http://www.hope.edu/admin/hsrb/>).

#### *Animal Subjects*

Research projects that use animals as subjects must be reviewed by Hope College's Animal Care and Use Committee (HCACUC) after receiving award notification or prior to submission if required by a specific grant program. Information is available in <http://www.hope.edu/academic/biology/ourdepartment/policies/>.

#### *CITI*

Collaborative Institutional Training Initiative (CITI) has designed and implemented a course for RCR that was partially funded by the Office of Research Integrity and Department of Health and Human Services (DHHS). This comprehensive course is designed to meet Federal requirements for formal training in the responsible conduct of research. The new on-line course is now available for Hope members at <https://www.citiprogram.org> and it can be accessed through Hope's HSRB website,

<http://www.hope.edu/admin/hsrb/>. Upon successful completion, a certificate will be provided.

### **External Online Resources:**

- The Office of Research Integrity (ORI), US Dept. of Health and Human Services, has RCR (responsible conduct of research) educational resources in core instructional areas including, General, Data Acquisition, Management, Sharing, and Ownership, Conflicts of Interest and Commitment, Human Subjects, Animal Welfare, Research Misconduct, Publication Practices and Responsible Authorship, Mentor/Trainee Responsibilities, Peer Review, and Collaborative Science. (See [http://ori.hhs.gov/education/rcr\\_resources.shtml](http://ori.hhs.gov/education/rcr_resources.shtml) for instructional materials.) The general page on the site is also very useful: [http://ori.dhhs.gov/education/products/rcr\\_general.shtml](http://ori.dhhs.gov/education/products/rcr_general.shtml).
- A helpful resource is a booklet by the Office of Research Integrity entitled ORI Introduction to the Responsible Conduct of Research. The booklet can be downloaded here or go to <http://www.ori.hhs.gov/education/>.
- RCREC (<http://rcrec.org/resources.htm>) (Responsible Conduct of Research Education Consortium) offers resources for further RCR education including: 1) a Columbia University RCR Course, 2) Online Resource for RCR Instructors and 3) Current Resources for RCR Education (PowerPoint presentation).
- Northern Illinois University: Web based training in Data Management, Collaborative Research and Research Mentoring. (<http://www.niu.edu/rcrportal/>)
- Other potentially useful websites are: <http://www.rcr.emich.edu/>, <http://www.unh.edu/rcr/index.html>, and <http://www.onlineethics.org/>.