

## Office of Research Services

Loyola University Chicago Stritch School of Medicine

### National Research Service Awards (NRSAs) Requirements Regarding Responsible Conduct of Research (RCR)

It is essential that research is conducted in accordance with certain scientific, ethical and regulatory standards, which are collectively called the Responsible Conduct of Research (RCR), and principal investigators who receive extramural support are held accountable for ensuring that the funded research meets the highest scientific and ethical standards. In addition, the Public Health Service (PHS) encourages research institutions to actively promote RCR. In order to comply with these standards and expectations, each institution has the obligation to develop policies for the various aspects of research, to provide training for members of its research community in areas relevant to their activities, and to certify compliance with research policies.

NRSA applications (NIH Training grants or individual awards for graduate and postdoctoral fellowships) require faculty advisors to certify that awardees will be trained in the elements of RCR. In general, certification by the advisor is accepted as assurance that the training program described in the fellowship/training grant application will be completed. The training in RCR should include formal coursework as well as continued education throughout the degree program in settings such as seminars, journal clubs, and individual interactions with faculty.

The information presented below is provided to assist faculty, students and staff fulfill the basic requirements for training in RCR and should assist individuals completing applications requiring documentation of this training. The initial section describes resources available on the Office of Research Services (ORS) Website, and the second section presents language that can be used as a template for applications requiring information on continued training in scientific and ethical conduct. This template should obviously be edited for content as appropriate for the trainee and laboratory involved. If you have any questions or require additional information, please do not hesitate to contact the ORS.

#### **Resources on the ORS Website:**

The Office of Research Services at Loyola University Chicago (ORS), Stritch School of Medicine provides its Research Community with access to institutional, federal and professional resources that support the core areas listed for RCR. Information on the topics listed below can be accessed on the ORS Website:

- Data acquisition, Management, Sharing, and Ownership
- Intellectual Property
- Mentor/trainee responsibilities
- Publication practices and responsible authorship
- Peer review
- Research misconduct
- Conflict of Interest
- Human subjects

- Research Involving Animal subjects
- Environmental Safety: radiation, chemicals and microbial agents
- Financial Management

### **Template for Fellowship Applications:**

#### **Responsible Conduct of Research**

Loyola University Chicago is a Jesuit Catholic University that was established to provide an academic environment grounded in high ethical values. This emphasis suffuses our education and research, both formally and informally, at every level. The following is a brief overview of the exposure that students receive in terms of the ethical and moral conduct of research, and of the long-standing and ongoing training that they experience at Loyola University Medical Center (LUMC).

The institutional emphasis on high moral standards resounds in the Loyola University Chicago Mission Statement: "We are Chicago's Jesuit Catholic University – a diverse community seeking God in all things, and working to expand knowledge in the service of humanity through learning, justice and faith." This emphasis is echoed by the Mission Statement of LUMC: "LUMC exists within a Jesuit tradition of academic distinction that embraces social responsibility and respect for diversity of thought, opinions and people." The Office of the Senior Associate Dean for Research creates an outstanding environment that is particularly attuned to socially responsible biomedical research, including ethical treatment of animals and responsible research involving human subjects. In concert, the Graduate School establishes an educational environment that focuses on the acquisition of research skills, knowledge and competence in the backdrop of high ethical behaviors and moral values, and the Neiwanger Institute for Bioethics and Health Policy, which is dedicated to the "mission of research, education and service in bioethics and health policy", provides a multifaceted service to our graduate education by encouraging continued awareness of ethical conduct in research as well as a course on Bioethics that is required for all graduate students. In addition, ethical attitudes are constantly stressed in the (*departmental or interdisciplinary*) graduate program seminar series and (*student journal club presentations – if appropriate*).

*Dr. XXXX's* laboratory also provides a climate where ethical conduct in research is stressed. Informal dialogues regarding RCR are commonplace, and appropriate principles are discussed as students generate and record data, prepare written and verbal presentations of their work, and conduct their daily lives in the research community. *Dr. XXX* also requires students to access all opportunities that LUMC provides for enhanced awareness on the topic, and has established two additional venues where ethics in research are discussed: 1) Weekly laboratory meetings where annual presentations include discussions on laboratory record keeping, Standard Operating Procedures (SOPs) as required by outside agencies, and proper authorship; and 2) Bi-weekly meetings of research teams where data notebooks are co-witnessed by two team members, and then read and understood by all members of the team.