THE ISSUES AND CHALLENGES OF RESEARCH ETHICS EDUCATION IN THE UNIVERSITY, PARTICULARLY IN THE AREA OF THE SOCIAL SCIENCES

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GENERAL ISSUES RELATED TO ETHICS EDUCATION

The institution of higher education is responsible for assisting students in the acquisition of knowledge, skills and cultural values that exemplify the responsible conduct of research (RCR) through a formal and organized process of learning. Unfortunately, these acquisition processes are particularly difficult to realize within the context of graduate education for two reasons.

First, the process of graduate education and research is usually decentralized, increasingly complex, and often requires cross-disciplinary collaboration, at times involving multiple research groups and/or organizations. Second, students that participate in graduate education and research often represent the widely diverse socio-economic, racial, ethnic and international citizenship of the global research community. Few would deny the merits of an inclusive graduate student population. However, the decentralized and diverse nature of the graduate research and education process complicates any organization’s attempt to successfully communicate and sustain the values and practices that embody the responsible conduct of research (RCR).

Besides the challenges of decentralization and value multiplicity that are endemic to graduate research and education, organizations that attempt to facilitate graduate student acquisition and compliance with values and practices consistent with the responsible conduct of research (RCR) must address three specific logistical challenges. First, academic competitive pressures and resource demands, particularly related to time, increase the difficulty of generating interest and enthusiasm for participation in seminars, workshops, or brief orientation sessions that tackle the subtle challenges related to adherence to the principles of
responsible research. In addition, faculty/researchers, as well as graduate students, often assume that the values and practices associated with the responsible conduct of research (RCR) are well known, generally agreed upon, and usually practiced by other members of the research community. Thus, time spent discussing values and behavior related to the responsible conduct of research is often viewed as unnecessary, redundant and, at times, professionally offensive.

Second, the complexity of, and demands for, instructional time found in most graduate education and research settings often results in the presentation of educational material using teaching styles that are unlikely to influence student members of the research community to acquire and retain knowledge of values and principles related to the responsible conduct of research. In addition, the teaching style often found in higher-education settings is generally unilateral and highly individualistic. Thus, learning situations are unlikely to occur that facilitate discussion of common situations and/or issues relevant to the responsible conduct of research (RCR). In addition, typical higher-education learning situations seldom provide opportunities for graduate students to develop social ties with trustworthy college-specific faculty/researchers available for informal discussion and/or advice if an alleged situation of misconduct were to occur during the student’s graduation education. Hence, most presentations of information relevant to the responsible conduct of research (RCR), if they occur at all, transpire in learning situations unlikely to facilitate the successful acquisition and retention of principles and practices of responsible research, and unintentionally minimize dissemination and discussion of values and practices of responsible research by faculty/researchers and student members of the research community.

Finally, it is unclear as to how values and practices associated with the responsible conduct of research are best communicated to graduate students and faculty/researchers. A variety of learning protocols have been developed for training in the responsible conduct of research (RCR). However, minimal empirical data assessing their effectiveness is available. Several plausible challenges can be easily identified that increase the complexity of valid and reliable program evaluation. First, in most circumstances, successful knowledge acquisition is predicated on elevated levels of interest in, and motivation to acquire, the information offered for consideration. To date, it is indeterminate as to how best to organize and present material related to the responsible conduct of researchers so as to enhance the receptivity of graduate students and faculty/
researchers. Second, any program that attempts to provide training related to the responsible conduct of research (RCR) should measure both the acquisition, as well as the successful application of RCR principles and best practices to realistic case studies that illustrate the complex, yet subtle, nature of ubiquitous situations of research misconduct. Third, successful evaluation of training that addresses the responsible conduct of research (RCR) should measure long-term retention of the material presented, successful application of RCR best practices in actual research situations and, ideally, reveal additional issues yet to be addressed by literature on the responsible conduct of research.

**ISSUES SPECIFIC TO THE SOCIAL SCIENCES**

Both empirical evidence, as well as informal discussions at most institutions of higher education suggest significant irritation/hostility towards RIO/IRB administrative policies and procedures from social science researchers. A variety of factors contribute to this emotional response, most of which are beyond the scope of this paper; however these emotion-related beliefs appear to result in a oppositional/deviant stance by social scientists towards the compliance assurance process (i.e. IRB protocols). Unfortunately, this results in a situation that discourages informal control, and encourages the use of formal (bureaucratic) control, a significantly less effective compliance mechanism.

Similarly, in the 1960s and 1970s, a “research revolution” in the study of policing occurred. One outcome was the realization that cops and citizens are actually co-producers of crime deterrence. In other words, the police can’t do it alone. Another realization was the importance of citizen involvement in crime deterrence.

After all, Agents of Formal Control like the police depend on citizens to comply with the law, and report lawbreakers. And, since interaction with Agents of Informal Control—family, friends and co-workers—occurs everywhere, all the time, informal social control is difficult to evade.

For social scientists, if deterring “crime,” and deterring “misconduct” can be considered functionally similar, then those interested in the Responsible Conduct of Research have much to learn from the science of policing, including potential methods of decreasing social science resistance to compliance processes.

The Compliance Office (including the RIO/IRB) of any organization serves as the formal control agent (“law enforcement”) of
the research community. In order to assist in the coproduction of compliance, Research Integrity Officers might reach out to their research community, especially social scientists, in a proactive, positive and helpful manner; for example, being available and approachable to discuss concerns about possible research misconduct or assisting the submission of IRB protocols. In addition, the Compliance Office should provide assistance to special student populations, such as honors or graduate students or foreign-trained post-docs. If successful, the Compliance Office would be regarded as a “member in good standing” of the overall research community, rather than being marginalized as “research Nazi.”

Faculty, students and staff serve as the Informal control agents (“citizens”) of the research community. In order to enhance the coproduction of compliance, the informal network of a research group’s social relations should be encouraged to be as dense and as multiplex as possible. Group-based, especially college-based RCR training would be one way to achieve this. Another would be “Paired Research” or “Collaborative Research” carried out by work-pairs of students, especially those working on Honors or Master’s degrees. In addition, research groups should be organized into supervisory units of 4-8 students, and the Principal Investigator should organize weekly meetings to collaboratively discuss the group’s project.

The research community will continue to grow larger, more diverse, and possibly more transient. Research groups are increasingly geographically decentralized. All of these trends threaten to further weaken formal and informal social control; subsequently, the potential opportunity for research misconduct will grow.

An increase in the use of formal mechanisms of control to deter scientific misconduct is limited to what a researcher can tolerate without feeling under siege by the IRB/CIO. On the other hand, enhancements in informal social control, which requires that the members of an organization spend more time together on a research project, or on a group exercise during an interdisciplinary RCR training session might feel empowered to assist with compliance.