2.E - Core Component 2.E

The institution's policies and procedures call for responsible acquisition, discovery and application of knowledge by its faculty, students and staff.

- 1. The institution provides effective oversight and support services to ensure the integrity of research and scholarly practice conducted by its faculty, staff, and students.
- 2. Students are offered guidance in the ethical use of information resources.
- 3. The institution has and enforces policies on academic honesty and integrity.

Argument

2.E.1. The Office of the Vice President for Research, Office of Responsible Research, Office of Research Integrity, Office of Sponsored Programs Administration, and Sponsored Programs Accounting collaborate to provide oversight and services that support the research and scholarly activities of faculty, staff and students.

The Office of the Vice President for Research (VPR) provides overall leadership and support for ISU's research enterprise. Its mission is to "Promote and enhance research, creative, and scholarly enterprises and related services and further economic development through the transfer of discoveries to the private sector." The Office provides services, such as the Grants Hub, that assists researchers in the development research proposals, an e-newsletter, and trainings that support researchers.

The Office of Responsible Research (ORR) coordinates ISU's research compliance program. The program includes reviews conducted by numerous research compliance review committees: Institutional Animal Care and Use Committee, Institutional Biosafety Committee, Institutional Review Board, and the Radiation Safety Committee. The purpose of the compliance program is to review all relevant proposals and activities to ensure they are in compliance with University, local, state, federal, and funding agency regulations for research. In 2014 the four compliance review committees reviewed 2.681 research project applications.

Committee approval is granted for a specific period of time. At the end of the approval period, protocols are reevaluated through a process called *continuing review* where researchers provide a progress report for committee review. New applications must be reviewed every three years for projects requiring oversight by the Institutional Animal Care and Use Committee (IACUC) and every five years for projects requiring oversight by the Institutional Biosafety Committee (IBC).

ORR has implemented a formal Post-Approval Monitoring (PAM) program for projects involving <u>animals</u> or <u>humans</u>. Post-approval monitors meet with principal investigators and/or their staff to verify that project activities are being conducted in compliance with committee-approved protocols, and verify no changes have been implemented without approval. The post-approval monitors also identify any potential problems, make recommendations to ensure future compliance, and communicate identified issues to the respective committees.

The Office of Research Integrity (ORI) fosters a culture of ethical research practice through ISU's conflicts of interest, export controls and research integrity programs.

ORI's conflict of interest program facilities the conduct of ethical research by promoting objectivity

in research, and the export controls program prevents the unauthorized export of technology, software and goods that may adversely affect U.S. national security, foreign policy or economic advances. ORI partners with the ISU research community in effective and innovative ways to minimize manage research risk. In 2014, ORI reviewed 1,131 export control worksheets, material transfer agreements, and non-disclosure agreements. From those reviews, 38 export control management plans were developed. In 2014, ORI completed 1,523 conflicts of interest and commitment reviews, and conducted 66 conflicts of interest management plan meetings. Concerns regarding research integrity violations are forwarded to the Research Integrity Officer, the Associate Vice President for Research, for investigation.

The Office of Sponsored Program Administration (OSPA) supports researchers throughout the grant life-cycle, including review of proposals and budgets to ensure alignment with sponsor requirements, management of contracts associated with awards, and post-award oversight.

Sponsored Programs Accounting (SPA) oversees the financial transactions associated with funded research. The approval, review, and audit process exist to detect and reduce criminal conduct in the financial management of research by reviewing web requisitions for equipment purchases; subaward invoice payments; cost transfers and transfers. SPA also reviews expense transactions at the close-out of an award.

ISU recently implemented its Business Ethics Awareness and Compliance Program, as required by institutions receiving federal contracts (FAR 52.203-13). Assigning key party roles and responsibilities, training, disseminating information, providing a hotline and displaying posters are key components of this program. Units/departments with specifically outlined roles, responsibilities and mandatory training requirements include principal investigators, OSPA, and Office of Intellectual Property and Technology Transfer, VPR, SPA, University Counsel, ORR, Internal Audit, and Purchasing.

Environmental Health and Safety (EHS) supports ethical research activities by providing critical safety training for faculty, staff and student researchers. EHS <u>provides training sessions to over 20,000 participants</u> each year through both classroom-based and online modules.

2.E.2. ISU has a degree requirement that all undergraduate students complete Library 160, Information Literacy. <u>Lib 160</u> is an eight-week one-credit course that provides students with an understanding of information literacy process, including the ethical and legal frameworks related to information use.

The Graduate College, in collaboration with academic colleges, created and offers a responsible research course for students. This course, <u>GR ST 565- Responsible Conduct of Research</u> in Science and Engineering, is a one-credit course that covers the ethical and legal issues facing researchers.

All student researchers (undergraduate, graduate, or post-docs) as well faculty and staff that are involved with NSF, NIH, or USDA-NIFA grants are required to complete training for responsible research. Face-to-face and online training options are available, although some agencies require a certain number of hours be face-to-face. Training is available through the GR ST 565 course, or by completing specific modules of online training offered through the Collaborative Institutional Training Initiative (CITI) at the University of Miami. The Training Coordinator for the VPR monitors students' completion of training and their ability to work on the research projects.

As a part of its outreach program, the Office of Judicial Affairs conducts presentations related to academic misconduct for students and faculty. <u>In 2013-2014 the office provided training sessions that reached 92 faculty/staff members and 1226 students.</u>

2.E.3. ISU has several policies that address academic honesty and integrity. The <u>Academic Dishonesty Policy</u>, contained within the Catalog, is the overarching policy on academic honesty. The policy provides examples of common academic dishonesty issues (such as obtaining unauthorized information, tendering of information, misrepresentation, bribery, and plagiarism). Since academic dishonesty is both an academic issue and a student conduct issue, students may be penalized academically (e.g. receiving no credit for assignment) and also sanctioned through the Student Disciplinary Regulations process. <u>In 2013-2014 there were 211 charges of Academic Misconduct handled through the University's judicial review process</u>.

The ORR website provides links to a wide range of policies that support integrity and honesty in academic research. Examples include <u>Responsible Conduct of Research</u>, <u>Research Misconduct</u>, and the <u>Use of Human Subjects in Research</u>.

To support ethical conduct, the University provides technology that allows students and faculty to proactively identify potential violations of plagiarism. SafeAssign is available through the Blackboard interface for both students and faculty. This software is used to prevent plagiarism and to help students properly attribute sources rather than paraphrase. SafeAssign compares a student's submitted assignment against against several databases, containing millions of articles dating from the 1990s to the present, to identify areas of overlap between the submitted assignment and existing works. In addition to Safe Assign, ISU implemented TurnitIn and iThenticate software in 2014. These resources, which function similarly to SafeAssign, are available to all graduate students, post-docs, faculty and staff for their use in examining dissertations, manuscripts, and proposals for possible plagiarism.

Sources

- 15-16 Catalog Academic Conduct
- Business Compliance Key Roles and Responsibilities
- EH&S Training Information 11-17-2014
- GR ST 565 Responsible Conduct of Research Syllabus
- Human Subjects-Use in Research
- IACUC Post-Award Monitoring Program Description
- IRB Post-Award Monitoring Program Description
- Judicial Affairs Summary Data 2013-14
- Library 160 Syllabus
- Office of Research Integrity Review Statistics
- Office of Responsible Research Review Statistics 2014
- Professional Development Workshops VPR 2014-15
- Research Misconduct
- Responsible Conduct of Research Training for NSF-NIH-NIFA Website
- Responsible Conduct of Research Training Requirement Policy