



Responsible Conduct of Research Strategic Plan
2011-2016
DRAFT #4
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Introduction

Guided by an ongoing strategic planning process, Grand Valley State University (GVSU) has positioned itself to achieve excellence at all levels and to become one of the nation's premiere comprehensive universities. Consistent with University principles, the strategic plan developed for the Responsible Conduct of Research (RCR) at GVSU is grounded in the principles of liberal education. The RCR Strategic Plan offers a framework that will enhance research and scholarly activities and provides GVSU with a guide to meet federal mandates and achieve, sustain, and enhance a best practice research environment.

The RCR Strategic Plan articulates a vision for GVSU as a Carnegie classification "Masters Large" public institution that promotes research and scholarship that enhances teaching. The RCR Strategic Plan also contains statements of mission and values that guide GVSU's culture, attitudes, and behavior at all levels, i.e., administrative, faculty, staff, and student. Finally, the Plan includes goals and specific objectives, so that progress and effectiveness can be measured and reported to all stakeholders.

Strategic Planning Process

The RCR Strategic Planning Task Force (Task Force) was constituted in December 2010. Gordon Alderink, representing the Brooks College of Interdisciplinary Studies, chaired the Task Force, comprised of faculty and staff that represented each college and the University Libraries. Task Force members included: Blake Ashby, Engineering; Mary Bair, Education; Cheryl Dunn, Accounting; Julie Garrison, University Libraries; Lisa Kenyon, Physical Therapy; Claudia Leiras-Laubach, Nursing; John Stevenson & Jeff Potteiger, Graduate Studies; Glenn Valdez, Psychology; and Christina Yalda, Criminal Justice and Legal Studies. Ex-officio members (consultants to the Task Force) included: Paul Reitemeier, HRPP; Robert Smart, CSCE; Jon Jellema, Provost's office; and Mike Lombardo, Biology.

It was agreed that the Task Force would meet twice a month through June. Work was essentially completed in early May, 2011. In the first meeting P. Reitemeier and J. Jellema provided an overview of RCR and the mandate to the committee. An early Task Force meeting included

discussion of member's personal and professional values related to teaching and scholarship; this discussion also allowed Task Force members to become acquainted with one another. This was followed by a review of GVSU's strategic plan, vision, mission and core values. The Task Force spent time reviewing and discussing the content of the booklet published by the Office of Research Integrity (ORI) titled *Introduction to the Responsible Conduct of Research*, as well as a paper by DuBois & Dueker (2009), "Teaching and assessing the responsible conduct of research: A Delphi consensus panel report." These resources provided information on core content that should be part of RCR training/education programs. Subsequently, the Task Force searched for evidence of ORI core content at all levels of the University, including undergraduate and graduate curricula. Based on this review, the Task Force discussed Grand Valley's strengths and opportunities for improvement related to ORI core content, and identified potential resources and significant gaps. After discussion of both internal (e.g., faculty and middle administration resistance) and external threats (e.g., RCR mandates other than National Science Foundation (NSF)/National Institutes of Health (NIH)) that a formal RCR program might encounter at Grand Valley, Jon Jellema gave the Task Force an overview of potential resources for RCR programming. At the final formal meeting budget implications for RCR programming at Grand Valley were identified. The Task Force meetings in April and May centered on defining RCR strategic planning vision, mission, values, and goals & objectives.

RESPONSIBLE CONDUCT of RESEARCH STRATEGIC PLAN 2011-2016 (PROPOSED)

Grand Valley State University is a "Master's Large' public institution with a local, regional, and state commitment; global perspective; and grounding in the tradition of liberal education" (Grand Valley State University, Strategic Plan 2010-2015 (GVSU SP)). Teaching in the general arts and sciences and professional degree programs takes a liberal approach and "rests on scholarship and the open exchange of ideas" (GVSU SP). The University is committed "to educating students to become competent professionals, able scholars and responsible citizens" (GVSU SP). Furthermore, Grand Valley faculty, as able teacher-learner mentors, collaborate with staff and students in the development of "skills of inquiry, reflection, critical analysis, dialogue and expression" (GVSU SP).

Public support and recognition of the importance of research has increased dramatically over the past several decades. For example, university spending on research and development (R&D) in science and engineering increased 5.8% between 2008 and 2009 to \$54.9 billion, 59% of that from the federal government.^a In 2009, total federal obligations for life sciences R&D at academic institutions totaled \$15.8 billion, of which 90% or \$14.2 billion was provided by the NIH. Furthermore, the American Recovery and Reinvestment Act of 2009 provided an additional \$8.2 billion to NIH to fund extramural life sciences R&D.^b With growing public support for, and interest in, research there is a parallel increased concern about the way it is conducted. For example, in a survey of over 1,700 researchers, 33% reported engaging in so-

called “questionable research practices” (Martinson, Anderson & deVries, 2005), despite their clear obligations to conduct their research in a responsible manner. “Responsible conduct of research is simply good citizenship applied to professional life.” (Steneck, 2007). However, the details of good citizenship in research may not be widely known or consistently practiced. A recent study by ORI estimated that there were more than 2,300 observations of likely research misconduct per year just in research funded by the U.S. Department of Health and Human Services (Titus, Wells, & Rhodes, 2008). Such data suggest the need for training and education in the responsible conduct of research. Moreover, a growing, and often changing, body of local, state, and federal regulations makes it a challenge for researchers to keep pace with best practice standards. Finally, the federal government via The America COMPETES Act (August 9, 2007) mandated that the NSF and the NIH *require* institutions in receipt of funding from these agencies to provide appropriate training and oversight in the responsible and ethical conduct of research for undergraduate students, graduate students, postdoctoral researchers, trainees, fellows, participants and scholars. For those reasons, Grand Valley State University will be fully engaged in the promotion of responsible and ethical conduct of research in all disciplines at all levels.

Mission

Grand Valley State University is committed to ensuring the highest ethical and professional standards in scholarly endeavors, including respect for all participants and credit for all contributors. Training in Responsible Conduct of Research is a critical step in imparting best practice standards for GVSU faculty, staff, and students as they shape their careers and contribute to their professions and society.

Vision

Grand Valley State University will become excellent in practicing the Responsible Conduct of Research, grounded in the principles of liberal education. GVSU will educate undergraduate and graduate students, faculty, and staff to become a community of life-long learners committed to ethical principles based on respect, beneficence, and justice.

Value Statements

Excellence

Faculty, staff, and students will exhibit excellence in their conduct of research and scholarly activities. Excellence entails following best practices across disciplines in all aspects of scholarly activities, such as design, conduct, collaboration, mentoring, and accurate reporting of results and contribution credits.

Inquiry

GVSU is committed to the liberal ideals of critical and imaginative inquiry and lifelong learning through instructing, involving, and mentoring the next generation of researchers, scholars, and creative problem solvers. GVSU supports the ongoing development of the knowledge, skill, and disposition related to the responsible conduct of research.

Collaboration

GVSU is committed to promoting collaboration among faculty, staff, and students in scholarly activities across disciplines and between institutions. GVSU, as a community, values the creative process that enhances scholarly excellence through sharing knowledge, learning, and building consensus. Collaboration promotes greater transparency and ethical decision making in scholarly activities.

Transparency

An open and transparent process is indispensable in ensuring the highest quality of all scholarship activities at GVSU. Access to all relevant procedures and information facilitates accountability through effective review, replication, and collaboration amongst broader communities of interest.

Integrity

GVSU is committed to creating an environment that promotes responsible conduct of research by embracing standards of integrity, honesty, trustworthiness, and lawfulness.

Responsibility

Responsible research is encouraged and guided by the research culture at GVSU. Those engaged in scholarship at GVSU are entrusted with certain responsibilities, as demonstrated by practices such as: 1) respect for human and animal subjects, community stakeholders, and the environment; 2) good stewardship of public and private resources; 3) appropriate acknowledgment of collaborators; and 4) responsible communication of research.

Accountability Measures

With connections to the RCR program values, accountability measures are an essential component of program success and on-going improvement. These measures will ensure compliance with federal guidelines.

Measures of RCR Training/Education Effectiveness

The RCR Committee (Board) is accountable for planning effective training/education programs for faculty, staff, and student research.

Efficiency

The RCR Committee (Board), and collaborative partners (e.g., Center for Scholarly and Creative Excellence (CSCE)), will provide programming that is relevant, timely, accessible and convenient.

Stewardship

The RCR Committee (Board), and collaborative partners, will be prudent stewards of all resources it receives.

Public/Private Partnership

RCR programs will satisfy best training/education practices and be compliant with guidelines for any partner institution or funding entities.

Goals

The following goals and objectives are consistent with our values and will allow Grand Valley's RCR program to accomplish its mission and move toward its vision. Specific programs that emanate from these goals will: 1) include substantial face-to-face instruction; 2) cover subject matter recommended by ORI and other public/private partners; 3) involve GVSU faculty and staff as instructors/mentors; 4) include at least eight (8) contact hours; and 5) involve instruction at least once during each career stage¹. These goals will provide a way to measure program outcomes and report progress. Responsibility for achieving these goals will rest with the RCR Committee (Board) and collaborative partners.

Goal One

Grand Valley has the administrative and pedagogical infrastructure to promote responsible conduct of research in all disciplines at all levels.

Objective 1.1: Create permanent and officially recognized infrastructure for the development, implementation and supervision of Responsible Conduct of Research (RCR) training/education programs for faculty, staff, and students.

Sub-objective 1.1.1: Within 1 year create an ad-hoc RCR committee whose task is to develop, implement, and supervise university-wide RCR programs. The committee will consist of appropriate faculty, staff, representative from CSCE, and students selected by the Provost's office and/or designee and would be chaired by a faculty member of the committee. The chair would report to appropriate administrative and/or faculty governance bodies regarding RCR activities. The faculty chair would receive appropriate re-assigned time and be provided with appropriate clerical, office & technical (COT) support.

Sub-objective 1.1.2: Within 3-5 years create a permanent RCR Board to maintain, improve, and supervise University-wide RCR programs. The Board would be chaired by

a faculty member (as part of re-assigned time) or professional staff (preferably someone with research experience) and have part-time COT support for administrative/office management needs. Board members would be comprised of elected and/or appointed representative faculty, staff, representative from CSCE, and students. The Board would report to the Provost's office.

Sub-objective 1.1.3: Within 5-7 years the RCR Board would be fully integrated into University curriculum and/or governance system.

Goal Two

Grand Valley promotes the development of the knowledge, skills, attitudes and behaviors consistent with excellence in responsible conduct of research.

Objective 2.1: Provide university-sponsored forums twice a year involving regional/national experts that focus on sensitivity to ethical issues related to RCR.

Sub-objective 2.1.1: Within 1 year create a mechanism and identify funding sources for on-going, permanent public research ethics-related fora. The RCR Ad-hoc Committee, with collaborative partners, will plan and implement at least one public forum.

Sub-objective 2.1.2 Within 3 years have established infrastructure for twice-a-year public fora, in conjunction with private and/or public partners. By this time twice-a-year fora will have taken place.

Objective 2.2: Create a two-tiered instructional RCR program: a) department-level, disciplinary-based, integrated into undergraduate, graduate, and professional curricula and b) extra-department, interdisciplinary, that will include faculty/staff mentoring and training within and external to the University.

Sub-objective 2.2.1: Within 1-2 years develop mechanisms to monitor and certify program participation/completion.

Sub-objective 2.2.2: Within 2 years establish a training program for undergraduate and graduate faculty and research staff who teach/mentor research methods, conduct research, and collaborate in student research ORI RCR guidelines.

Sub-objective 2.2.3: Within 2 years provide interdisciplinary RCR workshops twice a year for faculty, staff, and students.

Sub-objective 2.2.4: Within 3 years provide interdisciplinary seminars twice a semester with ethical sensitivity and problem-solving emphasis.

Sub-objective 2.2.5: Within 3 years establish mechanisms/funding sources to promote faculty RCR development off-campus, e.g., conference training.

Goal Three

Regular and rigorous assessment of Responsible Conduct of Research training/educational programs informs decision making at Grand Valley State University.

Objective 3.1: Develop multi-level, regular and formal assessment of RCR training/education programming.

Sub-objective 3.1.1: Within 1 year identify primary constituents, i.e., curricular, experiential, etc., of a formal RCR training/education assessment program.

Sub-objective 3.1.2: Within 1 year be compliant with NSF and NIH RCR training/education mandates.

Sub-objective 3.1.3: Within 3 years create formal RCR training/education assessment program.

Sub-objective 3.1.4: Within 5 years collect and analyze preliminary RCR training/education assessment outcome data.

Sub-objective 3.1.5: Within 5-7 years utilize outcome assessment data to change/improve existing RCR training/education programs.

Budget Implications

Several budget implications are associated with this strategic plan to include, but not limited by: 1) re-assigned time for faculty chair of RCR Committee (Board); 2) faculty/staff time/commitment as members of RCR Committee (Board); 3) speaker fees, travel expenses, etc for bi-annual RCR-sponsored lectures on research-related ethic issues (**Note: it is suggested that these lectures include one regionally- and nationally-recognized speaker**); 4) construction and maintenance of RCR website (**Note: it is suggested that a graduate assistant (GA) could have some of their assignment devoted to the website**); 5) dedicated half-time GA to assist faculty chair of RCR Committee (Board); 6) costs related to ongoing workshops/seminars such as curricular materials to purchase/replicate, e.g., ORI RCR handbooks for workshops, etc., room costs, food, etc.; 7) part time COT support for RCR Committee (Board); and 8) funding sources to support faculty/staff RCR development at conferences and workshops.

Conclusion

Task Force members believe that the rigor of the process and thoroughness of the final report provides Grand Valley State University with the framework for the development of an excellent RCR program.

References

^bBlume-Kohour ME, Kumar KB, & Sood N, Federal funding and university research and development, RAND, March 2010.

DuBois JM, Dueker JM, Teaching and assessing the responsible conduct of research: a Delphi consensus panel report, *J Res Admin*, 40(1): 49-70, 2009.

^a*InfoBrief*, National Science Foundation, Directorate for Social, Behavioral, and Economic Science, September 2010.

Martinson BC, Anderson MS, & de Vries R, Scientist behaving badly, *Nature*, 435: 737-738, 2005.

Steneck NH (2007), *ORI, Introduction to the Responsible Conduct of Research*, U.S. Government Printing Office, Washington, DC.

Titus SL, Wells JA, & Rhoades LJ, Repairing research integrity, *Nature*, 453(7198): 980-982, 2008.

¹ Career stage refers to faculty member professorship (assistant, associate, full), as well as public/private funding levels and research experience, i.e., number of years.