

Project for Scholarly Integrity

Capstone Conference

October 30, 2010 ♦ Washington, D.C.



The CGS Project for Scholarly Integrity is supported
by an award from the Office of Research Integrity
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Project for Scholarly Integrity Capstone Conference Booklet

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Project for Scholarly Integrity Capstone Conference

Saturday, October 30, 2010

8:30 a.m. - 4:30 p.m.

Atrium Ballroom
Washington Court Hotel
525 New Jersey Avenue NW
Washington, DC

Agenda

8:00 a.m. Registration and Buffet Breakfast

8:30 a.m. Welcome and Introduction

Debra W. Stewart, President, Council of Graduate Schools

8:45 a.m. Keynote Address

John Galland, Director, Division of Education and Integrity, Office of Research Integrity

What role does graduate education play in the formation of responsible and ethical scholars and researchers?

**9:30 a.m. Graduate Education for Research and Scholarly Integrity:
Institutions as Levers for Change in U.S. Science, Research and
Scholarship**

The Role of Funding Agencies

Jean Feldman, Head, Policy Office, National Science Foundation

*Aaron Manka, Investigative Scientist, Office of the Inspector General,
National Science Foundation*

What can funding agencies do to support graduate education for research and scholarly integrity? What are the current needs and priorities for the future?

Current Strengths and Needs in RCR and Research Ethics Education

Elizabeth Heitman, Vanderbilt University

What are we doing well? What are the gaps in RCR and research ethics education?

Engaging the Whole Community

Jeffrey Engler, University of Alabama at Birmingham

How can institutional leaders understand the perspectives of all groups who will be involved in training programs—faculty, students, research administrators? How can they use what they learn to develop messages and activities that reach everyone? What role do graduate schools play in coordination of campus activities?

10:15 a.m. Open Discussion

10:45 a.m. Break

11:00 a.m. Creating Effective Programs

Making Ethics Integral to Research Training

Lisa Tedesco and Mark Risjord, Emory University

How can institutions make research ethics and scholarly integrity integral to graduate education? How do graduate schools create a culture that values research and scholarly integrity?

Engaging Faculty and Disciplines

Henry Foley and Suzanne Adair, Penn State University

How can institutions engage faculty and disciplines in the development and assessment of effective programs?

Integrating Research Integrity into the Professional Development of Future Scholars and Researchers

Jan Allen, Columbia University

What have we learned about the professional development needs of graduate students? How can these lessons be used to develop stronger mentorship structures and professional development training programs?

11:45 a.m. Open Discussion

12:30 p.m. Working Lunch: Roundtable Discussions

1:30 p.m. Developing Effective Assessments and Interventions

The Role of Assessment in the Project for Scholarly Integrity

Daniel Denecke, Council of Graduate Schools

How could data from the collective assessment efforts support the development of institutional best practices for research ethics education?

Using Activities Assessments to Enhance Resource and Program Development

Elizabeth Boyd, University of Arizona

What have we learned from assessments of institutional and program activities that support research ethics education? How can we use such assessments to improve programs and resources?

Using Climate Assessment to Strengthen Programs and Institutions

Karen Klomparens, Michigan State University

What role do graduate schools play in the assessment and enhancement of institutional climate? How can these assessments be used to develop evidence-based interventions?

Lessons Learned in Assessing Institutional Climate for Research and Scholarly Integrity

Brian Martinson, HealthPartners Research Foundation and Carol Thrush, University of Arkansas for Medical Sciences

What are the indicators of an institutional climate supportive of research and scholarly integrity? What have we learned about the process of assessing institutional climate?

2:30 p.m. Open Discussion

3:00 p.m. Closing Remarks

Debra W. Stewart, President, Council of Graduate Schools

3:15 p.m. Break

3:30 p.m. Open Discussion of Priorities and Next Steps

4:30 p.m. Conclusion

The National Science Foundation & Training in the Responsible & Ethical Conduct of Research

**Council of Graduate Schools
Project on Scholarly Integrity
October 30, 2010**



Jean Feldman
Head, Policy Office
National Science Foundation (NSF)

Ask Early, Ask Often

- Jean Feldman
 - Head, Policy Office
 - Division of Institution & Award Support
 - Office of Budget, Finance & Award Management
 - jfeldman@nsf.gov
- Policy Office
 - 703.292.8243
 - policy@nsf.gov

SEC 7009 of the America COMPETES Act: Responsible Conduct of Research (RCR)

- “The Director shall require that each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project.”

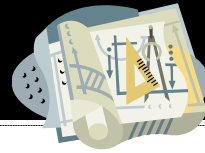


NSF Implementation

- Funded workshop entitled "*Ethics Education: What's Been Learned? What Should be Done?*" held by the National Academies of Science & Engineering in August 2008.
- Solicited feedback from the research community on NSF's proposed implementation in February 2009.
- Announced final implementation plan on August 20, 2009.
- The RCR training requirement applies to **new proposals** submitted, or due, on or after January 4, 2010, to conduct research.



Institutional Requirements



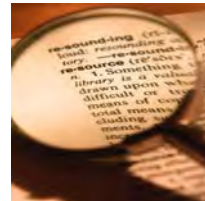
- RCR training is considered an institutional requirement. While training plans are not required to be included in proposals submitted, institutions are advised that they are subject to review upon request.
- NSF requires a certification, at the time of proposal submission, that the institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research.

Institutional Requirements (Cont'd)

- As part of its RCR implementation, institutions must also:
 - Designate one or more institutional officials to oversee compliance for RCR;
 - Determine the content requirements of its RCR training program, and the frequency with which such training determining must occur;
 - Determine which methods will be used to provide training; and
 - Verify that undergraduate students, graduate students, and postdoctoral researchers **supported by NSF to conduct research** have received RCR training.

NSF RCR Resources

- RCR Page on the NSF Policy Website
 - <http://www.nsf.gov/bfa/dias/policy/rcr.jsp>
 - Federal Register Notices
 - FAQs
 - International Research Integrity



NSF Funding of an On-line Ethics Resource

- NSF 10-547: Ethics in Science, Mathematics, and Engineering Online Resource Center (Ethics Resource). This competition proposed to fund one award to support a multidisciplinary team of researchers who will create an online ethics resource center.
- The National Professional and Research Ethics Portal is a \$5 M, five year award, to develop an online resource center for ethics in science, mathematics, and engineering. It will be developed by the University of Illinois at Urbana-Champaign and its partners Howard University, the National Academy of Engineering, and Public Responsibility in Medicine and Research (PRIM&R).

On-line Ethics Resource (Cont'd)

- This resource center:
 - is designed to foster a broad conversation about professional and research ethics across a range of disciplines and settings and to provide support resources for those studying, conveying and practicing research and professional ethics.
 - will incorporate existing resources and a wide range of new, peer-reviewed materials to be developed by the proposal team and other scholars, from instructional modules for learners to white papers that summarize research and best practices in teaching ethics and maintaining ethics programs.
 - will provide comprehensive access to the research literature and other materials through sophisticated, user-friendly federated search functions and will host discussions among communities of interest.



*Implementation and Oversight of
NSF's Requirement to Facilitate
the Ethical Conduct of Research*

30 October 2010
Council of Graduate Schools
Project on Scholarly Integrity

Aaron Manka
Investigative Scientist

National Science Foundation | Office of Inspector General | Office of Investigations



NSF's RCR Requirements

Institutions must:

- Have a plan, subject to review;
- Designate someone to oversee compliance with the plan; and
- Verify undergraduates, graduates, and postdoctoral researchers receive training.

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Connection to Research Misconduct

Warnings for Questionable Research Practice (QRP) and Questionable Administrative Practice (QAP).

QRPs meet the definition of RM, but are a departure, rather than a significant departure, from accepted scholarly standards.

QAPs fall outside the definition of RM, *e.g.*, violating NSF's merit review, COIs (but not EEO allegations).

If RM finding, requirements for ethics/responsible research practices training, usually general, but sometimes with content requirement, *e.g.*, course must include authorship or citation practices.

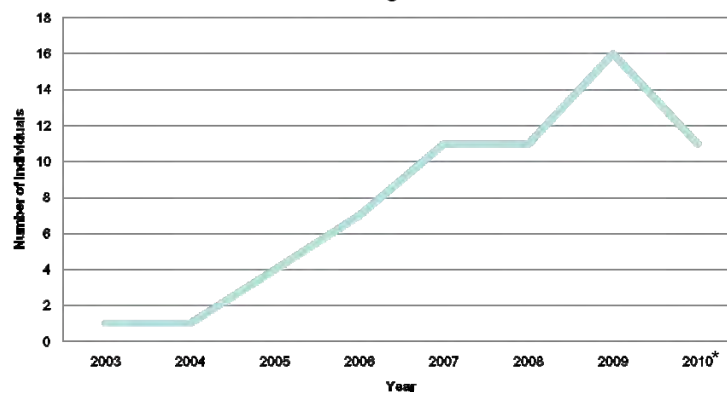
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Remedial Training 2003-Present

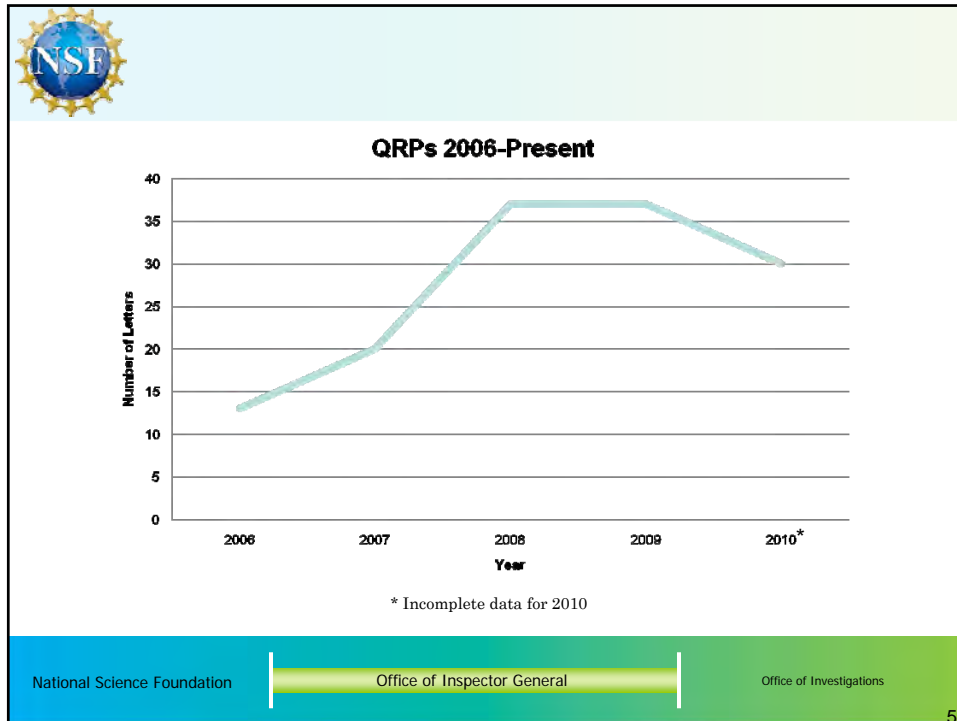


* Incomplete data for 2010

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What's in your plan?

<i>What's the format?</i>	On-line? Face-to-face meetings w/advisor? Faculty-led courses?
<i>What's the subject matter?</i>	RM policies, authorship and citation practices, data acquisition and sharing*, animal/human subjects protection, IRBs, gov't requirements or other issues as determined by risk assessment?
<i>Who participates?</i>	Only students/postdocs directly funded by an NSF grant? Foreign-educated? All?

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What we are seeing (so far)

2 case studies from RM (plagiarism) investigations

University A: invited us to visit to discuss its implementation of its RCR program (early part of the year).

Phased approach beginning with all students/postdocs on active NSF grants and 'high risk' students, broadening each year to eventually include all STEM students/postdocs regardless of support.

Training included courses supplemented by on-line material.

Univ's designated RCR person worked across campus for inclusiveness and had staff to assist.

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Case studies contd

(both compliant with NSF requirements)

University B: had more open cases than any university in OIG's history; we invited ourselves for a visit to discuss ethical environment.

For RCR: Univ interpreted support as who was receiving direct salary from NSF grants started after Jan 2010 (2 students); it had no immediate plans to broaden participation.

Univ assigned RCR duties to VPR (low priority). VPR was not working with other parts of the univ and had one other staff assigned to help in this area.

Training: students could take any on-line course, academic course, or discuss w/advisor (no format).

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Conclusions

- Two-pronged effort:
 - We connect allegations against students/postdocs to the training they have (or have not) received
 - Affects determination of intent;
 - QRPs and recommendations for required training if RM finding
 - Appeal to aspiration goals (compliance is easy)
- Observed need for RCR training of non-U.S.-educated students
- Tone at the top is crucial: is this an opportunity or a burden?

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Questions?



amanka@nsf.gov – 703-292-5002

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*Council of Graduate Schools
Scholarly Integrity Capstone Conference
October 30, 2010*

Current Strengths and Needs in RCR and Research Ethics Education

Elizabeth Heitman, PhD
Center for Biomedical Ethics and Society
Vanderbilt University Medical Center

Strengths and Needs in RCR Education

- There has been tremendous development in RCR and research ethics education since the 1989 IOM report that coined the term “RCR”.
- How long does it take to transform a profession’s world view?
- How long does it take to develop a field?
- How do we know when we reach the goal(s) of scholarly integrity?

Strength #1:

University administrations are paying attention, heeding calls for RCR instruction.

- NIH's initial 1989 "training grant mandate" received little response; ORI's 2000 PHS' Policy on RCR instruction received significant pushback and was ultimately withdrawn – BUT
- NSF's 2009 Congressionally mandated requirement and NIH's 2009 comprehensive policy update have prompted widespread action.

Need #1:

University faculty need to pay attention to calls for RCR instruction and take interest in it.

- Administrative responses to 2009 mandates have not been matched by faculty interest or willingness to teach RCR and /or research ethics.
- There is widespread concern that faculty have limited knowledge of the principles, policies, and practice standards of research and scholarship in their fields, blunting or even counteracting the effect of RCR education for students in their environments.

Strength #2:

Universities and training programs have staged instructional plans in place for RCR.

- NSF's 2009 requirement for RCR instruction has led to university-wide plans for instruction, with staging and integration of instructional activities for undergraduates, graduates, and post-docs.
- NIH's 2009 policy update on RCR instruction clarifies that plans should include issues and activities relevant to each stage of training.

Need #2:

RCR instruction plans still widely seen as a compliance issue, not an educational issue.

- Concern to have a plan in place for NSF has often focused attention on meeting the administrative requirement more than the educational need.
- Medical schools' efforts to streamline the grant application process have often yielded one-size-fits-most templates for proposed RCR instruction.

Strength #3:

Curricular materials and even whole programs are increasingly available online.

- New web-based courses and materials extend RCR instructors' reach, limiting the logistical challenges of teaching many trainees.
- NSF has recently awarded a \$5 million online resources grant for ethics in science, engineering, and mathematics.

Need #3:

Many materials used in RCR instruction are not peer-reviewed or otherwise vetted.

- Individual instructors' PowerPoint sets and lecture notes may or may not be accurate, comprehensible, or truly portable to other contexts.
- Faculty who are not well versed in specific topics are unlikely to use "stock" RCR presentations well.
- Textbooks – including anthologies – are needed in RCR for individual disciplines and research areas.

Strength #4

Focus on “*responsible scholarship*” includes more than traditional research disciplines.

- Scholarly integrity is appropriately a university-wide concern, essential to fostering and sustaining society’s trust in the university.
- Discussion of scholarship can bring together academics from many disciplines around questions of the generation and transmission of knowledge.

Need #4

Academic fields beyond traditional research disciplines need to articulate their standards.

- Fields with few crises or scandals in scholarship may have had few opportunities to clarify their norms.
- There are few federal standards for scholarly activities that don’t receive federal funds; the government’s role in such work – if any – needs to be defined.
- Interrelated terms need agreed-upon meaning across disciplines (e.g., RCR, research ethics, research integrity, scholarly integrity, professionalism, professional ethics)

Strength #5

Focus on the academic *environment* looks beyond individuals to community context.

- The Climate Assessment Survey developed for use by the Scholarly Integrity Project will soon be picked up by the CTSAs.
- Teaching about the “hidden curriculum” addresses the mixed ethical messages that abound in academics.

Need #5

Measures of the effect of RCR education on individuals and environments still needed.

- Measuring new knowledge doesn't tell us about behavior or behavior change.
- Prevention is difficult to document.
- Longitudinal studies are subject to many confounders.
- Current studies show RCR education “doesn't work” to prevent unethical practices in research.

Many flowers are blooming! * How do we best cultivate them?

after Debra Stewart - "Let a thousand flowers bloom."
April 2009 RCR educators conference at CGS



Photos from http://www.wildnatureimages.com/Plants_and_Flowers.htm and
<http://www.dailyonder.com/wild-lady-karnack-texas>

Engaging the Whole Community

Jeffrey Engler, Ph.D.
Associate Dean for Academic Affairs
October 30, 2010
Project for Scholarly Integrity
Funded by the Council of Graduate
Schools and the Office of Research
Integrity



Engaging the Whole Community

Overall Questions:

How can institutional leaders understand the perspectives of all groups who will be involved in training programs?

How can they use what they learn to develop messages and activities that reach everyone?

What roles do graduate schools play in these activities?



Understanding Their Perspectives

- **Surveys** – Fall, 2008 – joint survey with the University of Alabama and the University of Alabama in Huntsville
- **Partnerships** – use student and other groups to provide support for the project
- **Focus groups** – use their experiences to identify issues that need to be addressed



Survey on RCR, Fall 2008

- Used an instrument tested at Old Dominion University by then Graduate Dean Phil Langlais
- Administered online with emails sent by their graduate dean to faculty, graduate students and postdocs on each campus: UA, UAB, and UAH
- 25-30% response rate on each campus.



Survey on RCR, Fall 2008

- **Areas of agreement:** trust issues
 - Faculty: “Can I trust the data my student collects?”
 - Students: “Can I trust my mentor to treat me fairly?”
- **Areas of disagreement:** what is the most effective means of delivering scholarly integrity information/advice?
 - Faculty: Informally, as need arises.
 - Students: Formally, with lectures – perceived lack of instruction by mentors



Understanding Their Perspectives: Institutional Partnerships

Develop partners to support the efforts to strengthen teaching in scholarly integrity

- Graduate Student Association
- Postdoctoral Association
- VP for Research and Economic Development
- Center for Ethics and Values in the Sciences
 - Drs. Harold Kincaid and Sara Vollmer
- Center for Clinical and Translational Science
 - Drs. Ned Hook and Dale Benos
- UAB Research Foundation – Dr. David Winwood



Understanding their perspectives: Focus Groups

- We established focus groups to develop ideas for educational resources to assist faculty in preparing graduate students for scholarly integrity.
- We presented case studies and articles to the members of these focus groups and asked them to suggest ideas for projects/resources that could be developed.
- After this initial priming, other ideas developed based on student and faculty experiences: videos on data integrity (“Cultural Miscommunication”), authorship issues (“That’s My Paper”), and intellectual property rights (“Invention”).



How to Develop Compelling Messages?

If our effort was going to succeed, we had to:

- Identify faculty “champions”.
- Provide resources and information to support them.
- Show them how these resources could be used.
- Change the conversation from “Thou Shalt Not...” to “Here’s why it’s important.”
- Provide strategies to model good practice



Testing the Message: Workshops

We decided to test how to deliver the message

- A one-hour workshop: “Avoiding Plagiarism”
 - Graduate School staff: Dr. Julia Austin; Jennifer Greer
 - This title was perceived as “Thou Shalt Not...”
 - Changed to “Ethical Authorship”
 - Many short duration activities: Case studies, short focused PowerPoints, self-quizzes, practice writing, critical thinking
 - Can be adjusted for time and for audience
 - Given 24 times over the last 3 years.



Testing the Message: Videos

With our partnership with the Center for Ethics and Values in the Sciences, we decided to test different means for effective deliver of online content

- “Query – Video – Query” – Dr. Sara Vollmer
- “Decision Tree” – Dr. Elizabeth Holmes, Stockdale Center, US Naval Academy
- An ongoing project – videos are nearly complete



Roles for the Graduate School

- Identify best practices and resources
- Survey faculty, graduate students and other staff for those areas in which they feel most vulnerable
- Partnerships to pool resources and ideas
 - CCTS “Best Mentoring Practices” Project
 - Ideas and Contributions of other Graduate Deans and PSI members



Challenges

- Integrity Education versus Compliance Training
- Identifying and supporting faculty “Champions”
- Finding appropriate partners to share resources and talent
- Overcoming “Survey Fatigue”
- Assessing Long-term Changes in Institutional Culture and Attitudes.



Scholarly Integrity at Emory

WORKING TOWARD A COMPREHENSIVE PROGRAM

JAMES T. LANEY SCHOOL OF GRADUATE STUDIES

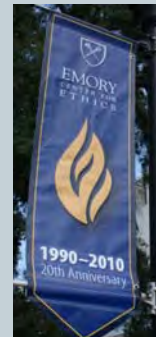
The Project for Scholarly Integrity

Project Goal

- Construct and implement a systematic program of education in research ethics and integrity

Guiding Principles

- Program Integration
- Critical Reflection
- Knowledge of standards, regulations, and best practices



Phase 1: Starting the Conversation

- **University-wide speaker events**
 - Tina Gunsalus, *Research Integrity: National Issues, Local Challenges*
 - Dr. Nicholas Steneck, *Scholarly Misconduct: What is it? Why it Matters? What Can be Done to Eliminate It?*
 - Dr. Gary Comstock, *Animals in Research*
 - Dr. Greg Koski, *The Truth, the Whole Truth and Nothing But the Truth: Is Scholarly Integrity Still Possible?*
- **Mini Grants to support program-level events**
 - *Research Ethics Roundtable*
 - Course in *The Ethics of Teaching*
 - Rebecca Skloot, author of *The Immortal Life of Henrietta Lacks*

Listening and Learning

- **Found less perceived need than anticipated**
 - Mini-grant response rate was low
 - Town hall meetings to discuss challenges and opportunities of teaching RCR/SI were poorly attended
- **Response**
 - Invited faculty and graduate students to participate as panelists for invited speakers
 - Panel participation developed likely allies and increased attendance from hard-to-reach units



Program Development: the Working Group

- 9 faculty and 2 graduate students from across the Laney Graduate School
- Looked at CGS publications and other institutional programs
- Charge: sketch two or more program models



- Parameters
 - Centralized – within programs
 - Common experience – individualized
 - Lectures – discussion or PBL

Listening and Learning: 2 Further Adjustments

1. From program models to program principles and student outcomes
2. New inventory of course based resources



1. Program Principles and Student Outcomes

- Education in scholarly integrity should
 - Be **relevant** to each student's research and career path.
 - Be an **organic part** of each PhD program
 - Include some **multi-disciplinary** experiences
 - Be **dispersed** throughout a student's career
 - Involve **faculty** from the program
 - Be **tracked** on the student's transcript
 - Include regular **program assessment**
- Graduates should
 - Be able to **disentangle** complex ethical problems
 - Have **communication skills** necessary to both prevent and resolve ethical issues
 - Know their **disciplinary codes** of conduct
 - Receive **certification** when necessary (e.g. IRB training).
 - Be familiar with the **resources** for resolving ethical problems and reporting misconduct

2. Inventory of Course-Based Resources

	Natural Sciences (11/14)			Social Sciences (7/10)			Humanities (7/8)		
	NA	0	1+ hr	NA	0	1+ hr	NA	0	1+ hr
Data Management	0	4	7	0	2	5	4	1	2
Mentoring	1	4	6	0	2	5	0	4	3
Authorship	0	4	7	0	1	6	1	1	5
Peer Review	0	4	7	0	0	4	0	4	3
Collaboration	0	4	7	1	6	0	4	3	0
Human Subjects	3	2	6	0	0	4	4	2	1
Animal Use	3	3	5	6	0	1	7	0	0
Misconduct (FFP)	0	4	7	0	3	4	3	3	1
Conflict of Interest	1	4	6	2	4	1	4	3	0
Ethics of Teaching	1	6	4	0	0	6	0	2	5
Public Scholarship	1	7	3	1	5	1	3	1	3

Consolidating Gains and Moving Forward

Plan for Program Development:

- Discussion with DGSs (September - October)
- 4 Open Forums for faculty and graduate student discussion (October - November)
 - Members of the working group attend and listen
- Working group meets and crafts program structure (November - December)
- DGS review (January-February)
- Executive Council review (February-March)
- Implementation Fall 2012



PSI Activities for 2010-2011

- More programming
 - Tentatively: Adriana Petryna (U-Penn), and Gary May (Ga. Tech)
 - Mini-grants for development of courses and workshops
- Course material archive
- Faculty seminar in research ethics



Building Consensus: Some Lessons

- **Raise awareness of need**
 - Motivate participation in conversation starters
 - Use Data
- **Content follows form**
 - Barriers are lack of knowledge and lack of experience teaching ethics
 - Develop consensus about the form of the program, then address barriers
- **Respect Faculty and Student time**
 - Build on existing resources



Future Needs



- **Evaluation**
 - Form of evaluation depends on character of the program
 - Measurement tools evaluate different program aspects
 - ✦ Climate survey
 - ✦ Course evaluations
 - ✦ Evaluation of student skills and abilities
- **Student tracking system**
 - Manage student sign-up and track attendance for workshops and other opportunities
 - Material inside and outside courses auditable on transcripts

Project for Scholarly Integrity at Penn State University

Suzanne C. Adair
Assistant Dean, the Graduate School
Pennsylvania State University

Council of Graduate Schools
Capstone Meeting
October 30, 2010

Penn State RCR Initiatives: *Past & Current Initiatives*

- Office of Research Protections
 - RCR Educational Programs & Faculty Training
- Scholarship And Research Integrity (SARI) Program:
 - Graduate Student Online training
 - Graduate Student Discussion Based RCR Training
- U-RICA Survey (Baseline)
- Academic Program Activity Assessments
- College of Health & Human Development Faculty Trainings & Student Workshops
- U-RICA Survey results overview to Associate Deans & University Research Council
- College level conversations
- CGS Site Visit

Penn State RCR Initiatives: *Next Steps*

- Implementation of RCR Strategies within Programs
- Review HHD RCR workshops
- Identify best practices
- U-RICA Survey (Follow-up)
- U-RICA Survey results presentation to Associate Deans & URC
- Identify University wide “next steps”

Penn State RCR Initiatives: *Challenges & Benefits*

- Challenges
 - Complete Project Staff Turnover
 - Reassigning Tasks, Catching Up, & Generating Interest
 - College Level Conversations
 - Addressing survey data concerns
- Benefits
 - Learning from our Partners
 - Collaborative/Institutional approach to RCR issues

Penn State RCR Initiatives:


Engaging Faculty & Disciplines

- Engage in conversations at multiple levels
- Begin with junior faculty
- Recruit faculty as facilitators
- Allow disciplines/colleges to develop programs that fit their areas
- Link RCR education to funding “hoops”

Penn State RCR Initiatives:

Reflections

- What is the greatest challenge to engaging faculty members in developing RCR initiatives at your institution?
- What strategies would be useful specifically to advance cross-disciplinary conversations around RCR issues?

 COLUMBIA UNIVERSITY
GRADUATE SCHOOL OF ARTS & SCIENCES

Creating Effective Programs for Research and Scholarly Integrity

Columbia University
Graduate School of Arts and Sciences


Carlos J. Alonso
Acting Dean, Graduate School of Arts and Sciences

Jan Allen
Associate Dean for Ph.D. Programs

This project is supported with generous funding and assistance from:

The Council of Graduate Schools, Debra W. Stewart, President; Daniel Denecke, Program Director; and Julia Kent, Program Manager

Office of Research Integrity, U. S. Department of Health and Human Services, Loc Nguyen-Khoa, Program Officer and Director of Online Education and Communication

 COLUMBIA UNIVERSITY
GRADUATE SCHOOL OF ARTS & SCIENCES

Columbia's RCR/PSI research survey and activities focus on:

- 3,486 Ph.D. Students in 60 Programs
- 6,187 Master's Students in 104 Programs
- 783 Post-Doctoral Fellows
- 1,812 Faculty, Research Staff, and Officers

2

We used a multi-level model....

- University-wide
GSAS-sponsored workshops
Web site
Advisory Board
The Academic Ethicist column
- Departments/programs
RFA to fund departmental conferences
- Faculty
RFA to fund course with a focus on RCR (develop new or modify existing course)
- Students
Research Ethics Fellows

3

Major Challenges at Columbia

- Columbia's very decentralized organization
- Faculty engagement
- Graduate student and post-doc reluctance to question faculty

4

Benefits of the PSI Collaborative Model

- Champions and models
- First ever research and scholarly integrity inventory and climate survey at Columbia
- Similarities and differences in culture and climate

5

Lessons Learned about Professional Development Needs

- Graduate students and post-docs have awareness but seek information and guidance
- They want this information from their advisors, P.I.s, and mentors
- Graduate students and post-docs want just-in-time help
- Peer-to-peer training can be very effective

6

Questions

- How can we increase engagement and opportunities for faculty mentors in research and scholarly integrity training?
- What are the appropriate incentives and rewards for faculty engagement?
- How broadly can we define mentorship to develop successful mentorship structures?



Overview

Background

- The national context for assessment
- What makes PSI unique among national efforts to define evidence-based best practices?

Preview

- What baseline data tell us about integration of RCR before PSI?

Areas for Future Work



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The National Context for Assessment

Evaluation of RCR education for graduate students is now an intrinsic part of federally funded research

NIH Requirement Update, 11/2009

- Instruction in [RCR] is an integral part of all research training programs, and its evaluation will impact funding decisions.

NSF Requirement, 1/2010

- While training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review upon request.



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What makes assessment in PSI unique?

PSI addresses issues of institutionalization, not just curricular design

The common question = What makes a good program?

Curricular approach:

- What should the curricular “content” be?
- How should it be delivered? Online/f2f contact hours? Scheduled/sequenced?
- What proportion of professional standards & ethical skills? etc.

Institutionalization approach:

- What should be centralized? Program-specific?
- Where should centralized programs be housed?
 - e.g., Graduate school? Centers for ethics? Compliance and integrity offices?
- What are the appropriate roles for senior university leadership?
- What are the challenges, sources of resistance?
- Where have graduate schools succeeded in overcoming those challenges?
- How much does a good program cost? To start-up? To sustain? To expand?
- How does institutional context affect the success of various approaches?



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The Framework

[The Project for Scholarly Integrity: A Framework for Collaborative Action](#) (2008)

- *Engage* the community in identifying needs
- *Invite* key stake holders to reflect on a plan of action
- *Enact* the plan
- *Communicate* to the broader community about activities and their ongoing impact
- *Integrate* activities to ensure the greatest impact and sustainability



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Assessment of RCR activities and needs is a core feature of the PSI approach

- “Multi-tiered assessment” was identified as a “best practice” in prior CGS RCR projects
(e.g., CGS 2006)
- [RFP for Project for Scholarly Integrity](#) required:
 - An inventory assessment of current graduate school and program activities and resources
 - A survey on institutional climate
 - A plan for assessing student learning



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CGS Inventory Assessment on Program Activities and Resources

- What kinds of educational experiences, resources, activities were programs and departments providing?
- What is the departmental/program policy environment for RCR?
- How much curricular integration is already in place in 12 core areas?
- What opportunities exist for benchmarking and practice exchange?



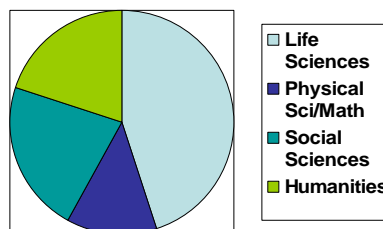
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CGS Inventory Assessment on Program Activities and Resources

- Purpose: *Primary*: To give graduate schools data tools for targeted follow-up with programs about RCR education in the disciplines. *Secondary*: To understand national gaps and trends in RCR curricular activities and monitor changes over time.
- Design: 12 Questions about program-level policies and practices (Q10 asked about how graduate students, faculty, and postdocs learn about a range of RCR &RI topics)
- Administration: CGS sent to graduate deans; deans surveyed all graduate programs (census vs. sample). CGS received surveys from 233 programs. Avg. of 39 per university. The "program" is the respondent.
- Analysis: Frequencies and cross-tabs, overall & by broad field (N=233), subfields (e.g., N=45 in biological and biomedical & 40 in health and medical sciences/professions) and program areas (e.g., Nursing, Pharmacology & Toxicology).

"The most comprehensive survey available of central, school, and departmental training"-PSI awardee university final report, 2010

Total = 223+ programs from 6 universities surveyed in 2009



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Graduate Student Exposure to RCR By Topic and Format, all fields/aggregate 7 General topics, N=214 programs, 6 institutions (% of respondents)							
	Advisor /Mentor	Courses /classroom	Workshops (e.g., RCR)	Print materials	Web-based (e.g., online) materials/ print&web combined	No Resource	N/A
Data acquisition, management, sharing and ownership	76	57	29	19	31/39	2	7
Conflicts of interest and commitment	74	45	26	17	34/43	4	6
Research misconduct	77	56	30	17	33/42	5	4
Publication practices and responsible authorship (including plagiarism)	81	59	31	21	30/37	2	3
Mentor and trainee responsibilities	80	35	20	12	15/25	6	7
Peer review (manuscript, grants)	80	44	25	15	18/28	4	6
Collaborative Research	78	31	10	9	5/17	5	12

Graduate Student Exposure to RCR By Topic and Format 5 Field-specific topics, N=214 programs, 6 institutions (% of respondents)							
	Advisor or Mentor	Courses (classroom)	Workshops (e.g. RCR)	Printed materials	Web-based materials (e.g. online modules)	No Resource	N/A
Use of human participants in research	64	43	26	24	48 <i>combined:</i> 55	.5	20
Use of animals in research	31	14	10	11	22 25	2	60
Use of hazardous substances	37	18	15	15	23 27	2	51
Personnel Management	38	12	6	6	7 10	12	42
Financial Stewardship (grants mgmt)	48	10	10	6	7 13	13	34

What Do the Activities Data Suggest?

- Programs report that faculty already address all RCR areas appropriate to their fields through advising and mentoring
 - Mentoring is seen by programs as the core of a graduate student's professional development in RCR & SI areas.
 - Is this measurable? Are faculty adequately and equally trained to address these issues? Are these data confirmed by student perceptions?
- Only about 1/2 report covering SI issues in formal curricula (coursework), and less than a third offer workshops on SI issues
 - Do students report the same amount of coursework coverage?
 - Do students perceive need for more formal coursework? Is there a key role for graduate school and other, centrally sponsored workshops to play in supplementing program curricula?
- Where web training is in place, key areas are not being addressed (peer review, mentoring, collaboration, personnel management, financial stewardship)

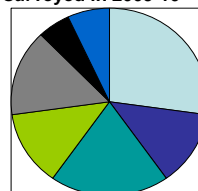


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Survey on Institutional Climate

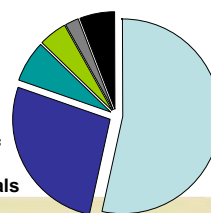
- Purpose: *Primary*: To provide graduate schools, college deans, dept. heads and others with data for targeted follow-up in efforts to improve RCR & SI education programs and policies. *Secondary*: To understand national gaps, perceptions about institutional cultures for SI.
- Design: *See next presentations*
- Administration: *See next presentations*
- Analysis: *See next presentations*
- Uses: Compare student & faculty perceptions and compare both with behavioral activities survey; Initiate discussions about and strengthen faculty engagement in addressing possible problem areas (identified through intra- and multi-university benchmarking); efficiently direct resources to target areas of greatest need and vulnerability.

Total = 15,359 students, postdocs, faculty & staff from 6 universities surveyed in 2009-10



- Life Sciences
- Physical Sci/Math
- Social Sciences
- Humanities
- Engineering
- Business
- Education

Total N = 15,574 individuals



- Graduate Students
- Faculty
- Staff
- Postdocs
- Undergrads
- No response



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How Will We Know that the PSI Approach is Working?

- Less misconduct?
- Fewer allegations of misconduct and wrongdoing?
- More students who demonstrate knowledge of regulations and professional standards or norms?
- More students who report exposure to and familiarity with ethical issues and ethical deliberation skills?
- More students engaging in required RCR training and elective research integrity educational activities?
- More formal and informal discussion about responsible and ethical research on campus?
- Greater integration into graduate curricula?
- Greater perception among students, faculty, staff of a shared institutional climate for scholarly integrity?
- More future faculty who accept and own RI/RCR education as an integral part of their scholarly responsibilities?



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Assessment Needs & Opportunities

- What impact has PSI made? (change over time)
- How can we sustain evidence-based graduate school/college/program faculty discussions through:
 - intra-university benchmarking and best practice exchange, and
 - inter-university benchmarking and best practice exchange
- Are seven universities enough to encourage widespread adoption of the PSI approach to benchmarking & model programs?
- What needs have not been adequately addressed in the PSI (e.g., international)?
- What existing opportunities (such as PFF programs) have not been adequately explored to scale up and sustain the PSI approach?



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Thank You!

Funder

Office of Research Integrity (ORI), Department of Health and Human Services (Don Wright, John Galland, Loc Nguyen-Khoa)

Awardees

Columbia University (Carlos Alonso, Jan Allen, Henry Pinkham), **Emory University** (Lisa Tedesco, Mark Risjord, Michelle Lampl, Melissa Gilstrap), **Michigan State University** (Karen Klomparens, Terry May), **Pennsylvania State University** (Henry Foley, Suzanne Adair, Eva Pell), **University of Alabama Birmingham** (Bryan Noe, Jeffrey Engler), **University of Arizona** (Andrew Comrie, Elizabeth Boyd, Tina Tarin), **University of Wisconsin-Madison** (Martin Cadwallader, James Wells), + many others at each awardee university

Affiliates: **Duke Univ., Georgia Institute of Technology, Howard Univ., Marquette Univ., Northern Arizona Univ., Princeton Univ., Purdue Univ., Simmons College, Univ. of California-San Diego, Univ. of New Mexico, Univ. of North Carolina at Chapel Hill, Univ. of West Florida, Wake Forest Univ.**

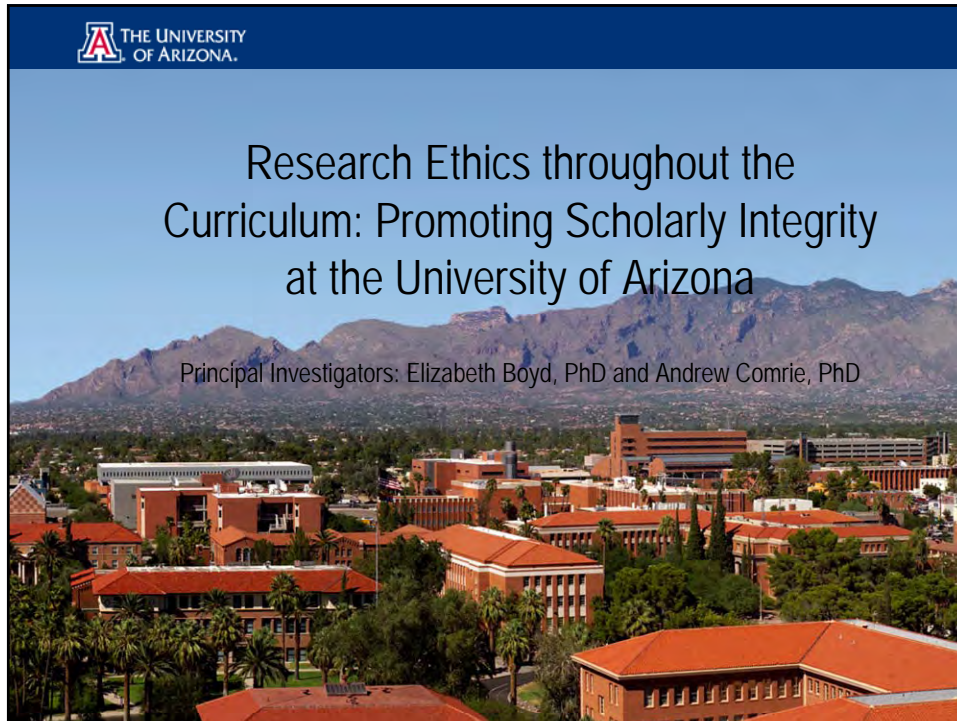
Researchers: Carol Thrush and Brian Martinson

Research and Analysis: Sheila Kirby, Scott Naftel, the PSU Survey Research Center

Others: AAAS (Mark Frankel), the National Science Foundation, prior CGS RCR awardees & affiliates



Council of Graduate Schools



A presentation slide for The University of Arizona. The top features a red header with the university's logo and name. The background is a light blue gradient. The slide is titled 'Goals of the Project:' in a black, sans-serif font. Below the title, the text 'To build an integrated RCR training program that:' is followed by a bulleted list of three goals. The word 'integrated' is highlighted in red. The bullet points are: '• maximizes opportunities for exposure to concepts and best practices;', '• provides multiple levels of engagement for students, trainees, and faculty;', and '• And engages individuals through multiple modes of interaction.' The words 'multiple' and 'modes of interaction' are highlighted in red in the third bullet point.

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Project activities:

- Full-day Conference
- Small grants program
- Half-day workshops
- Resource Center

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PRELIMINARY AGENDA
October 8-9, 2019

8:15 a.m. – 9:15 a.m.
Check-In & Breakfast

9:45 a.m. – 10:15 a.m.
Registration

10:30 a.m. – 11:15 a.m.
Welcome Address
Andrew C. Zuercher, Ph.D.
Associate Dean for Research
Dean of the Graduate College
Director, Graduate Research & Innovation Program
Professor of Geography

PLenary Session – 11:30 a.m. – 12:15 p.m.
"Why are we here? Where are we going?"
"2020 Vision"
Elizabeth Boyd, Ph.D.
Associate Vice President for Research & Policy
Associate Vice President for Graduate & Policy
Associate Vice President for Research & Policy
Associate Vice President for Research & Policy

12:15 p.m. – 1:15 p.m.
Lunch

1:30 p.m. – 2:15 p.m.
"Research & Innovation in the 21st Century: Responding to the Challenges of a Changing World"
Bernard L. Goss, Ph.D., Assistant Professor
Helen Peters, Ph.D., Professor
Helen Peters, Ph.D., Professor
Department of Human & Social Studies

2:30 p.m. – 3:15 p.m.
"The Role of the Graduate Research & Innovation Program"
Elizabeth Boyd, Ph.D.
Associate Vice President for Research & Policy
Associate Vice President for Graduate & Policy
Associate Vice President for Research & Policy

3:30 p.m. – 4:15 p.m.
"Working with Integrity"
Amy H. H. H. H.
Professor
Department of Human & Social Studies

1:30 p.m. – 1:45 p.m.
Lunch

1:45 p.m. – 2:15 p.m.
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3:30 p.m. – 4:15 p.m.
"Working with Integrity"
Amy H. H. H. H.
Professor
Department of Human & Social Studies

Small Grants Program in
Research Integrity

**call for
grant proposals**

Do you have innovative and creative ideas for educating graduate students in the responsible conduct of research?

For more information on the NSF CAREER program, visit the CAREER website at www.career.nsf.gov. For more information on the NSF CAREER program, visit the CAREER website at www.career.nsf.gov. For more information on the NSF CAREER program, visit the CAREER website at www.career.nsf.gov.

Mentoring
Authorship
Plagiarism

Data Imaging & Manipulation
Conflict of Interest
Genetics, rDNA, or vaccine research

Apollonia was first written in 1996. A preliminary version appeared in 1998. Forgetting to mention people's faces, glossed over the main plot. Permitted the characters to be a bit more like people. The third and fourth versions.



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Date: October 21, 2010
Location: Rm 3 Meeting Building, Macra 103
Time: 12:05 PM - 5:00 PM (Registration 12:05 - 1:00 pm)
BSR Training Credit: 4 hours **PMF & AMM** applicable

International Services
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Public Networking/Access

For a personal contact: Marilyn Marshall (508) 437-6000
Nona Trife (508) 436-7071

The Office for the Responsible Conduct of Research
and the Vice President for Research, University of Miami, P.O. Box 246166, Coral Gables, FL 33124-6166, USA
E-mail: rcr@umiami.ir.miami.edu



What did we learn from assessments of institutional and program activities that support research ethics education?



- The Institutional Activities Assessment

- What we learned:

- RCR/ethics education in the Graduate College is dispersed, variable, and inconsistent
 - Low response may rate reflect communication obstacles, survey fatigue, and relevance issues
 - Terminology may bias some disciplines
 - General campus climate regarding central administration



• Program Activity Assessments

- Some challenges and some (simple) solutions:
 - Who to target?
 - What to present?
 - When to reach your audience?
 - How to deliver content?



Who to target?

• **Challenge:** Identifying audiences and providing instruction

• **A Solution:** Central role for graduate students in driving RCR training

- Grad-to-grad
- Grad w/ faculty
- Grad-to-undergrad



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What to present?

Challenge: RCR represents a broad range of issues and topics, only some of which will be relevant for most audiences.

Broad-based RCR training helps orient trainees to underlying issues, but is challenging to deliver in an engaging way.

A Solution: Thematic or topic-driven approach

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When to reach your audience?

Challenge: Trainees at different stages of their careers may have different needs and different understandings of critical issues.

A Solution: Target particular career-stages



How to deliver RCR content?

Challenge: Traditional teaching methods may make RCR seem abstract, compliance-oriented rather than values-based.

A solution: Locate RCR within the issues at the heart of our disciplines.

March 5 Forum:
Harvill Room 404 - 3:30 pm



- ▶ Diane Austin (University of Arizona)
- ▶ Joel Walnwright (Ohio State University)
- ▶ Michael Goodchild (University of California at Santa Barbara)
- ▶ Moderated by Paul Robbins (University of Arizona)



How to deliver RCR content?

Challenge: Traditional teaching methods may make RCR seem abstract, compliance-oriented rather than values-based.

A solution: Locate RCR within the issues at the heart of our disciplines.





Final Thoughts ...

- New regulations helped motivate students/faculty to seek out RCR training opportunities, but also tended to shape their expectations toward more traditional ways of learning
- Designing and delivering high-quality RCR training is labor-intensive and time-consuming – how do we sustain the initial energy, especially in difficult economic times?
- Motivating faculty to do more or to change what they have been doing is the most difficult challenge of all. Our efforts were hampered by packed schedules and curricula, poor communication systems, and 'old' ways of thinking.
- Graduate students are creative, motivated, and keenly aware of many of the core RCR issues.



- Many thanks to Tina Tarin, who made it all happen every day;
- And to CGS and ORI for helping us launch our program

Project on Scholarly Integrity

Karen L. Klomparens, Dean
Terry May, COI officer
Michigan State University
CGS Conference October 2010

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Research & Scholarly Integrity

Introduction

- MSU Grad School offered RCR series since 1998
<http://grad.msu.edu/rcr/> 150+ participants annually
- Faculty-lead efforts in 2004 and 2008-current
- Our goal is **QUALITY RESEARCH** and inextricably linked to that, professional development for students and postdocs.
- What and how to improve in RCR? Content and climate--evidence for how we know.
- How to gain even more “traction” with faculty for increased responsibility and actions?
- Later steps—NSF requirement

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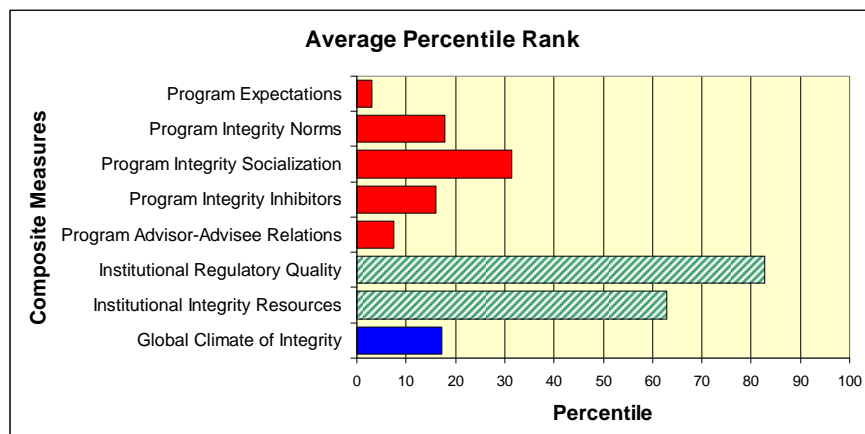
Background—PSI project

- MSU, PSU, UW-Madison collaborative
- Survey on the Climate for Responsible Research Practices—Carol Thrush and Brian Martinson (next speakers)
- Faculty, grad students, postdocs, staff—9,910 invitations at MSU with 45% participation
- Similar numbers at PSU and UW-Madison

Data analysis

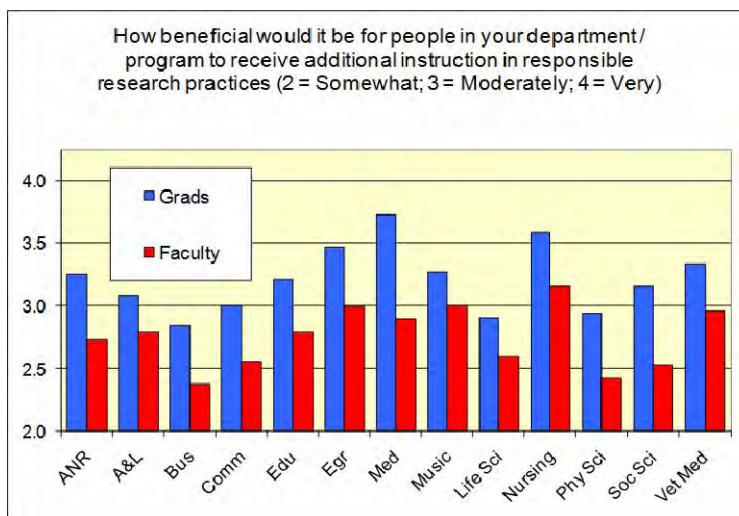
- Details from Drs. Thrush and Martinson
- Our University collaborative chose a high standard
- Department/program “dashboards”
- Comparison data to the college and university
- College summary data
- “Quartiles” ranking of programs/college
- Use of NBFJ response

MSU Department example



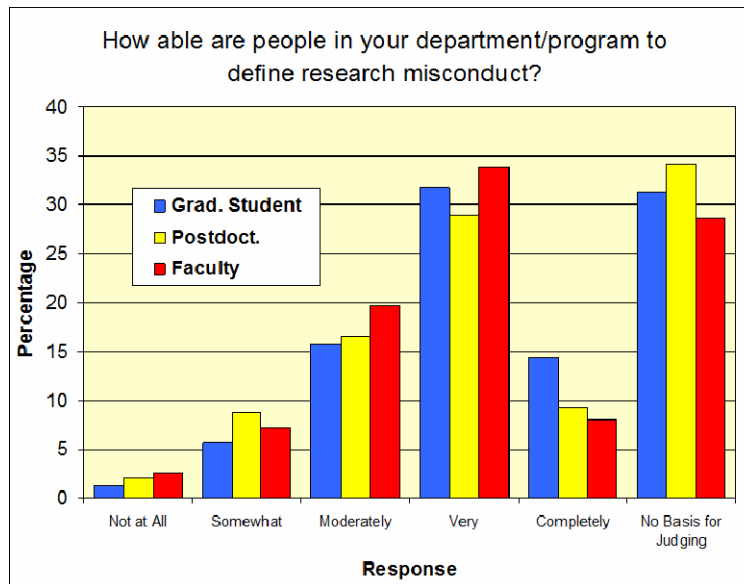
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Gaining “traction”

- Single most useful tool from survey: quartiles ranking sheets listing programs in appropriate quartiles for each of the 8 factors for each college.
- Top and bottom quartile program listings—no big surprises. Linked to the CGS “inventory” of practices data. What do the top programs do?
- Engage the faculty in top programs to share their practices....goal is **quality research**.
- Use data to determine areas of focus for improvement.

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MSU—integrated approach

- Faculty-lead Research Integrity Council faculty, grad students, postdocs
 - Completed a 12-item MSU current practices and “needs assessment” using CGS inventory.
 - Recommendations e.g., communication—at all levels, focus on postdocs, link to NSF requirement
- Link to Grad Handbooks project & annual updates using the 2004 faculty-lead task force that defined good practices for scholarly integrity and research mentoring <http://grad.msu.edu/publications/docs/integrityresearch.pdf>
- Ongoing learning assessment in our RCR series using a personal response system
- Connected to U Grad Council and Council of Grad Students
- Link to NSF requirement
- Developing Resources Website: <http://grad.msu.edu/researchintegrity/>

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Summary

- Graduate School role as a trusted office on campus
- More than a decade of sustained efforts focused on quality and education, not simply compliance
- Data are key for increased “traction” with faculty.
 - Climate survey and inventory data
 - Practices that work...shared by “good program” faculty
 - Specific areas for improvement
 - Personal responsibility for quality research
 - Concept of “principled partnerships” (D. Kirch—AAMC)

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Survey support materials

- Survey Codebook - Survey of Responsible Research Practices
 - Technical description of the survey elements and the resulting composite measures developed from the multi-university data.
- Users Manual - Survey of Responsible Research Practices, includes:
 - Background and Survey Development
 - Terms of Permission to Use the Survey
 - Survey Description
 - Survey Administration Considerations
 - Scale Creation Notes & Considerations
 - SAS Code for Computing the Eight Climate Composite Measures
 - List of Demographic Questions & Climate Questions
 - List of Composite Measures Descriptions & Items Represented
-

Eight survey composite measures

Departmental/Program

Expectations – 2 questions

How fair are your department/program's expectations with respect to publishing?

Integrity Norms – 11 questions

How committed are people in your department/program to maintaining data integrity and data confidentiality?

Integrity Socialization – 11 questions

How able are people in your department/program to define research misconduct?

Integrity Inhibitors – 11 questions

How true is it that pressure to produce "positive findings" has a negative effect on the judgment of researchers in your department/program?

Advisor-Advisee Relations – 3 questions

How fairly do advisors/supervisors treat advisees/supervisees?

Composite measures...continued

Institutional

Institutional Regulatory Quality – 4 questions

How useful are your university's policies/guidelines for the responsible conduct of research?

Institutional RCR Resources – 5 questions

How effective are the available educational opportunities for learning about responsible research practices (e.g., lectures, seminars, web-based courses, etc) at your university?

Combined Departmental/Program and Institutional

Global Climate of Integrity – 4 questions

How committed are people in your department/program to maintaining high standards of integrity in their research/scholarship?

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MSU "Dashboard" example

Composite Measures	ALL RESPONSES ^{1, 2}					
	N ³	% NBFJ (Resp. 6)	Mean	Standard Deviation	% Factor Measures >= 4.5	75th Percentile
FACTOR 1 -- Departmental Integrity (Subscale B -- Integrity Socialization)	2,821		3.617	0.808	14.6%	4.18
Graduate Student ⁴	1,510		3.753	0.794	19.4%	4.30
Postdoctoral Trainee / Research Associate	165		3.454	0.857	12.1%	4.00
Faculty ⁵	1,146		3.462	0.788	8.6%	4.00
How able are people in your department/program to define research misconduct?	3,180	30.4%	4.364	1.340		
Graduate Student	1,712	31.3%	4.461	1.296		
Postdoctoral Trainee / Research Associate	193	34.2%	4.373	1.427		
Faculty	1,275	28.6%	4.234	1.375		

¹ N = Number of Cases; NBFJ = "No Basis for Judging"

² Responses: 1 = "Not at all"; 2 = "Somewhat"; 3 = "Moderately"; 4 = "Very"; 5 = "Completely"; 6 = "No basis for judging"

³ Factor Scale N = Number of Cases where half or more of individual Measures comprising Factor 1B were answered "1" through "5"; N of Individual Measures = Number of Cases with Responses of "1" through "6" (N of Measure means = N - [N x % NBFJ])

⁴ Graduate Student in a Research Masters Program & Graduate Student in a Doctoral Program combined

⁵ Fixed-term Faculty -- Not Tenure-track; Tenure-track Faculty -- Not Tenured; Tenure-Tack Faculty -- Tenured; & Clinical Faculty combined

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MSU Department/Program Summary

Department / Program: **NAME**

College: **NAME**

Number of Respondents: **35 TOTAL**

20 Research Masters & Doctoral Students; 0 Postdoctoral & Research Associates; 15 Faculty

Composite Measures	Department / Program Results				College Results			
	Average Composite Measures	% >= 4.5 (Scale of 1-5)	Dept./Pgm. Percentile Rank	Average % NBFJ Response	Average Composite Measures	% >= 4.5 (Scale of 1-5)	Average Dept./Pgm. Percentile Rank	MSU Average Composite Measures
Program Expectations	3.31	6.5%	3.1	13.6%	3.77	23.9%	45.8	3.78
Program Integrity Norms	3.91	10.7%	17.9	17.9%	4.07	25.9%	46.1	4.09
Program Integrity Socialization	3.51	10.7%	31.5	19.4%	3.61	12.6%	47.1	3.62
Program Integrity Inhibitors	3.43	10.3%	16.1	22.4%	3.75	18.3%	39.3	3.78
Program Advisor-Advisee Relations	3.64	13.3%	7.6	10.1%	3.88	17.8%	47.2	3.88
Global Climate of Integrity	4.05	40.0%	17.3	8.8%	4.29	50.1%	47.7	4.25
Institutional Regulatory Quality	3.96	30.3%	82.8	6.6%	3.79	19.9%	60.1	3.71
Institutional Integrity Resources	3.67	12.1%	62.9	6.5%	3.60	12.3%	55.7	3.56

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Research & Scholarly Integrity



Lessons Learned in Assessing Institutional Climate for Research and Scholarly Integrity

Brian C. Martinson, HealthPartners Research Foundation
Carol R. Thrush, University of Arkansas for Medical Sciences

Funding support from:
Office of Research Integrity & NCRR – R21-RR025279
Michigan State University



Culture
norms,
values,
practices,
beliefs, and
assumptions

Climate
patterns of
organizational
life; reflected
in perceptions
& attitudes of
institution's
members
toward those
patterns

Institutional responsibility

- **Regulatory approach**
 - **42 CFR 93.300 2005** (1989 version updated)
 - **General responsibilities for compliance**
 - Institutions...must (c) Foster a research environment that promotes the responsible conduct of research, research training, and activities..., discourages research misconduct, and deals promptly with allegations....of possible research misconduct...
- Federal Register, May 17, 2005, Vol 70, #94

Motivation for developing a tool to assess research environments

- **Performance Based Approach**
- Institutions seeking to create an environment that promotes responsible conduct...and that fosters integrity must:
 - establish and continuously monitor structures, processes, policies, and procedures
 - monitor and evaluate the institutional environment supporting integrity in the conduct of research and use this knowledge for continuous quality improvement.
- IOM/NRC, 2002. *Integrity in scientific research: Creating an environment that promotes responsible conduct.*

Motivation for developing a tool to assess research environments

2002

- No gold standard

2006

- Thrush et al study using an expert panel who rated content validity of items for measuring organizational climate for research integrity (*JERHRE*, 2007)

2008 - 2010

- Martinson, Thrush and Crain completing research to validate ***Survey on Responsible Research Practices***
 - Office of Research Integrity & NCRR, R21-RR025279

Progress update

- Current project (R21)
 - validation work in national sample of faculty and postdocs in medical centers
- Analyses to date
 - Subscales consistent with results of MSU consortium work
 - 8 subscales
 - Reduced to 32 items
 - High inter-item reliabilities
- Now examining test-retest reliability & criterion validity

What are we measuring here?

- Individual perceptions of responsible research practices & conditions in local environments
- What are we NOT measuring?
 - The measures themselves do not inform us about individuals' behavior, but...
 - By aggregating responses - also provide a picture of group-level perceptions of environmental conditions

Three sub-scales assess features of the institutional environment

- **Global integrity**
- **RCR resources**
- **Regulatory quality**

Five sub-scales assess departmental/ program environment

- **Integrity norms**
- **Integrity socialization**
- **Advisor /advisee relations**
- **Integrity inhibitors**
- **Departmental expectations**

Why are these measures appropriate for assessing the climate of scholarly integrity?

- They tell us how students and faculty perceive the integrity of the environments in which they are immersed
- Preliminary evidence suggests they also correlate significantly with self-reports of research related behavior
- Many of the topics addressed by survey are both mutable and potentially subject to interventions

Linking climate assessment with best practices

- By identifying institutions or departments that score highly on these measures
- Then querying leaders of high scoring areas about their specific policies, procedures and practices
- An effective means to identify best practices which support and foster responsible research behavior

Thank you!

Questions and Comments?

Carol Thrush, Ed.D.

ThrushCarolR@uams.edu

Brian C. Martinson, Ph.D.

brian.c.martinson@healthpartners.com



Council of Graduate Schools

PRESS RELEASE

FOR IMMEDIATE RELEASE

Contacts: Stuart Heiser, Public Affairs sheiser@cgs.nche.edu
Daniel Denecke, Project Director ddenecke@cgs.nche.edu

CGS Announces Awards to Foster Integrity in Scholarship and Research

(January 22, 2009) — The Council of Graduate Schools (CGS), with funding from the U.S. Office of Research Integrity, has given awards to seven universities to develop models for integrating research and scholarly integrity into the graduate school experience.

Amid heightened concerns about academic research misconduct, CGS's Project for Scholarly Integrity seeks to better inform students, researchers, and faculty about the ethical responsibilities and complexities of research in the 21st century. Preparing scholars for today's research environment requires universities to take a comprehensive, integrated approach to fostering scholarly integrity.

Five \$50,000 awards, selected by an independent committee, were given to schools that proposed exceptional and innovative plans for fostering scholarly integrity in graduate education:

Columbia University

Emory University

Michigan State University

The Pennsylvania State University

University of Wisconsin – Madison

University of Alabama at Birmingham

University of Arizona

}

}

}

three-university consortium

The awards will support strategies to educate students and faculty on topics such as conflicts of interest, plagiarism, human subjects research, and laboratory management.

An additional 13 universities will join the project as affiliate partners:

Duke University

Georgia Institute of Technology

Howard University

Marquette University

Northern Arizona University

Princeton University

Purdue University

Simmons College

University of California, San Diego

University of New Mexico

University of North Carolina at Chapel Hill

University of West Florida

Wake Forest University

In partnership with CGS, all universities participating in the project will promote the adoption and adaptation of their models and best practices nationwide.

[more]

Council of Graduate Schools

One Dupont Circle NW Suite 230 • Washington, DC 20036

(202) 223-3791 • www.cgsnet.org

“External pressures on researchers are increasing, as are new opportunities for collaboration of all kinds. Preparing tomorrow’s scholars for the ethical responsibilities and uncertainties they will face in this new environment is one of the key challenges for universities today,” said Daniel Denecke, Director of the Project for Scholarly Integrity. “This project recognizes that the best place to address that challenge is in graduate school, where students are beginning to form their identities as researchers, scholars, and educators.”

In conjunction with the awards, CGS announces that it has launched a dedicated website for the Project for Scholarly Integrity, at www.scholarlyintegrity.org.

###

The Council of Graduate Schools (CGS) is an organization of over 500 institutions of higher education in the United States and Canada engaged in graduate education, research and the preparation of candidates for advanced degrees. CGS member institutions award 94% of the doctoral degrees and 80% of the master’s degrees in the U.S. The organization’s mission is to improve and advance graduate education, which it accomplishes through advocacy in the federal policy arena, research, and the development and dissemination of best practices.

**Awardees and Affiliates
for current and prior CGS RCR projects**

The Project for Scholarly Integrity
CGS/ORI [2007 to Present]

PSI Awardees

Columbia University
Emory University
Michigan State University*
The Pennsylvania State University*

University of Wisconsin-Madison*
University of Alabama at Birmingham
University of Arizona

* Three-university consortium

PSI Affiliates

Duke University
Georgia Institute of Technology
Howard University
Marquette University
Northern Arizona University
Princeton University
Purdue University

Simmons College
University of California, San Diego
University of New Mexico
U. of North Carolina, Chapel Hill
University of West Florida
Wake Forest University

Training Graduate Students in the Responsible Conduct of Research
CGS/National Science Foundation [2006-08, NSF 0529781]

Awardees

Bradley University
Brown University
Old Dominion University
Rockhurst University

University of Alabama at Birmingham
University of Kansas
University of Nebraska—Lincoln
University of Oklahoma

Affiliates

Appalachian State University
Colorado State University
Duke University
East Carolina University
Florida State University
Georgia Institute of Technology
Indiana University
Middle Tennessee State University
Ohio State University
Oklahoma State University
Oregon State University

Pennsylvania State University
Texas State University—San Marcos
University of Colorado—Boulder
University of Idaho
University of Illinois—Urbana-
Champaign
U. of Maryland—Baltimore County
University of North Carolina—Charlotte
University of Oregon
University of Washington

Graduate Education for the Responsible Conduct of Research
CGS/ORI [2004-2006, ORI 0404CT34771]

Awardees

Arizona State University
Duke University
Florida State University
New York Medical College
Old Dominion University

University of Kansas
University of Missouri—Columbia
University of New Hampshire
University of Rhode Island
University of Utah

Affiliates

Boston College
Chicago School of Professional
Psychology
Clemson University
Columbia University
Eastern Washington University
Florida International University
Fordham University
Hood College
Howard University
Michigan State University
Purdue University
San Diego State University
Towson University
University of Arkansas

University of Arkansas—Little Rock
University of California—Davis
University of Hawaii—Manoa
University of Illinois—Urbana-
Champaign
University of Maryland—Baltimore
County
University of Massachusetts—Amherst
University of North Carolina—Chapel
Hill
University of North Carolina—Charlotte
University of Wisconsin—Madison
Utah State University
Western Michigan University

**Council of Graduate Schools Request for Proposals
The Project for Scholarly Integrity
in Graduate Education**

The Council of Graduate Schools (CGS) is soliciting proposals from CGS member institutions to participate in a collaborative project on scholarly integrity. A new CGS project supported by the Office of Research Integrity (ORI) will award \$50,000 to five institutions who will be selected through a competitive process of external review. Participating universities will develop, assess, and disseminate educational models for promoting responsible conduct of research (RCR) and integrity in professional scholarship, education, and research. Participants will share instruments, resources, and models for curricular and administrative integration with each other throughout the project and with the graduate community through CGS meetings and workshops, online resources, and publications. CGS will feature university projects on an enhanced interactive website that will also serve as a clearinghouse of relevant resources and provide electronic forums for exchanging information and advice. As in other CGS best practice initiatives, universities who are not selected to receive awards will be invited to participate as affiliates. A monograph detailing the institutionalization efforts of five major research universities with particular emphasis on what is scalable and transferable to other institutional contexts will be released in conjunction with a capstone conference in October 2010.¹ This culminating event will bring together graduate deans, researchers, corporate leaders, national agencies and private foundations to discuss future trends and showcase best practices in comprehensive institutional approaches to research and scholarly integrity.

I. Project Rationale

In the broader academic context, integrity is a concept rich with connotations that encompass the minimal standards of compliance in research, the personal ethical decision-making processes of individuals, and ultimately the ways in which our institutions reflect the highest aspirations and broadest commitment on the part of the academic profession to the principles of truth, scholarship, and the responsible education of future scholars. Research integrity is not simply an individual value, it is also an institutional value reflected in the culture that is reinforced by the processes in place and the daily decisions of individual researchers, faculty and mentors, campus leaders, and administrative staff. Recent efforts to place greater emphasis on research integrity in graduate education are important in the context of three phenomena: (a) an increase in the number of reported cases of misconduct, nationally and internationally; (b) the encroachment of external pressures upon academic research as interaction and interdependence intensifies among academic, commercial, and government sectors; and (c) the expanding scope of researchers' responsibilities as a consequence of the globalization of the scientific community and the accelerating pace of change. The growing interaction among academic, business, and government sectors and the globalization of the scientific community both have the potential to provide enormous public benefits, but they also mean that the next generation of scholars faces new challenges. What is needed now, more than ever, is for university leaders and scholars to work together to ensure that a strong tradition of research integrity evolves to meet these new challenges. This project represents a continuing collaboration between CGS and member universities on research integrity and is designed to provide models for institutions seeking to take a comprehensive approach to embedding the ethical and responsible conduct of research into the fabric of graduate education.

¹ Due to a 6-month delay in awards at ORI's request, final reports from awardee universities received October 30, 2010 (rather than the original date of July 30, 2010) will be used to prepare a publication scheduled for release in early 2011.

II. Project Background

This project builds upon two prior CGS pilot projects. An initial project funded by ORI supported the generation and testing of strategic interventions and assessment strategies in the behavioral and biomedical fields at ten universities. The resultant CGS monograph on Graduate Education for the Responsible Conduct of Research focused on program “start up,” or the key elements required to launch an effective program. A subsequent NSF-funded CGS initiative supported the integration of RCR into the regular practice of graduate education. That project addressed the needs of students in science and engineering for enhanced skills and competencies in deliberate ethical reasoning about issues that arise in interdisciplinary research and in public-policy arenas. CGS will release the monograph from that project in summer 2008. The project described in this request for proposals builds upon results from both prior projects by drawing on resources created and lessons learned to develop institutional models for expanding and embedding research integrity and responsible conduct of research education programs.

The objectives of this new CGS initiative are: to expand the cadre of graduate deans who will serve as leaders in fostering a climate of research integrity in graduate education; to generate information about what works best in promoting a comprehensive institutional approach to RCR education; to document the results of the funded projects online and in a best practice monograph series; and to promote community-wide activity building on this initiative through publications, frequent meetings, a CGS scholarly integrity Website, and interactive media.

III. Selection Criteria

A selection committee will evaluate proposals based upon the following criteria:

- Institutional Commitment
 - Key leadership of the project by the senior academic officer for graduate education (graduate dean or equivalent) who will serve as principal investigator (PI).
 - Letter of endorsement by president or provost and, where appropriate, senior research administrator
 - Plan and budget reflecting appropriate allocation of resources needed to initiate the program and to sustain and expand it after the end of the project period
 - Plan for securing commitment of faculty effort and responsibility to achieve program goals
- The potential of the project to impact graduate education in the behavioral and biomedical sciences (see also *Eligibility*, p.5).*
- Quality of action plan to implement a comprehensive, integrated approach to research integrity meeting the requirements in section IV below.
- Ability to develop metrics to measure accomplishment of objectives (see section V below).
- Evidence of innovative ideas for fully integrating the responsible conduct of research into the research environment, as opposed to limiting the presentation of RCR issues into orientation sessions or other activities conducted as an adjunct to the conduct of research and research training.
- Priority will be given to proposals that address the need for improved education in the responsible conduct of research in three core areas of activity:
 - (1) Interdisciplinary activity
 - (2) Intercultural activity
 - (3) Interaction between and among units or groups

*In order to ensure meaningful and sustainable improvement in the behavioral and biomedical disciplines

chiefly targeted by this initiative, universities may find it important and even necessary to include a forum within the project to involve other fields, such as the humanities and social sciences.

IV. Proposal Plan and Activities

Each proposal should present a plan of activities that covers five core areas described below. Each of these areas, as well as questions pertaining to each, should be addressed in every proposal. Proposals should indicate a commitment to the bulleted minimum required activities and address any additional activities that will be undertaken. Innovative approaches are encouraged. [For a more comprehensive list of possible activities, see “The Project for Scholarly Integrity for Graduate Education: A Framework for Collaborative Action” <http://www.cgsnet.org/Default.aspx?tabid=336>.]

(1) Engage the community in identifying needs.

Key strategies for engaging the graduate community on any improvement initiative are:

(a) creating a sense of “vulnerability” linked to opportunity and (b) rewarding excellence in research and education, including mentoring.

Questions:

1. What is the local context on campus for this project? How will the graduate school establish recognition of the local context for the need to promote scholarly integrity through this project?
2. How are proposed activities in this phase of the project designed to encourage recognition of vulnerabilities and/or excellence in research and education?
3. What is your experience with each approach, and why is the proposed approach and respective activities the best for your local institutional context?

(2) Invite key stakeholders to reflect on a plan for action.

- Solicit a clear, public endorsement of the project by senior university leaders.
- Appoint a planning or steering committee.

(3) Act on stakeholder reflections.

Proposals should address how, under the leadership of the senior academic officer for graduate education (graduate dean or equivalent), the design and follow through on a plan for action will involve activities in three areas: a) Content; b) Sequencing of Content and Pedagogy; and c) Collaboration.

a) Content

One of the core features of this project is to encourage approaches that embed, in a rich curriculum, education in the professional standards pertaining to the nine core areas of responsible conduct of research as identified below. This should include focus on skills and competencies in the following areas, as well as bedrock principles and values behind them: 1) Data Acquisition, Management, Sharing, and Ownership; 2) Conflicts of Interest and Commitment; 3) Human Subjects; 4) Animal Welfare; 5) Research Misconduct; 6) Publication Practices and Responsible Authorship; 7) Mentor and Trainee Responsibilities; 8) Peer Review; and 9) Collaborative Research. Other areas that might be considered in a comprehensive approach include: lab management; classroom management and practice; financial stewardship; ethical decision-making and deliberation processes; ethical principals.

Questions:

1. What content areas will your project address? On which areas will it focus, and why?
2. Will your institution be creating new curricular content or adapting existing curricular materials to meet the needs of the local contexts?
3. Where creating new materials, what opportunities will key stakeholders have for providing input into identifying the shortcomings of existing materials and suggesting concrete areas for improvement? Who are the potential collaborators and what are the resources available for this effort?
4. If your project will be adopting and/or adapting existing resources, what are the reasons for choosing the particular curricular content that will be considered?

b) Sequencing of Content and Pedagogy

Projects should move beyond minimal training in proper conduct and professional standards. Aspects to consider include: the sequencing of content to address professional development needs of students and/or to expose students to situations of escalating complexity and encouraging consideration of the broader implications of decisions and deliberations. Institutions proposing to develop original curricular content or to innovate in the area of pedagogy and learning should articulate how proposed activities are grounded in theories of learning.

- Face to face and interactive learning opportunities are an essential requirement of instruction in this project.

Questions:

1. How will content, activities, and resources be sequenced to address the developmental needs of students and/or faculty at appropriate stages in their graduate paths or careers?
2. What pedagogical methods or activities do you anticipate being undertaken or encouraged?

c) Collaboration

- Proposals should identify: key collaborators who will be involved in the project, potential collaborators who will be invited to participate in the project, and the anticipated role for each.

(4) Disseminate to the broader community information about activities and their ongoing impact.

Communication among the leadership group of PI's as well as to the broader CGS community about project achievements is a core requirement. Participation in the following is required:

- Eight PI telephone conferences per year (from September 2008 to September 2010).
- Project sessions convening participants and affiliates at CGS summer and annual meetings (July 2009 to December 2010)
- A capstone conference in October 2010 highlighting project achievements and bringing together key stakeholders from business, government, and non-profit sectors.
- Two face-to-face meetings of graduate deans and affiliates per year (April 2009-August 2010) [*travel expenses paid by CGS; do not include in budgets*].

(5) Integrate curricular and administrative activities, where appropriate, to ensure greatest impact and sustainability.

Proposals should address how curricular resources and content will be integrated into the

graduate research experience. Proposals are encouraged to address how administrative processes and procedures may be tuned to reinforce a climate of scholarly integrity. Key considerations should include: sustainability, scalability, and the potential transportability of materials, lessons, and/or resources to other institutions.

Questions:

1. How will resources be developed or adapted to meet the local university context(s)? And what administrative resources will assist in this process?
2. Will curricular content or resources currently serving a small population be scaled up to a larger one?
3. Beyond CGS vehicles for dissemination, how will your institution work to make feasible the transportability of your materials or resources to other universities?

V. Assessment Requirements

Institutions are required to conduct assessment in three areas during the course of the project:

1. Activities assessment
2. The climate for scholarly integrity
3. Student learning

All participants will be required to complete an *activities assessment* using a template provided by CGS: (a) pre-implementation, to be submitted by October 30, 2008, and (b) post-implementation, to be submitted in conjunction with final reports. [Assessment instruments and instructions are available online at: <http://www.cgsnet.org>.]

Proposals must also indicate a commitment to administering a survey, created by CGS in consultation with PI's, on *the climate for scholarly integrity* within the first six months of receipt of the awards and, again, within the six months period prior to the conclusion of the subaward period. These instruments will be common to participants in the project and will reflect activities in the required areas as well as the elective innovations that universities propose. Support documentation for obtaining campus IRB exemption for survey #2 will be provided by CGS. These assessment instruments will be used to measure the progress of projects over time against their own goals and to gather comparable information across participating institutions about the scope, impact, integration, visibility, and potential sustainability of funded projects.

Projects will also be required to address how *student learning* will be assessed during the course of the project. [Optional student learning assessment tools developed as a result of prior CGS RCR initiatives will be available on the CGS RCR project website, accessible through www.cgsnet.org.]

Beginning in January 2009, CGS project staff will conduct site visits to participating universities.

Eligibility

All U.S. CGS member institutions are eligible to apply for awards. Priority will be given to proposals from institutions that can provide evidence of the project's potential to have a direct and significant impact on behavioral and biological sciences and biomedical research as indicated by the scope of the proposed project (e.g. number of students expected to participate) and relevant national rankings, for example, in receipt of NIH funding.

Reporting Requirements

Annual narrative and financial report due July 30, 2009. Final narrative and financial report due

July 30, 2010.

Deadlines

Applications for a CGS/ORI award must be **received at CGS no later than July 30, 2008.**

Awards will be announced by September 20, 2008 for projects that will be implemented in September 2008 and conclude in July 2010.

Application Materials

- A proposal (no more than 10 pages, single spaced) outlining proposed activities and demonstrating the applicant institution's ability to meet selection criteria, including a budget specifying the uses for requested funds of \$50,000. Indirect costs are not allowable on CGS subawards. (A sample financial reporting form is available upon request if you would like to use this form to structure your budget).
- Letters from departments and faculty demonstrating interest in and commitment to the incorporation of RCR issues into departmental/lab research activities.
- Letter of endorsement by the president or chief academic officer that the activities and intent of the grant are consistent with and complementary to the institutional mission and strategic plans.

Send completed proposals via e-mail (preferred) to: ddenecke@cgs.nche.edu

Proposals sent via U.S. mail will also be accepted (*must be accompanied by an e-mail notice that a proposal is being shipped*):

Council of Graduate Schools
PSI
One Dupont Circle, NW, Suite 430
Washington, DC 20036
www.cgsnet.org

For more information, contact:
Daniel Denecke
ddenecke@cgs.nche.edu
Phone (202) 223-3791
FAX: (202) 331-7157



IN THIS ISSUE:

- [Emory and University of Arizona Host PSI Site Visits](#)
- [University of Wisconsin-Madison Holds Ethics Forum](#)
- [Singapore Statement on Research Integrity Released](#)
- [APPE's RCR Educational Committee to Hold Seminar](#)

Updates on the Project for Scholarly Integrity

EMORY AND UNIVERSITY OF ARIZONA HOST PSI SITE VISITS

As reported in the [June Newsletter](#), an important feature of the [Project for Scholarly Integrity](#) is a series of site visits to universities that have received PSI awards. The visits provide an opportunity for project leaders to reflect on and discuss strategies for strengthening scholarly integrity at their institutions, and for CGS staff to gain a deeper understanding of their progress steps and ongoing challenges. Highlights of the August site visits, listed in chronological order, are summarized below. We would like to thank Melissa Gilstrap, Program Associate at Emory University's Laney Graduate School, and Tina Tarin, Training Coordinator in the Office for the Responsible Conduct of Research at the UA, for coordinating excellent visits to their universities.

Emory University

[Emory University](#) project leaders invited Dr. Douglas James, Assistant Dean for [Academic Affairs](#) at the Duke University Graduate School, to join CGS staff, Dr. Daniel Denecke and Dr. Julia Kent, for the August 11 visit. In addition to overseeing a wide range of academic programs at Duke, Dr. James coordinates Duke's mandatory academic training in RCR for all graduate students and has been involved in Duke's current activities as a PSI Affiliate. [Duke](#) was an Awardee for [the first ORI-funded RCR Initiative coordinated by CGS](#).

Two of the central goals of Emory's PSI project are to integrate research ethics education into all graduate programs and to ensure that pedagogies used in training programs help students to reflect critically on complex issues of professional integrity. The site visit highlighted the university's progress toward achieving these goals through communication and coordination with different groups on campus.

Site visitors first attended a meeting with the Program Working Group, a multi-disciplinary faculty committee that has been discussing different models for the integration of research ethics education into graduate curricula. Dr. Lisa Tedesco, Dean of the Laney Graduate School, Dr. Mark Risjord, Associate Dean and Dr. Michelle Lampl, Samuel C. Dobbs Professor of Anthropology, led a discussion of key priorities, such as ensuring that training is discipline-specific and complemented by strong mentorship.

In the afternoon, site visitors and project leaders met with staff at the Emory Center for Ethics to discuss opportunities to partner with the Center in areas of programming and resources to develop research ethics education programs. Discussion focused on ways to make sure that training courses provide knowledge of regulatory standards and skills of ethical deliberation and leave graduate students with greater confidence about facing the challenges of interdisciplinary research.

During the 2010-2011 school year, the Laney Graduate School will be working with graduate programs to develop appropriate strategies for teaching and mentoring scholarly integrity. Dean Tedesco emphasized that “This work continues as a priority area for graduate student professional development in the Laney Graduate School, and is vitally important to their long-term success whether in the academy or on pathways beyond.”

University of Arizona

The August 25 site visit to the [University of Arizona](#) featured a range of programs and resources developed through the university's PSI award. Meetings with students, faculty, and senior administrators focused on the outcomes of current project activities, which will be used to shape the university's long-term strategy for expanding research integrity education within graduate programs.

The day began with a visit to Arizona's Tree-Ring Laboratory and a meeting with the lab's curator, Dr. Pearce Paul Creasman, a recipient of one of Arizona's [mini-grants for Research Integrity](#). Dr. Creasman shared curricular materials used in his grant-funded graduate seminar on the Responsible Preservation of Scientific Material and discussed the challenges of making instruction relevant to the various disciplines in which a student may be conducting research. Later in the afternoon, site visitors met with several of the students who had received mini-grants to develop curricular content for research integrity education in their fields. The [Office for the Responsible Conduct of Research](#) will be integrating materials from the modules and courses developed through the mini-grants program into UA's course management system, which is open to the UA community, and through the [UA YouTube Channel](#), which is open to the public.

Site visitors also learned about the perspectives of faculty and staff involved in developing broad-scale training programs and resources for graduate students, including the Graduate Certificate in Responsible Conduct of Research. Dr. Cindy Rankin, Research Integrity Officer, Dr. Jeanette Hoit, Professor of Speech, Language and Hearing, Dr. Sallie Marston, Professor of Geography and Development, Dr. Sheryl Wurl, Director of the Human Subjects Protection Program, and Dr. Dianne Horgan, Associate Dean of the Graduate College discussed challenges faced within their offices and departments and offered suggestions for developing new resources on campus.

Arizona's project leaders, Dr. Andrew Comrie, Dean of the Graduate College and Dr. Elizabeth Boyd, Assistant Vice President for Research Compliance and Policy, provided comments throughout the visit on project activities. The Graduate School is now assessing the outcomes of some of these activities, including participant feedback on UA's [Research Integrity Days conference](#), to plan future activities and strategies to engage the entire campus in RCR education.

“This grant was perfectly timed to catalyze integration of graduate research integrity education with a reorganized and higher profile office overseeing responsible research conduct on our campus,” said Dr. Comrie. Dr. Boyd added, “We are delighted that the

grant seeded an outstanding collaboration between our units that extends across campus, well beyond the core activities of our project.”

UNIVERSITY OF WISCONSIN-MADISON HOLDS ETHICS FORUM

The [University of Wisconsin-Madison](#) is a member of the three-university consortium including [Michigan State University](#) and [Penn State University](#) that shares a single PSI award to conduct a common assessment of their institutional climates for research integrity and to implement individual activities on each of the three campuses. On September 20, the University of Wisconsin used the results of its survey of 119 graduate programs to launch a discussion of the ethical challenges of research. The [forum](#) was led by a panel of department chairs from three different departments, including Dr. James Wells, Chemistry Department chair and Director of the Office of Research Policy, who with Dr. Eileen Callahan, Director of Graduate School Professional Development, has played a lead role on the consortium’s survey research project. A more detailed description of the consortium’s joint assessment effort can be found in the [April 2010 PSI Newsletter](#).



IN THIS ISSUE:

- [CGS Workshop Session Highlights PSI Leadership](#)
- [New PSI Blog Post on Peer Responses to Misconduct](#)
- [World Conference Shapes Research Integrity Goals](#)
- [ESF Releases Code of Conduct on Research Integrity](#)

Updates on the Project for Scholarly Integrity

CGS WORKSHOP SESSION HIGHLIGHTS PSI LEADERSHIP

The technical workshop devoted to the [Project for Scholarly Integrity](#) at the [CGS Summer Workshop](#) took place on July 15, 2010 and drew strong attendance from the graduate deans who attended the conference. The session was the third in a series of PSI workshops held at CGS Annual and Summer Meetings, each of which has featured PSI Awardees and Affiliates and project representatives. The goal of the sessions is to share the outcomes of institutional projects as they are implemented as well as the results of project-wide activities such as the collective assessment efforts, which include an [assessment of activities](#) related to RCR and research ethics education and an [assessment of institutional climates](#) for research integrity.

Three speakers, graduate deans from Awardee institutions, stressed the importance of senior university leaders in communicating the value of the project and implementing project activities:

Karen Klomparens, Dean of the Graduate School at Michigan State University (MSU), described the implementation of the climate assessment survey developed by Carol Thrush and Brian Martinson for a consortium of three universities, MSU, Penn State University (PSU), and the University of Wisconsin-Madison, of which two, MSU and PSU, share a PSI award. The [presentation](#) gave particular focus to MSU's use of the survey data to help departments and programs make improvements in areas of vulnerability identified through the climate assessment tool.

Henry Foley, Vice President for Research and Dean of the Graduate School at PSU, also discussed the process of implementing the climate assessment survey and plans for data-based interventions. Dr. Foley stressed that the success of the PSI project and any institution-wide effort to improve research ethics depends both on a strong investment on the part of senior leadership and close coordination among different offices with responsibility for graduate education and research.

Jan Allen, Associate Dean for Ph.D. Programs at Columbia University gave an overview of current and past project activities within Columbia's Graduate School of Arts and Sciences and discussed the lessons learned by Graduate Deans overseeing the project. Dr. Allen's [presentation](#) emphasized that their project activities have revealed that graduate students have a strong interest in understanding and managing the ethical problems of research. This discovery has given Columbia strong leverage for improving education and mentoring in RCR and research ethics.

Presentations were followed by an active discussion among workshop attendees about the new challenges and opportunities surrounding RCR and research ethics education. Participants gave particular focus to building strong institutional responses to the new NSF and NIH mandates on RCR education and to new and growing challenges surrounding RCR education in the context of international research communities. Workshop presenters indicated that these developments make the need for comprehensive, institution-wide efforts all the more important, and that graduate deans must play a strong role in shaping these efforts and conveying the importance of research integrity to the quality of research and research training.

NEW PSI BLOG POST ON PEER RESPONSES TO MISCONDUCT

A new blog on the PSI Website invites discussion of questions raised in a recent [opinion piece](#) in *Nature*, (July 20, 2010). Authors Gerald Koocher and Patricia Keith-Spiegel report the results of a survey they developed to understand the behaviors and interventions of scientific researchers who suspect colleagues of scientific misconduct. Funded by a grant from the Office of Research Integrity (ORI), the confidential, online survey was fielded among investigators funded by the U.S. National Institutes of Health.

The survey results indicated that there is a much higher rate of informal intervention into cases of suspect misconduct than expected: nearly two-thirds (63%) of survey respondents who had suspected research misconduct intervened in some way. As the researchers point out, these results complicate earlier studies suggesting that researchers tend to avoid intervention to protect their careers. In addition, many of those who took action reported satisfaction with the results of their interventions: 28% reported that they had been able to resolve the problem, and the chances of a positive or negative outcome were approximately even.

The latest PSI [blog post](#) asks members of the graduate community to consider the relevance of informal peer interventions to the formal efforts of universities to improve the climate of research integrity. Visitors to the PSI website are asked to reflect on questions such as: “What steps can institutions take to promote open and informal discussions among colleagues and graduate students about questionable research practices and suspected acts of misconduct?” and “How can institutions balance the need for compliance and formal investigation of research misconduct with a culture of openness and honest discussion?”

To post a response to these questions, please visit the [Blog page](#) of the [PSI Website](#) and follow the instructions for registering and posting a comment.



IN THIS ISSUE:

- [UAB and MSU Host Site Visits Featuring PSI Activities](#)
 - [University of Alabama at Birmingham](#)
 - [Michigan State University](#)
- [CGS to Hold PSI Session at 2010 CGS Summer Workshop](#)
- [Updates on Second World Conference on Research Integrity](#)

Updates on the Project for Scholarly Integrity

UAB AND MSU HOST SITE VISITS FEATURING PSI ACTIVITIES

One element of the [CGS Project for Scholarly Integrity](#) is a series of site visits to all institutions that have received PSI awards. The purpose of these visits, which are conducted by CGS project staff, is to learn more about a variety of issues that institutions are encountering over the course of their projects, including programmatic details and reflections by participants that will enrich the final CGS monograph on the PSI. In addition, project staff provide feedback to institutions and an opportunity to discuss challenges, next steps, and the sustainability of their projects. PSI Awardees were asked to develop agendas that allowed discussion of topics such as: university-wide and departmental/program activities that comprise each university's Project for Scholarly Integrity; any mid-course adjustments that have been made in the scope and content of proposed activities; resources developed as a result of the project or in conjunction with the project; and hurdles or early successes encountered over the course of the project. The remaining site visits will take place in the summer or early fall of 2010 and will be featured in upcoming PSI newsletters.

University of Alabama at Birmingham

Dr. Bryan Noe, Graduate Dean and Dr. Jeffrey Engler, Associate Dean at the [University of](#)

[Alabama at Birmingham](#) (UAB), hosted a site visit on May 6, 2010. During the morning visits, CGS project staff, Dr. Daniel Denecke and Dr. Julia Kent, met with a number of key leaders within UAB's project, including **Dr. Charles Prince**, Assistant Vice President for Research and Economic Development, who provided the institutional context for research ethics at UAB and described current efforts to identify potential misconduct early through an "Ethics Hotline"; statistician **Dr. Kathy Harrington**, who is conducting preliminary analysis of Climate Assessment data gathered by UAB as part of the collective assessment effort in which all PSI Awardees are taking part; and **Dr. Sara Vollmer** and **Dr. Harold Kincaid** of UAB's [Center for Ethics and Values in the Sciences](#). Dr. Vollmer and Dr. Kincaid discussed the process for developing the successful video tools used in ethics education at UAB and next steps for building on and refining the "decision tree" model of ethics training on which they are based.

The next part of the visit was a lunch and informal discussion between CGS project staff and the leaders of graduate student associations at UAB. All of the graduate students present had taken part in UAB's required course in RCR for graduate students, and some had participated in a recent TA-training program that taught graduate students to develop lessons in RCR for undergraduates. Students offered candid and thoughtful reflections about these experiences as well as constructive suggestions for further strengthening training opportunities for graduate students at UAB.

Following lunch, the CGS team met with **Dr. Julia Austin** and **Ms. Nancy Abney** of the [Graduate School Professional Development Program](#) to discuss the integration of ethics education into TA training into course syllabi through faculty development workshops. The visit concluded with a wrap-up session with Dr. Noe and Dr. Engler on the next steps for UAB's current project, which will focus on ensuring that students receive the preparation they need. Dean Noe commented, "Even though the RCR education initiatives at UAB have been somewhat comprehensive to date, we recognize that this must be an ongoing process. Our ultimate goals are to integrate RCR education more fully into the curriculum, and to assure that graduate students in all disciplines are exposed to the principles of RCR during their course of study at UAB."

Michigan State University

[Michigan State University](#) (MSU) is part of a three-university consortium including [Penn State University](#) (PSU) and the [University of Wisconsin-Madison](#) that is conducting a joint climate assessment effort for a PSI project shared by MSU and PSU. As reported in previous [PSI newsletters](#), the consortium proposed a climate assessment effort as part of their joint proposal, and the climate assessment instrument, developed by Dr. Carol Thrush and Dr. Brian Martinson, has been adopted by all PSI Awardees. Since MSU and PSU are conducting separate project activities in addition to the joint climate assessment, a separate site visit to PSU is scheduled for September 2010.

The MSU site visit took place on June 17, 2010 and was organized by Dr. Karen Klomparens, Dean of the Graduate School at Michigan State. The visit opened with an overview of the joint assessment project and included a discussion with Dr. Terry May, who has responsibility for the Responsible Conduct of Research initiatives within the Graduate School, the Office of the Vice President for Research and Graduate Studies, and the office of postdoctoral affairs. Next, Dr. Klomparens and Dr. May led a discussion with the heads of MSU colleges and units that have been partners in MSU's assessment effort and have shared the results of the climate assessment data with their departments and programs. **Dr. Fred Derksen**, Acting Chair of Food Science and Human Nutrition,

Agriculture and Natural Resources; **Dr. Rich Schwartz**, Associate Dean of the College of Natural Sciences; and **Dr. Chris Maxwell** and **Dr. Bob Caldwell**, Associate Deans of the College of Social Sciences, described the processes they have used to present data to programs and encourage activities that will help strengthen areas where improvements are needed.

The discussion of interventions at the college and department level was followed by a meeting with MSU's Vice President for Research and Graduate Studies, **Dr. Ian Gray**. Dr. Gray discussed the importance of connecting RCR education to the quality of research; this message has been an important part of MSU's communications about the implementation of the NSF and NIH mandates requiring RCR training for all graduate students, undergraduate students, and post-docs. The next meeting was a discussion with **Dr. James Pivarnik**, MSU's Research Integrity Officer, on MSU's efforts to raise greater awareness about RCR, and on specific needs and questions that have arisen following the NSF and NIH mandates as well as the university's implementation of the climate survey.

The visit concluded with a brief conference call including Dr. Carol Thrush and Dr. Jim Wells, the Director of the Office of Research Policy at the University of Wisconsin-Madison, on their role in the analysis of the consortium's climate data. Dr. Klomparens said, "This has been a terrific experience for MSU and I hope also for our consortium partners, as well as Carol Thrush and Brian Martinson. During our weekly conference calls over the course of the approximately 18 months we were engaged in preparing, administering, and analyzing the survey and data were lively and stimulating. Our collective goal is to provide a very useful RCR climate survey for all universities to use in order to engage faculty in discussions about this important topic."



IN THIS ISSUE:

- [Consortium Shares Initial Outcomes of Climate Survey](#)
- [NSF Solicits Proposals for Online Resource Center on Research Ethics](#)
- [NIH Issues RFP for International Research Ethics Education](#)

Updates on the Project for Scholarly Integrity

CONSORTIUM SHARES INITIAL OUTCOMES OF CLIMATE SURVEY

[Michigan State University](#), [Pennsylvania State University](#), and the [University of Wisconsin-Madison](#), the consortium of universities collaborating on a shared PSI project, completed their analysis of data from a common climate assessment survey, a key component of their CGS Project for Scholarly Integrity. Dr. Carol Thrush (University of Arkansas for Medical Science) and Dr. Brian Martinson (HealthPartners Research, MN) provided the

survey (based on Dr. Thrush's doctoral dissertation,) as well as consultation and advice on survey analysis. As reported in the [April 2009 PSI Newsletter](#), Drs. Thrush and Martinson are funded by the [National Institutes of Health \(NIH\)](#) and the [Office of Research Integrity](#) to continue validation of the survey in biomedical research centers and expect to release the survey into the "creative commons" early in the Fall of 2010.

Along with Drs. Thrush and Martinson, a number of members of the consortium have worked on the project: at Michigan State, Karen Klomparens, Graduate Dean, and Terry May, Faculty Conflict of Interest Information Officer; at Penn State University, Eva Pell, former Graduate Dean, and Michelle Stickler, former Director of the Office of Research Protections, whose initial role was taken up by Suzanne Adair, Assistant Graduate Dean; and at the University of Wisconsin, Madison, James Wells, Director of the Office of Research Policy, and Eileen Callahan, Director of Graduate Student Professional Development.

The consortium administered the survey during April 2009 to all faculty, postdocs, graduate students, technicians, and at MSU, undergraduates involved in research across the three campuses (approximately 30,000 individuals). Approximately 50% of survey recipients responded across the three universities. Eight factors were identified from the analysis of responses to 60 questions: Program Integrity Norms, Program Integrity Socialization, Program Integrity Inhibitors, Program Advisor-Advisee Relations, Program Integrity Expectations, the Global Climate of Integrity, Institutional Regulatory Quality, and Institutional Integrity Resources.

Initial data were analyzed in a "dashboard" of indicators that included: percent of respondents with a score of 4.5 on a scale of 1-5, average score, each program's percentile rank, average percent of "no basis for judging" response, and a comparison to each university's average response for each factor. These data were shared with collegiate deans and associate deans at MSU and at the University of Wisconsin, Madison, and are now being shared with graduate programs at each of these institutions. A quartile ranking based on responses (at the 4.5 level) for each of the factors resulted in excellent discussions about strategies for strengthening the research environment within individual departments.

The universities in the consortium will share more details about the survey and their use of the results on their campuses at the special session on the Project for Scholarly Integrity at the [CGS Summer Workshop](#), and also at the PSI Capstone Conference. All of the other PSI Awardees have also administered the survey, and aggregate analysis of the survey results will be included in the CGS monograph on the PSI.



IN THIS ISSUE:

- [University of Arizona Holds Research Integrity Days Conference](#)
- [Emory Highlights Research Ethics through PSI Speaker Series](#)
- [AAAS Holds Session on NSF's Role in Science and Engineering Ethics](#)

Updates on the Project for Scholarly Integrity

UNIVERSITY OF ARIZONA HOLDS RESEARCH INTEGRITY DAYS CONFERENCE

On January 22, 2010, the [University of Arizona](#) held its First Annual Research Integrity Days Conference, an event co-sponsored by the UA Office for the Responsible Conduct of Research and the Graduate College, with support from the CGS Project for Scholarly Integrity. The day-long conference began with a welcome and introductions from Dr. Andrew Comrie, UA Graduate Dean, and Dr. Elizabeth Boyd, Assistant Vice President for Research Compliance and Policy, and was followed by a series of plenary sessions led by Master Professors in Research Integrity and Administrators with direct involvement in Research Integrity initiatives at UA. A full conference [agenda](#) can be found on the Website of UA's [Office for the Responsible Conduct of Research](#), which includes a [web page](#) devoted to the Project for Scholarly Integrity.

Plenary Sessions addressed a number of specific categories of research integrity as defined by the Office of Research Integrity along with topics of general concern to graduate students and faculty. Dr. Benedict Columbi, Assistant Professor in the Department of American Indian Studies, and Kathleen Van Vlack, a PhD Candidate, delivered a presentation on the ethical issues surrounding research on native peoples, ["Successful Research in Indian Country: Respecting the Cultural Integrity and Sovereignty of Native Nations;"](#) and Dr. Doug Cromey, Assistant Scientific Investigator in the Department of Cell Biology and Anatomy discussed image manipulation in "The Darkroom is Closed—Image Ethics for a New Generation." Presenters also addressed the social, pedagogical, and institutional structures surrounding research training and practice: Dr. Jenny Hoit, Professor of Speech, Language and Hearing Sciences presented on ["Mentoring with Integrity;"](#) Dr. Cindy Rankin, Lecturer and Research Integrity Officer in the Department of Physiology spoke about authorship in ["Yours, Mine & Ours: the Ethics of Authorship;"](#) Dr. Gail Burd, Vice Provost for Academic Affairs and Distinguished Professor, Department of Molecular and Cellular Biology addressed "Science, Society, and Ethics;" and Dr. Malcolm Hughes, Regents Professor, Laboratory of Tree Ring Research, discussed data ownership and integrity in the environmental sciences in "Lessons from Climate Wars—A Teachable Moment."

The conference also featured a "Grantees Showcase" in which graduate students and faculty who had received Small Grants for RCR Curriculum Development presented their

projects. Lora Grainger, a Ph.D. Candidate in the Department of Immunobiology gave a presentation titled [“Strategies for Success: Research Integrity in the life Sciences Laboratory, A Workshop for First-Year Graduate Students;”](#) Dr. Geoff Boyce, a Graduate Teaching Assistant and Professor in the School of Geography and Regional Development discussed [“The Ethics of Geospatial Research with Politically Vulnerable Populations: Developing on Online Multimedia Toolbox;”](#) and Alexandra Trueman, a PhD candidate in the Department of Linguistics explored [“Education and Ethics for Linguistic Fieldwork.”](#)

The conference concluded with a group discussion for further integrating RCR into graduate education and research activities. Ideas included a single, campus-wide website for RCR training and educational materials, using a “Train the Trainers” approach to disseminate research integrity throughout the graduate community, continuing to offer campus-wide workshops, and encouraging the continued development of discipline-specific training materials that can be incorporated into existing graduate courses.

EMORY HIGHLIGHTS RESEARCH ETHICS THROUGH PSI SPEAKER SERIES

As part of its Project for Scholarly Integrity, [Emory University](#) launched the 2009-10 speaker series “Beyond Right & Wrong: Engaging Ethics at Emory.” In October 2009, the inaugural event of this series featured the University of Illinois at Urbana-Champaign’s Tina Gunsalus, who presented to an audience of faculty, researchers and students on research integrity in the current national policy environment. Professor Gunsalus also hosted a small workshop for Emory faculty on whistleblowing in data management. This event was followed by a November presentation and panel discussion featuring Dr. Nicholas Steneck, a consultant to the Office of Research Integrity and professor at the University of Michigan. Dr. Steneck’s presentation focused on scholarly misconduct— why it matters and how it can be eliminated. The next event in the series was a presentation and panel discussion featuring North Carolina State’s Dr. Gary Comstock (see below). The final event of this academic year is scheduled for April 20, 2010 and will feature Harvard University’s Dr. Greg Koski, former director of the Office for Human Research Protections. Dr. Koski will present on scholarly integrity and its relevance in a rapidly evolving world. He will later be joined by a panel of Emory faculty and researchers to discuss these issues at Emory.

According to the Laney Graduate School’s Dean Lisa Tedesco, the Project for Scholarly Integrity is as timely as it is important. “The advancement of research is a cornerstone of our work here at Emory University, and we are committed to satisfying training requirements in the responsible conduct of research for all of our researchers. But this isn’t enough. We are striving to move beyond compliance to nurture a community of scholars that is equipped to confront and engage issues of scholarly integrity in their everyday lives as professionals and citizens of the world. My colleagues and co-leaders on this project, Associate Dean Dr. Mark Risjord and Professor of Anthropology Dr. Michelle Lampl, have done an outstanding job to bring these issues to the attention and forefront of discussion here at Emory and in our community.”

On March 3, 2010, Emory held the most recent [event](#) in the speaker series, a Panel Discussion led by Dr. Gary Comstock, Professor of Philosophy at North Carolina State University, which addressed the subject of Animals in Research. Dr. Comstock is the author of *Vexing Nature? On the Ethical Case against Agricultural Biotechnology*, and brought a philosophical perspective to one of the complex tensions within animal research— on the one hand, the strong potential of research involving animals to support advances in science and medicine that benefit human life, and on the other, the potential

for unjust harm and use of animals. Joining the panel discussion were Emory faculty and researchers with special knowledge of ethical issues surrounding animals in research. The audience included Emory faculty and students as well as members of IACUC (Institutional Animal Care and Use Committee) and the Georgia Veterinary Medical Association. Given the focus and featured discussants of this event, the Georgia Veterinary Medical Association approved the event as meeting the Legal, Ethical and Professional training requirement necessary for the 2010 license renewal of all practicing veterinarians in Georgia.

Dr. Comstock brought a broad-based philosophical background to the panel: as a researcher, he has studied philosophical distinctions between humans and animals, and currently serves as editor-in-chief of *On the Human*, a division of the National Humanities Center's digital humanities project. This [online resource](#) provides a forum for scientists and humanists who examine definitions of human life as well as ethical claims grounded in ideas of the human. The dedicated website of *On the Human* can be found on the PSI's [Online Resource Library](#) along with other online resources and discussion forums devoted to various topics in research ethics and RCR.

As editor-in-chief of the *OpenSeminar In Research Ethics*, which serves as a repository of online pedagogical resources designed for junior researchers, and as the former director of NC State's research and professional ethics program, Dr. Comstock also has significant experience in research ethics education. His presentation supported Emory's mission of using the PSI to prepare students, researchers, and faculty for the complex ethical challenges and responsibilities of 21st-century research.



IN THIS ISSUE:

- [Columbia Hosts Science Writer for Research Ethics Forum](#)
- [AACN Conference Features Sessions on PSI](#)
- [COSEPUP Meeting Addresses Priorities in Research Ethics and RCR](#)
- [Second World Conference on Research Integrity](#)
- [Poynter Center to Host Annual Meeting on Teaching Research Ethics](#)

Updates on the Project for Scholarly Integrity

COLUMBIA HOSTS SCIENCE WRITER FOR RESEARCH ETHICS FORUM

Columbia University reports that biologist and science writer Rebecca Skloot spoke at the university on February 2, 2010, on the occasion of the release of her new book, [The Immortal Life of Henrietta Lacks](#). The book tells the story of Lacks, a poor tobacco farmer whose life uncovers the ways in which the history of medical research involving human

subjects is tainted by racism, the abuse of power, and radical inequalities in the distribution of the benefits of research. In 1951, doctors took Lacks' cells without her knowledge to develop the first "immortal" human cells, reproducing every twenty-four hours. "HeLa" cells led to countless innovations in medical research and a multimillion dollar industry.

Skloot's talk focused on the way Lacks was treated by researchers and described her family's discovery twenty years later that their mother's cells existed the world over, and were even sent into space. A particularly compelling part of her talk addressed how and when Skloot first heard about HeLa cells—as a 16-year-old in a biology class whose instructor ended his lecture about the cells with the words, "HeLa cells were one of the most important things that happened to medicine in the last hundred years; she ['HeLa'] was a black woman." Skloot spent most of her time answering questions from the audience, including questions about current practices: "Most Americans have their tissue on file somewhere," Lacks explained. A 1999 Rand Corporation report estimates that over 300 million tissues samples from 78 million people exist in research labs, with 20 million more samples being added a year. Use of these materials from diagnostic and surgical procedures and money from their sale to research labs legally do not require the owner's consent, as no case law has clarified that tissue continue to belong to its owner once it is removed from the body. Coincidentally, the day of Skloot's talk at Columbia was also the start of a trial in New York City to determine whether it should be legal for anyone to hold patents on human genes. Jan Allen, Associate Dean at Columbia and co-PI for the university's Project for Scholarly Integrity, commented, "Skloot's presentation addressed multiple issues related to our RCR discussions and activities at Columbia University, such as informed consent for research, confidentiality, and conflict of interests."

More than 150 doctoral students, post-doctoral fellows, and faculty from programs in biology, chemistry, engineering, and sociology attended the event jointly sponsored by Columbia's Department of Biological Sciences and the Graduate School of Arts and Sciences; support for the presentation came from GSAS's Project for Scholarly Integrity funds provided by the Council of Graduate Schools and USDHHS Office of Research Integrity. More information about Columbia's PSI/RCR activities is available here: <http://www.columbia.edu/cu/gsas/sub/project/research/main/index.html>.

AACN CONFERENCE FEATURES SESSIONS ON PSI

The [American Association of Colleges of Nursing](#) (AACN) featured special sessions on the Project for Scholarly Integrity at its [Doctoral Conference](#) on Captiva Island, Florida, on January 29, 2010. Julia Kent, CGS Program Manager, gave two presentations to a total audience of 100 conference participants, including Deans of Colleges of Nursing, faculty members in doctoral programs in nursing, and research nurses. The presentations gave an overview of current national trends in research compliance, including NIH's recent update on training requirements in RCR, the goals and needs that motivated CGS to develop the project in cooperation with partner institutions, and current activities of PSI awardees and affiliates.

Dr. Kent's presentation also highlighted the [PSI online resource library](#), which includes special resources for deans and faculty overseeing research in the biomedical sciences, along with resources in areas of special concern to research nursing programs: research involving human subjects, financial and personnel management, and Conflicts of Interest (COI). The library makes it possible to search for articles and resources related to nursing,

including a recently added book, [Educating Nurses: A Call for Radical Transformation](#) (Carnegie Foundation for the Advancement of Teaching, 2010).

The discussion periods following the sessions addressed a number of topics of special concern to deans and faculty in doctoral programs in nursing. One discussion strand focused on the relative merits of training in compliance and training in ethical deliberation, a topic that can emerge in all graduate research programs but one that is particularly relevant to programs that may train students to administer research protocols while also developing their judgment-making skills in patient care settings. Participants also discussed guidelines for authorship on publications co-authored by graduate students and their thesis and dissertation supervisors, along with the research training needs of international students and non-native English speakers. CGS has invited conference participants to submit their suggestions of resources relevant to the ethics of nursing research to the growing PSI library.



IN THIS ISSUE:

- [CGS Features Project for Scholarly Integrity at Annual Meeting](#)
- [UAB Reports Successful Semester of TA Training in RCR](#)
- [NIH Issues Policy Update on Requirement for RCR Instruction](#)

Updates on the Project for Scholarly Integrity

CGS FEATURES PROJECT FOR SCHOLARLY INTEGRITY AT ANNUAL MEETING

In conjunction with the 49th Annual Meeting in San Francisco (December 2-5, 2009), CGS hosted a special session on the Project for Scholarly Integrity, "Institutionalizing Research Ethics and Scholarly Integrity: Model Programs." The session featured presentations from the following universities, both awardees and affiliates of the project, on the various approaches that their institutions have taken to integrate research ethics education into graduate programs:

[Dr. Henry Pinkham](#), Dean of the Graduate School at Columbia University (awardee)

[Dr. Jo Rae Wright](#), Vice Provost and Dean of the Graduate School at Duke University (affiliate)

[Dr. Richard Podemski and Dr. Carla Thompson](#), University of West Florida (affiliate). Dr. Podemski is Dean of Graduate Studies and Associate Vice President for Research UWF, and Dr. Thompson is Assistant Professor and Director of the Community Outreach Research and Learning (CORAL) Center.

Please click on the links above to access the PowerPoint presentations delivered at the session. In addition to describing each university's project-related activities, the

presentations include links to university web pages that communicate the importance of research ethics education to their respective graduate communities as well as opportunities and activities related to each institutional project.

The next CGS session devoted to the Project for Scholarly Integrity will be held at the CGS 2010 Summer Workshop for Graduate Deans, which will take place from July 10-14 in San Juan, Puerto Rico. Session details will be provided in the Spring of 2010.

UAB REPORTS SUCCESSFUL SEMESTER OF TA TRAINING IN RCR

Dr. Jeffrey Engler, Associate Dean for Academic Affairs and co-PI on the PSI project at the University of Alabama at Birmingham, reports that UAB's TA Training course in Fall, 2009, gave UAB graduate students greater confidence in understanding ethical dilemmas related to research integrity and data management. An added benefit was that the program helped TAs to develop lesson plans that would engage undergraduate students in learning about these issues. Along with UAB's PI and Graduate Dean, Dr. Bryan Noe, Dr. Engler shared plans for the TA Training Program in the [June issue](#) of the PSI Newsletter and now sends the following update, which has appeared as an article in [UAB's Graduate Student Association Newsletter](#) under the title, "Empowering Teaching Assistants to Discuss Ethics with Undergraduate Students."

"For aspiring researchers, few factors are as sensitive, but critical, to a student's success as scholarly integrity. That's why this fall, graduate teaching assistants at UAB developed and presented a unique series of lesson plans to engage undergraduate students in learning about ethical problems and how to deal with them. This curricular initiative is part of UAB's role in the nationally funded Project for Scholarly Integrity and the Graduate School's highly successful course, "Preparing TAs to be Effective Teachers," to prepare new teaching assistants for their role as classroom instructors in many of the undergraduate science courses.

This year's class of 21 TAs from four departments (Chemistry, Biology, Physics, and Computer and Information Science) developed lesson plans for teaching undergraduate students about the specific issue of data integrity. Topics for discussion included keeping an up-to-date record of your research work and protecting the original data collected in a survey. One of the goals of this project is to help undergraduates learn about data integrity (what it is and what areas of research are involved) and to develop ethical research practices early. To expand their own understanding of data integrity issues, the TAs reviewed information from the following sources: the Resources for Research Ethics Education website (<http://research-ethics.net/topics/data-management>), materials on the Office of Research Integrity website (<http://ori.dhhs.gov/>), and case studies from the book *Scientific Integrity* by F.L. Macrina.

The TAs organized themselves into discipline-specific groups to investigate specific ethical dilemmas that can occur in keeping track of scholarly research results. Using examples appropriate for their discipline, each group developed a 50 - 60 minute lesson plan of activities, presentations, and small group discussions to engage undergraduate students in learning about these issues. Each group presented their lesson plans on the course website and in class meetings, where each group received constructive feedback from other TAs and the course instructors. During class meetings, each group practiced delivering their lessons and received additional feedback. In designing the lesson plan, each group was able to test their skills as future educators and to apply their knowledge to the practical task of crafting an effective lesson plan.

At the final class meeting, each group shared highlights from their lesson plans to demonstrate to the other TAs how they approached engaging undergraduate students in learning about data integrity and making those issues relevant. Some groups wrote case studies, made brochures and bookmarks summarizing the material, and others developed role playing activities. Each group received constructive feedback from the other TAs and the course instructors about what worked and what didn't work in their presentations. The best of these presentations will be posted on the Graduate School website in the near future.

The long term vision for this effort is to engage graduate students, faculty, and postdoctoral fellows in continuing discussion of issues of scholarly integrity and responsible conduct of academic research. Our goal is to raise awareness of ethical issues campus-wide, to enrich the training of graduate students and to prepare them for the challenges of their future careers."



IN THIS ISSUE:

- [Duke University Provides Sequenced RCR Training for All PhD Students](#)
- [NSF Publishes 2010 Award and Administration Guidelines](#)
- [SRA Offering Webinar on Implementation of NSF Requirement](#)
- [ESF and ORI Hold Workshop on Research Integrity Education](#)

Updates on the Project for Scholarly Integrity

DUKE UNIVERSITY PROVIDES SEQUENCED RCR TRAINING FOR ALL PHD STUDENTS

As an Affiliate of the Project for Scholarly Integrity, [Duke University](#) has shown exceptional commitments to developing institution-wide activities that support the Responsible Conduct of Research (RCR). Since 2003, Duke University Graduate School has required Ph.D. students in every department and program to complete a series of [RCR training workshops](#) that are documented on official transcripts. The mandatory RCR training is sequenced to include the completion of one of three RCR Orientation events tailored to academic divisions, followed by participation in several 2-hour RCR Forum workshops offered by the Graduate School, certain departments, or campus centers or institutes. This fall, nearly 500 entering Ph.D. students in almost 50 departments and programs attended one of three RCR Orientation sessions. Two of these events were held on the Duke campus: nearly 145 students attended the [Humanities and Social Sciences Workshop](#), and nearly 250 students participated in the [Natural Sciences and Engineering Workshop](#). [Dr. David Resnik](#), Bioethicist and Institutional Review Board Chair at the

National Institute of Environmental Health Sciences (NIEHS), gave a keynote address with an international focus, "Responsible Conduct in Research: A Global Concern," and Duke faculty from various disciplines engaged students in discussion on a broad range of topics, including the development of research questions, human subjects research, animal subjects, and ethical issues raised by new technologies. Dr. Doug James, Assistant Dean for Academic Affairs, said that by offering RCR training in face-to-face activities that are interdisciplinary, "Duke is striving to build a sense of community and openness so that conversations about academic and research integrity become part of the normal experience of everyday researchers." Dr. Jo Rae Wright, Dean of the Graduate School, commented that "Duke views RCR training for graduate students as a priority and therefore it is a requirement for graduation. We strive to provide training that is relevant to students in all disciplines and to engage students in small group discussions."

A third event, the [Beaufort Ethics Retreat](#) held at Duke's Marine Laboratory in Beaufort, North Carolina, was developed in 1996 by Dean Wright, with support from the Graduate School and the Kenan Institute for Ethics. The weekend retreat is required for all students in the basic medical sciences, and this year involved nearly 115 students, all of whom received 12 hours of credit in RCR training toward the total requirement of 18 hours. As reported in an article in Duke's [Graduate School Newsletter](#), "This retreat not only serves to introduce serious content in a relaxed atmosphere, but also provides an informal setting in which entering students can meet and talk with nearly 30 faculty and advanced graduate students who serve as TAs for the retreat." Duke participated in the initial CGS/ORI RCR project (focused on the basic medical sciences) and is completing an NSF EESE project on ethics education for graduate students involved in nanoscience research with the Pratt School of Engineering. They plan to develop online resources that can be adapted by other institutions.



IN THIS ISSUE:

- [PSI Awardees Conduct Inventories of University Activities](#)
- [University of West Florida Launches Affiliate Program](#)
- [OSTP Gives Priority to Ethical and Scientific Integrity](#)
- [Association for Practical and Professional Ethics Annual Meeting](#)

Updates on the Project for Scholarly Integrity

PSI AWARDEES CONDUCT INVENTORIES OF UNIVERSITY ACTIVITIES

During the first phase of the Project for Scholarly Integrity (PSI), the planning committee developed a framework for guiding institution-wide efforts to promote scholarly integrity and the Responsible Conduct of Research (RCR). A key component of this document was a multi-dimensional approach to assessing the needs of graduate institutions. Three areas

of assessment were outlined: the institutional “climate” or culture of research, university activities and resources supporting RCR and scholarly integrity, and student learning. In the Winter of 2008 and Spring of 2009, the Council of Graduate Schools and the PSI Awardees met to discuss research tools in all three areas and approved common tools for assessing climates and activities. Updates on the common climate assessment instrument were provided in the [April 2009 PSI Newsletter](#).

The assessment of university activities and resources will enable Awardees to meet their project goals in a variety of ways. Used internally, the survey will allow universities to inventory current and planned activities, as well as material resources related to RCR and research ethics, and identify areas of vulnerability or need. Within the PSI project as a whole, the survey will provide one measure of the impacts of individual projects at each university since institutions will administer the survey at both the beginning and the end of the implementation phase.

PSI Awardees participated in the creation of the final survey by providing revisions to a template developed by CGS. The inventory survey comes in two parts, one directed at the graduate school or other central unit serving students and/or faculty from multiple disciplines, and the other directed at specific departments and programs. Both [revised surveys](#) were made available to Project Affiliates in July 2009 and are now publicly available on the PSI website. Any institution is free to use or adapt the survey templates, which take approximately 20-25 minutes to complete. CGS is currently exploring the option to make the activities inventory survey available to any institution on SurveyMonkey.com.

PSI Awardees and Affiliates will present on their activities, including their experiences using the climate surveys and the activities inventory, at a special session devoted to the PSI project at the [CGS Annual Meeting](#) in December 2009. Please stay tuned for more information about this event.

UNIVERSITY OF WEST FLORIDA LAUNCHES AFFILIATE ACTIVITIES

As an Affiliate of the Project for Scholarly Integrity, the [University of West Florida \(UWF\)](#) has demonstrated a strong commitment to making issues of scholarly integrity a priority for all members of their university community. CGS is happy to support the efforts of UWF and other [Affiliate universities](#) by featuring their projects in PSI newsletters and on the PSI web. UWF and a number of other PSI Affiliates will soon become more deeply involved in the project by using common assessment tools and by sharing their experiences and project outcomes at the CGS Annual Meeting. We are delighted to publish the following update on UWF’s project, which has been provided by Dr. Richard Podemski, Dean of Graduate Studies and Associate Vice President for Research and Dr. Carla Thompson, Director of the Community Outreach Research and Learning (CORAL) Center at UWF.

“The University of West Florida (UWF) is excited to be an Affiliate of the CGS Project for Scholarly Inquiry (PSI). As a regional comprehensive university with a large segment of part-time graduate students and a focus on applied research, we believe that we have unique challenges relative to research integrity and, thus, need to develop unique solutions. It is our hope that our activities will help inform solutions at other regional institutions. Currently UWF is undertaking a variety of activities for faculty, staff, students, and the professional education community to promote the responsible conduct of research (RCR). These activities are coordinated by a university-wide steering committee that has

representatives from each graduate department and is chaired by Dr. Carla Thompson, Director of the Community Outreach Research and Learning (CORAL) Center. This year the entire university is focusing on academic integrity in its many aspects. The opening faculty assembly dealt with strategies to promote academic integrity in undergraduate instruction, online learning, and graduate instruction and research. The assembly presented UWF's affiliation with the PSI and highlighted activities that will be completed throughout the project.

In spring 2009, the UWF steering committee developed and pilot-tested a Needs Assessment instrument, which assesses faculty and graduate student perceptions of the current research climate and related issues associated with RCR in UWF graduate programs. This instrument will be administered broadly across campus in September 2009 with the results serving to guide next steps. The second key activity will be an analysis by the department steering committee representatives of the syllabi for all graduate research courses to determine the extent to which they address the various elements of RCR. To support revision of course curricula, the Research Integrity Officer in the Office of Research and Sponsored Programs has developed a [website](#) listing appropriate RCR tutorials, tests, policy guidelines, print resources, and other materials found at government and university sites. We believe that this course review and revision will have a significant long-term impact. Finally, UWF is hosting the Rocky Mountain Educational Research Association (RMERA) Annual Meeting. Dr. Daniel Denecke of CGS will discuss national issues related to RCR in the keynote speech and the conference will feature a RCR program strand. For information concerning upcoming events at the University of West Florida, contact Dr. Richard Podemski (rpodemski@uwf.edu) or Dr. Carla Thompson (cthompson@uwf.edu).



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- [MSU Raises Awareness about Key Principles of Research Integrity](#)
- [PSU Implements Scholarship and Research Integrity Program](#)
- [CGS Hosts Deans' Dialogue on RCR and Ethics Education](#)
- [National Academies Release Report on Issues in Data Management](#)
- [Center for Academic Integrity to Host International Conference](#)

Updates on the Project for Scholarly Integrity

MSU RAISES AWARENESS ABOUT KEY PRINCIPLES OF RESEARCH INTEGRITY

In 2007, Michigan State University established a Research Integrity Council tasked with expanding the efforts of the Graduate School, the Office of the Vice President for Research and Graduate Studies, and the Office of the Provost to foster and promote integrity and

the responsible conduct of research, scholarship, and creative activities. Chaired by Stephanie Watts, Professor of Pharmacology and Toxicology, the Council includes faculty from diverse disciplines along with student and postdoctoral representatives. The Council was given the responsibility of recommending principles regarding RCR education, instruction, and training parallel to the [guidelines](#) developed in 2004 by the Research Mentoring Task Force for Integrity in Research and Creative Activities and Graduate Student Advising and Mentoring Relationships. The Advising and Mentoring Guidelines summarized the roles and responsibilities for academic units and their leaders, faculty, and students.

While developed to address graduate education, the Research Integrity Council is broadening its reach in order to promote education, both formal and informal, at all levels and across disciplines. A key goal is to find common ground for considering and discussing integrity and responsible conduct across disciplines while allowing for the application of differences in professional standards. To support this work, the Council has articulated eight key principles of Research Integrity: honesty, fair recognition for work, confidentiality, disclosure, compliance, protection of research subjects, collegiality, and communication. The Council encourages campus units to apply these principles both implicitly, through individual activities, and explicitly, in the education and socialization of junior researchers and scholars at all levels.

This summer, the Council began a campaign to raise awareness about these principles by developing a set of posters that have been distributed to the over 125 graduate programs at MSU. Displayed in strategic locations in all buildings, the posters take a first step toward achieving the goal of common understanding by presenting simple messages: "Understand and follow the rules," "Respect intellectual property," and "Report potential conflicts of interest." The posters are also featured on a new Research Integrity Council website that will provide support for MSU's campus-wide efforts. Electronic copies of the posters are available at the following MSU website (to be activated this month): <http://grad.msu.edu/ric>.

PSU IMPLEMENTS SCHOLARSHIP AND RESEARCH INTEGRITY PROGRAM (SARI)

As part of the Council of Graduate School's Project for Scholarly Integrity and internal university initiatives, Penn State University is implementing required graduate student education in the responsible conduct of research (RCR) through a program called Scholarship and Research Integrity (SARI). This program is required of all graduate students beginning with students entering the university in Fall 2009. The SARI program model includes both interdisciplinary and program-specific RCR education and includes two parts. First, during the first year of enrollment, graduate students are required to complete an online RCR training program provided by the Collaborative Institutional Training Initiative (CITI). Next, graduate engage in an additional 5 hours of discussion-based RCR education prior to degree completion. These discussions will encompass both universal and discipline-specific material.

The SARI program is being designed and implemented by Penn State graduate programs in a way that meets the specific needs of each unit's students, focusing on the nine core RCR topics identified by the Office of Research Integrity as well as other scholarly and professional ethics issues as they relate to research and scholarship conducted by the disciplines in the college. Each college and/or program has developed a plan for how their graduate students will meet the 5 hours of discussion-based RCR education. These plans

include a wide variety of educational activities including credit coursework, workshops, and brownbag discussions.

The university provides extensive resources to support the SARI program and its implementation by the colleges, available through the [SARI Resource Portal](#). These resources include:

- Training opportunities for faculty involved in teaching RCR
- Classroom resources, such as slide shows and case studies, for RCR education
- Individualized consultation and advice
- Online resources
 - Access to the CITI RCR program (for part one of SARI)
 - Access to other online RCR training modules, resources, and readings
 - Video archives of workshops and educational presentations on RCR topics
 - Links to classroom resources and tips

Because the core foundation of the SARI program is highly dependent upon educational activities sponsored by programs and likely taught by faculty, the university offers train-the-trainer workshops. While most faculty are aware of the ways in which these important topics pertain to their own work, many feel unprepared to present these topics to students in a systematic way, or may be reluctant to moderate a discussion that ventures into moral or ethical territory. The first of these workshops, offered in April to 35 faculty as a two-part, six-hour workshop, prepared attendees to present an overview of RCR topics, identify the many resources that are available to support their efforts to teach RCR, and implement various teaching modalities, such as moderated discussion, case studies, or role playing.

National News in Research Ethics

CGS HOSTS DEANS' DIALOGUE ON ETHICS AND RCR EDUCATION

On July 12, 2009, the Council of Graduate Schools featured a "Deans' Dialogue" titled "Ethics Education and the Responsible Conduct of Research: What Works?" in conjunction with the [CGS New Deans Institute and Summer Workshop](#) in Quebec City. The session provided a forum in which attending deans and invited presenters could discuss the America COMPETES Act and its mandate that all graduate students, undergraduates, and postdoctoral researchers funded on NSF grants and traineeships receive "training and oversight in the responsible and ethical conduct of research." The session included the following presenters and topics:

Jean Feldman, Head of the Policy Office at the National Science Foundation, gave a [presentation](#) outlining the new responsibilities of universities under the America COMPETES Act. One of the key points Dr. Feldman stressed in her presentation was the scope of institutional responsibilities: universities must be prepared to demonstrate that all students and postdoctoral researchers who receive financial support from NSF receive appropriate training in the responsible conduct of research. In October 2009, NSF will make public more detailed language outlining these responsibilities and the policy will go into effect in January 2010.

Michael Mumford, Director of the Center for Applied Research at the University of Oklahoma, gave a presentation titled [“Sensemaking Approach to Ethics Instruction: Development and Validation.”](#) The presentation provided evidence supporting the view that effective ethics education must focus not only on ethical rules, but on decision-making processes.

Lisa Tedesco, Dean of the Graduate School at Emory University, provided information about Emory’s project within the larger Project for Scholarly Integrity in a presentation titled [“Ethics Education and the Responsible Conduct of Research: the Emory University Project.”](#) Dr. Tedesco gave particular emphasis to the comprehensive nature of Emory’s approach, including the institution’s efforts to conduct a comprehensive assessment of the institutional climate for research, identify areas of vulnerability, and fully integrate ethics education within all programs on campus.

Lee Williams, Vice President for Research and Dean of the Graduate College at the University of Oklahoma, gave a [presentation on RCR and Professional Ethics training](#) at his institution, which includes a model program on ethical decision-making for RCR. This course meets the requirements of the America COMPETES Act and will be used to develop training in research ethics for all members of the graduate community, beyond the areas supported by NSF and NIH.

Following the presentations, presenters and attendees engaged in an active discussion of topics related specifically to America COMPETES as well as broader issues related to the building of strong research cultures. Discussion topics included the interest of some universities in building training programs that go beyond the requirements of American COMPETES, and the particular training needs of international students.



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- [University of Alabama at Birmingham to Provide TA Training in RCR](#)
- [Emory Involves Division of Animal Resources in PSI Project](#)
- [NIH Issue Call for Comment on Conflicts of Interest](#)
- [National Academy of Engineering to Launch Online Ethics Center](#)
- [PRIM&R Plans Conference on Advancing Ethical Research](#)

Updates on the Project for Scholarly Integrity

UNIVERSITY OF ALABAMA AT BIRMINGHAM TO PROVIDE TA TRAINING IN RCR
Each fall, the Graduate School at the University of Alabama at Birmingham trains 30–40 new graduate TAs in the elements of pedagogy and curriculum development to equip

them to teach and mentor undergraduate students in courses in Biology, Chemistry, Physics, and Computer Science. This year, as part of UAB's Project for Scholarly Integrity, the TAs themselves will be instructed in an area of responsible conduct of research (for example, data integrity) and will then, as a group, create and implement a lesson plan related to that topic. The project recognizes the fact that today's graduate teaching assistants are on the front lines, as both instructors and role models, of issues involving scholarly integrity. The opportunity to develop lessons will encourage comprehensive thinking and discussion of the RCR topic among the TAs, in addition to enhancing their skills as future instructors. "We anticipate that this experience will prompt these future faculty to think more consciously about embedding ethics lessons in their courses as they assume more permanent teaching positions," says Dr. Bryan Noe, Dean of the UAB Graduate School. "Another benefit of our strategy is the engagement of undergraduate students in discussions of ethical behavior early in their academic careers." The effectiveness of this approach will be assessed using pre- and post-tests for both the TAs and their undergraduate students.

EMORY INVOLVES DIVISION OF ANIMAL RESOURCES IN PSI PROJECT

Emory University is currently working to coordinate communication on topics related to research ethics between the Graduate School and various schools and divisions throughout the campus. In late April, members of Emory's PSI implementation group, Dean and Project PI Lisa Tedesco, Associate Dean Mark Risjord, and Dr. Michelle Lampl met with Dr. Michael Huerkamp, Director of Emory's Division of Animal Resources (DAR), to discuss strategies to improve research climate across the university. Dean Tedesco reports that Dr. Huerkamp provided an overview of resources and tools that were specific to the ethics of research involving animals and in some cases, applicable to other programs. One area of common concern shared by the DAR and the PSI implementation group was the importance of creating a research climate in which ethics is valued. For example, the DAR has developed strategies in the orientation of facility users and in the training of graduate veterinarians for creating a laboratory environment that promotes ethical awareness and encourages difficult conversations about ethical issues surrounding animal research. Dr. Tedesco observed that some of these strategies can be applied to other programs. "Dr. Huerkamp's pedagogy includes historical context for the development of ethical standards, as well as use and reliance on consultation with colleagues and experts for problem solving when questions arise, and we plan to work with him to advance understanding of the issues for graduate students" reported Dr. Tedesco. More information about current programs to train DAR researchers can be found at the division's [website](#) and on the website of Emory's [Institutional Animal Care and Use Committee \(IACUC\)](#).



IN THIS ISSUE:

- [Recent Projects to Support Graduate Student Leadership in RCR](#)
- [New Blog on "Supply and Demand" in RCR Training on PSI Website](#)
- [AAAS-CAST Meeting on Ethics Education in Science](#)
- [Updated Edition of *On Being a Scientist* Published](#)
- [CGS Responds to OSTP's Request for Comment on "Scientific Integrity"](#)
- [Reminder: CGS Summer Workshop to Feature Session on "Ethics Education and the Responsible Conduct of Research"](#)

Updates on the Project for Scholarly Integrity

RECENT PROJECTS TO SUPPORT GRADUATE STUDENT LEADERSHIP IN RCR

Two awardee universities in the Project for Scholarly Integrity, Columbia and the University of Arizona, are currently implementing project plans that help graduate students become directly involved in research ethics education. Both of the projects described below give graduate students (as well as others in the university community) a leadership role in forums on research ethics.

[Columbia University](#) is appointing Research Ethics Fellows, a total of 24 Ph.D. students across disciplines. By Fall of 2009, the fellows will begin organizing discussions about specific issues and challenges related to the responsible conduct of research within their respective departments and fields. These discussions will provide a foundation for training workshops, brown-bag discussions, and other discipline-specific activities in research ethics and scholarly integrity to begin in the 2009-10 academic year. Henry Pinkham, Dean and co-PI, reported that the role of graduate students as Research Ethics Fellows working with fellow students and the faculty in their departments "allows us to engage students in addressing the critical research integrity issues and challenges for their discipline and subfields."

The Office for the Responsible Conduct of Research and the Graduate College at the [University of Arizona](#) are soliciting proposals to promote research integrity throughout the campus. The university plans to award 30 grants ranging from \$250 to \$750 to faculty, graduate students, and post-doctoral trainees for a diverse range of projects, including "creative ideas for building curricular materials," new courses, lessons within existing courses, electronic and web-based tools and resources, and outreach activities involving external speakers and presenters. The [Request for Proposals](#) for the grant program encourages applicants to consider general projects on research methodology as well as specific lessons on the ethical implications of certain types of research in fields such as genetics, vaccine development, and archaeology. Andrew Comrie, PI for the PSI

Project at Arizona, commented that “going through graduate students is a great way to get at the heart of campus needs in research ethics education.”

NEW BLOG ON “SUPPLY AND DEMAND” IN RCR TRAINING ON PSI WEBSITE

Melissa Anderson, Professor of Higher Education at the University of Minnesota and Director of the Postsecondary Education Institute recently contributed a [blog entry](#) to the PSI website. Drawing from her research experience on topics related to research integrity, postdoctoral and graduate training, and academy-industry relations, Dr. Anderson poses a number of challenging questions about academic research cultures. One of the current issues affecting scholarly integrity in university research cultures is a problem of “supply and demand,” Anderson contends, a gap between the resources provided by universities and the interest in those resources on the part of students and faculty. The blog provocatively asks members of the university community to assess the effectiveness of RCR training and to consider new ways of encouraging a shift in attitudes toward educational requirements. Those wishing to post a response to Dr. Anderson’s blog can do so by registering at www.scholarlyintegrity.org/RegisterUser.aspx



IN THIS ISSUE:

- [PSI Awardees Collaborate on Common Climate Assessment](#)
- [PSI Website to Incorporate AAAS-National Academies Resources on Scholarly Integrity](#)
- [May 2009 ORI Conference on Research Integrity in Niagara Falls](#)
- [CGS Hosts Meeting on National Research Ethics and RCR Resources](#)
- [Plenary Session on Professional and Research Ethics at MAGS Conference](#)

Updates on the Project for Scholarly Integrity

PSI AWARDEES COLLABORATE ON COMMON CLIMATE ASSESSMENT

In the March 17, 2009 meeting for PSI Awardee institutions, project PIs moved forward with plans to administer a common assessment survey at each of their institutions. Developed by Drs. Brian Martinson and Carol Thrush, the survey measures factors that are believed to correlate with the overall strengths and vulnerabilities of research cultures, and fulfills a project plan to collectively assess the participating universities’ research environments before full implementation of the individual project plans. The results of the survey, which awardees agreed to administer before or during the Fall of 2009, will allow institutions to gain a comprehensive assessment of their research environments and identify areas in need of future work. The survey will be made available to project affiliates and other interested universities via the PSI website later in 2009.

PSI WEBSITE TO INCORPORATE AAAS-NATIONAL ACADEMIES RESOURCES ON SCHOLARLY INTEGRITY

Since 2008, the American Association for the Advancement of Science (AAAS) and the National Academies have maintained a compilation of online resources on Scientific Misconduct and Research Integrity. AAAS and the National Academies have recently invited CGS to merge the resources on the AAAS website into the website of the Project for Scholarly Integrity (www.scholarlyintegrity.org). The merge will have the additional advantage of allowing researchers to use the PSI website's search function.

Recent and Upcoming Events

CGS HOSTS MEETING ON NATIONAL RESEARCH ETHICS AND RCR RESOURCES

On April 9, 2009, the Council of Graduate Schools hosted a meeting organized by Drs. Michael Kalichman (UC San Diego) and Phil Langlais (Old Dominion University) for developers of national resources on research ethics and RCR education. The purpose of the meeting was to share resources and ideas in the field of research ethics education and discuss new possibilities for future collaboration. Participants identified a number of priority areas in which future collaborative work is needed, including: assessing the outcomes of various approaches to training and education; addressing the particular issues that arise in the context of international research collaborations; and increasing and improving the resources currently available and under development for researchers and educators. Also discussed were strategies of supplementing regulatory structures with more positive approaches to strengthening research cultures.

PLENARY SESSION ON PROFESSIONAL AND RESEARCH ETHICS AT MAGS CONFERENCE

The April 2009 conference of the CGS Midwestern Association of Graduate Schools (MAGS) featured a plenary session devoted to the topic of Professional Integrity. The plenary speaker, Dr. Jason Borenstein, Director of Graduate Research Ethics Programs at the Georgia Institute of Technology, delivered a presentation entitled "Professional Ethics and Research Ethics in Science and Engineering." Dr. Borenstein discussed the important stakes behind graduate ethics training: training programs not only respond to the federal government's recent mandate to provide ethics training to graduate students and postdoctoral researchers, but also support values integral to the practice of science. The presentation also defined the potential content, goals, and format of an effective ethics program, and identified many of the most significant recent resources available on the topic, including books, journals, institutional programs and websites, and online training courses.



IN THIS ISSUE:

- **University Press Releases on PSI**
- ***Chemical and Engineering News* features PSI**
- **New “Blog” Posting on the Use of Video in RCR Training**
- **NSF’s Solicitation of Public Comment on America COMPETES Act**
- **Obama Administration’s Memorandum on “Scientific Integrity”**
- **RCR Dialogue at CGS Summer Workshop**

Updates on the Project for Scholarly Integrity

UNIVERSITY PRESS RELEASES ON PSI

A number of Awardees and Affiliates have issued press releases and articles describing their institutions’ involvement with the Project for Scholarly Integrity. These articles not only make individual projects more visible to university communities, they also draw attention to the national importance of scholarly integrity and the project’s nationwide effort to strengthen graduate research cultures. You can read these articles by clicking on the names of the institutions listed under the “Awardees” or “Affiliates” sections of the website’s list of “Participants,” or by accessing the following links:

Awardees:

Emory: http://www.graduateschool.emory.edu/about/announcements.php?entity_id=10

Michigan State University: <https://www.msu.edu/~rohler/rnfall08/CGSgrant.htm>

Penn State University: <http://live.psu.edu/story/37811>

University of Wisconsin: <http://www.news.wisc.edu/releases/15125>

Affiliates:

University of West Florida: <http://uwf.edu/graduate/psi.shtml>

Wake Forest University: <http://www.wfu.edu/news/release/2009.02.02.c.php>

Awardee and Affiliate universities that have issued similar press releases are invited to send the relevant links to Julia Kent at jkent@cgs.nche.edu.

CHEMICAL AND ENGINEERING NEWS FEATURES PSI

The March 2, 2009 issue of *Chemical and Engineering News* features an article on the Project for Scholarly Integrity, “Instilling Scholarly Integrity.” The article provides an overview of the project’s goals and includes comments by the PSI Program Officer at the Office of Research Integrity, Mr. Loc Nguyen-Khoa, and by two of the PI’s representing Awardee institutions, Dr. Karen Klomparens of Michigan State University and Dr. Lisa

Tedesco of Emory University. The full article can be accessed in vol. 87, issue 9 of the journal, available online at <http://pubs.acs.org/cen/education/87/8709education.html>

NEW “BLOG” POSTING ON THE USE OF VIDEO IN RCR TRAINING

A key feature of the Project for Scholarly Integrity Website is [an interactive “blog”](#) that allows project Awardees and Affiliates to communicate with each other and the broader graduate community on various topics in research ethics education. Dr. Jeffrey Engler, Co-PI at the University of Alabama at Birmingham (UAB), has written a blog on the use of video vignettes in RCR Training. Dr. Engler describes some of the advantages of using this method of training and provides links to video resources that he has developed with fellow PI, Dr. Bryan Noe, for research ethics training at UAB. The blog posting also includes a summary of presentations by Elizabeth Holmes, Paul Braunschweiler, and Lee Williams at the CGS Annual Meeting in December 2008 about RCR training resources based on video vignettes and case studies. Visitors to the blog page are invited to comment on the posting or to answer questions raised by Dr. Engler about the use of case studies in research ethics education. Those wishing to **post a comment to the blog** can do so by registering at <http://www.scholarlyintegrity.org/RegisterUser.aspx>.