

National Issues, Local Challenges

C. K. Gunsalus

National Center for Professional & Research Ethics

C. K. Gunsalus



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Some of NCPRE's Projects

- Ethics CORE
- Survey of Organizational Research Climate (SORC)
- Annual curriculum conference, with CPRBS
- Teaching RCR Certificate program (TRCR)
- Workshop on RCR Assessment, held jointly with National Academy of Engineering
- Materials development collaborations
- Outreach: Ethics Awareness Week, High School Ethics Programs , Faculty Ethics Summit

Ethics CORE

(Collaborative Online Resource Environment)



- National online ethics resource
- National competition
- www.NationalEthicsCenter.org
- Full range of instructional resources to support RCR
- Powerful federated search engine for searching literature; community features; social networking; permanent part of UI Library collection
- SORC: Tool to assess research integrity climate

Ethics CORE

Collaborative Online Resource Environment



- HOME
- MY HUB
- RESOURCES
- MEMBERS
- ABOUT
- SUPPORT
- RCR MODULES FROM CMDITR

Getting started with RCR

- > Help me get started
- > NCPRE best practices
- > CMDITR certification modules

Search Ethics Literature

- > Journal and Article Locator
- > Locate articles that *cite* an article

Search Ethics Resources

 Search

Filter by areas

- Topical Search
- Author
- Title Words

Select sources

- Research Articles
- Books
- CORE Site
- Web



RCR Education

Browse resources for RCR education.



Resources by Discipline

Browse resources by many of the varied disciplines available.



Codes of Ethics

Search codes of ethics for professional and academic associations and corporations.



Give to NCPRE

Donate and help support the best online resource for ethics education online.

Survey on Organizational Research Climate

coming soon

More

Introducing Ethics CORE

A short video highlighting the importance of ethics education and the features of the Ethics CORE platform. Includes student testimonials.

More

Ethics Unwrapped

Ethics Unwrapped is a series of free ethics teaching videos from The University of Texas Austin.

More

Ethics Awareness Week

Lecture videos from the Ethics Awareness Week.

More

Ethicana

Ethicana is an Anti-Corruption Education and Training Global ACET Project

More

Publications

CORE Issues in Professional and Research Ethics

A peer-reviewed article series from experts in professional

Ethics in the News

Famous HeLa cells get genetic closeup, and new data sharing rules - Science Insider

August 8, 2013 - Five months after it was hastily removed from the Internet in the face of harsh criticism, the genome of the widely used

Upcoming Events

APPE 2014 Annual Meeting Call for Papers

February 27-March 2, 2014, in Jacksonville, FL. Program

A Journey, Not a Destination

- Where are we?
- How did we get here?
- Thoughts about the next turns



“At the base of our investment in research lies the trust of the American people and the integrity of the scientific enterprise. If that trust is threatened ...then not only are the people placed at potential risk, but the welfare of science itself is undermined.”

Albert Gore, Jr.
Congressional Hearings on Fraud in Biomedical Research

“One can only judge the rare acts that have come to light as psychopathic behavior originating in minds that made very bad judgments—ethics aside—minds which in at least this one regard may be considered deranged.”

President, National Academy of Sciences

1981 Congressional Hearings on Fraud in Biomedical Research

Bad Apples & the Barrel



SCIENCE

Fraud in Science

Having acknowledged that, we must recognize that 99.9999 percent of reports are accurate and truthful, often in rapidly advancing frontiers where data are hard to collect. There is no evidence that the small number of cases that have surfaced require a fundamental change in procedures that have produced so much good science. To continue the great advances that are being made, we must accept that perfect behavior is a desirable but unattainable goal. Vigilance? Yes. Timidity? No.—DANIEL E. KOSHLAND, JR.

January 9, 1987

FRIDAY, APRIL 1, 1994
CONTAINS 10 PAGES, 100¢ PER COPY (EXCEPT FOR THE 10¢ PER COPY)

COLUMN ONE

Feeling Betrayed by Science

■ A scandal over faked data in a breast cancer study has left patients reeling and a pioneering doctor in disgrace. It also has heightened fears about human experiments.

By **SHERYL STOLBERG**
TIMES MEDICAL WRITER

When she read the news, the patient burst into tears.

The story documented flaws in a study that had helped change the course of breast cancer treatment. Results had been falsified. What was worse, the researchers conducting the clinical trial—part of a long-running and extremely important series of breast cancer studies—knew about the doctored data but remained silent.

In an extraordinary reaction, the National Cancer Institute on Tuesday demanded—and got—the resignation of the man in charge of the massive \$8-million-a-year project: Dr. Bernard Fisher, a pioneering 75-year-old surgeon who is a legend in breast cancer research. The NCI declared that no more women will be enrolled in the studies until an investigation is completed.

All of which left thousands of women who have breast cancer—and many of the doctors who treat them—feeling angry and betrayed.

The patient, a 60-year-old Los Angeles public relations specialist, had watched her mother die of the disease 30 years ago. In 1983, after receiving a diagnosis that she had breast cancer herself, she decided to have only the malignant lump removed—based in part on this project's finding that lumpectomy was as effective as mastectomy, in which the entire breast is removed.

Now, she is wondering if she made the right choice, even though experts insist that she did. She has lost faith in those who do medical research. "If you can't trust the people who are running this kind of trial," she asked, "who can you trust?"

Indeed, there are many questions surrounding the National Surgical Adjuvant Breast and Bowel Project—a three-decade-long research effort that has involved 5,000 doctors, 484 hospitals and more than 44,000 patients throughout the United States and Canada. The scandal has rocked the breast cancer community and raised serious concerns about quality control in human experiments.

Specialists are hurrying to reassure patients that, despite the discrepancies in the data, the basic conclusion of the study stands: A woman's entire breast need not be removed when she has cancer; lumpectomy is a safe alternative.

"It's much ado about nothing," said Dr. Susan M. Love, a nationally renowned expert who is director of the UCLA Breast Center. "There are multiple other studies showing the same thing. Even if you threw the whole study out, it still wouldn't change the fact that lumpectomy is just as good as mastectomy."

Please see **CANCER, A22**

“I believe there was an excessive level of collegiality and a higher level of tolerance than is now the case.”

Samuel Broder
Congressional Hearing
April 13, 1994

“But ‘fraud in science’ is not a real problem. This is because of the psychology of the perpetrators of fraud, and the self-checking nature of the system. The psychopathology of fraud is such that its perpetrators hardly ever contain themselves to manufacturing routine data. Instead, they doctor something important.”

Nobel Laureate

April 29, 1996 C&EN

Rethinking Unscientific Attitudes About Scientific Misconduct

By C. K. Gunsalus

MANY AMERICAN SCIENTISTS are fed up with press reports and questions from Congress and the public about scientific misconduct. The concern is drastically overblown, they say, and the government should spend less time and money investigating the few bad apples and concentrate on expanding appropriations for research. After all, some of the most highly publicized charges of misconduct eventually have been dismissed, these scientists note. Relatively few scientists have been found guilty of misconduct, so no elaborate investigative apparatus or intrusive federal rules are needed.

These feelings seem heartfelt and widely shared. What's worrisome is how unscientific they appear.

What's unscientific? Well, it's unscientific to make repeated assertions that scientific misconduct is an extremely small or non-existent problem when we have few or no reliable data supporting those claims. In an extreme example, a 1987 editorial in *Science* said: "99.9999% of all published reports are truthful and accurate, often in rapidly advancing frontiers where accurate data are difficult to collect."

There is no basis for this claim, despite the air of scientific precision conferred by the four digits follow-

support their assertions? The answer, I believe, is that some structural aspects of universities lead top scientists to minimize the existence of problems and to ignore the possibilities for misconduct that are inherent in research.

The first structural issue is what I call the paradox of the university: A good one is organized so that the active scientists are insulated from what it takes to run it, so that they can think creatively and do science. Productive scientists complain that they are plagued with administrative work and committees, but most of that work is focused on matters directly related to their professional lives—selecting their students and col-

"The leaders of science need to be more realistic about the nature of the enterprise that they supervise and defend."

"The public will support science only if it can trust the scientists and institutions that conduct research."

Institute of Medicine and National Research Council, Integrity in Scientific Research: Creating an Environment That Promotes Responsible Conduct

The committee found that existing data are insufficient to enable it to draw definitive conclusions as to which elements of the research environment promote integrity. ...

Empirical studies evaluating the ethical climate before and after implementation of specific policies or practices are lacking.

Integrity in Scientific Research: Creating an Environment That Promotes Responsible Conduct

Institutions seeking to create an environment that ... fosters integrity must

- establish and continuously monitor structures, processes, policies, and procedures that provide leadership in support of responsible conduct of research...
- *monitor and evaluate the institutional environment supporting integrity in the conduct of research and use this knowledge for continuous quality improvement.*

Executive Summary
(Emphasis added)

Plagiarism and Other Sins Seem Rife in Science Journals, a Digital Sleuth Finds

BY LILA GUTERMAN

FACULTY MEMBERS gnash their teeth and wring their hands when students plagiarize. They cry for offenders to be punished. But now an online text-search program directed at their own work suggests that professors in biomedicine may be just as guilty of paper-writing sins.

More than 70,000 article abstracts appeared disturbingly similar to other published work when scanned by a new search program, researchers at the University of Texas Southwestern Medical Center report in the current issue of *Nature*. The researchers examined 2,600 of these abstracts by hand and found 73 instances of what appears to be outright plagiarism: one author stealing another's work.

Many more examples existed that looked like double publishing, in which a researcher publishes identical papers in different journals.

Mounir Errami, one of the Texas scientists, said that as a result of this work, a "big shot" at "one of the most prestigious universities in the United States" was now under investigation by a top-tier journal in which he apparently published a plagiarized article. He declined to give further details because of the preliminary stage of the inquiry.

The search program, called eTBLAST, looked for similar language among papers listed in Medline, the online database of abstracts from biomedical journals. Mr. Errami, and his *Nature* co-author, Harold R. Garner Jr., turned it loose on seven million abstracts tagged by Medline as related to other literature in the database.

After getting 70,000 suspicious hits, the researchers began the slower process of checking each abstract manually; it has taken them months

to churn through the 2,600 items. They have placed the entire set of 70,000 abstracts in a public database called Déjà Vu (<http://spore.swmed.edu/dejavu>), hoping the scientific community will now pitch in with some public peer review.

The detection program is sorely needed, said Mr. Errami. Apart from violating ethical norms and skewing research efforts, repeat publication could actually be dangerous to patients. If a clinical trial appears more than once, it would appear that more patients have undergone an experimental treatment than truly have. "Then you instill a false sense of safety for the drug," says Mr. Errami, an instructor at Texas Southwestern's division of translational research.

DOUBLE TROUBLE

Researchers originally devel-

oped the text-comparison program to allow scientists to scan the vast medical literature and find work closely related to their own.

But Jonathan D. Wren, who had been a graduate student in Mr. Garner's laboratory, suggested in 2006 that eTBLAST could check for duplicate publication after a manuscript he was considering for a journal turned out to be oddly familiar. Mr. Wren, who is an associate editor of *Bioinformatics* and a scientist at the Oklahoma Medical Research Foundation, recalls that when he sent the manuscript for peer review, one reader responded by saying, "I've reviewed this paper before." Mr. Wren and other editors of *Bioinformatics* now use eTBLAST routinely, he told *The Chronicle*.

Journals' policies forbid repeat publication and plagiarism, but there are gray areas. In papers that build upon one another, the sections describing the experimental

methods or the background information are often almost identical.

Indeed, when the Texas Southwestern researchers looked at the individual abstracts that eTBLAST had flagged, they found that approximately one-quarter were legitimate, often extensions of other studies that had been published with similar abstracts.

But others appeared to be unethical, like when one abstract appeared in two journals at the same time. The flagged abstracts sometimes appeared in high-profile journals—including one in *Nature*—though many apparent plagiarists published in less-influential journals, perhaps to evade detection, Mr. Errami says.

Mr. Errami and Mr. Garner found that the rate of duplication has increased over the years. They hope that their search tool, or others like it, will deter further increases.

Both NSF and NIH introduce RCR requirements.



title oversight.

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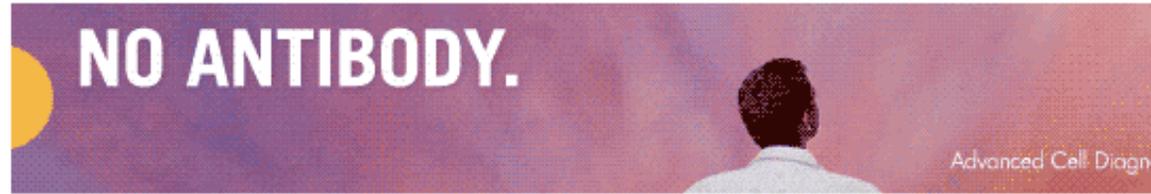
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Fraud Breeds Retractions

An analysis of retractions dating back to 1977 shows that most papers are retracted due to misconduct.

By Sabrina Richards | October 1, 2012

2 Comments Like 18 +1 0 Link this Stumble Tweet this



Wikimedia Commons, Evan-Amos

Scientific misconduct contributes to more retractions than previously realized, according to a [new analysis](#) published today (October 1) in *Proceedings of the National Academy of Sciences*. Using retractions indexed in Pubmed, researchers found that fabrication, falsification, and duplication led to more retractions than error or plagiarism.

"Tracking down these corrections and retractions to find out what is going on is really innovative," said [David Resnik](#), a bioethicist at the National Institute of Environmental Health Sciences, who did not participate in the research. It turns out

September 30, 2012

Fake Peer Reviews, Fool Journals

By Josh Fischman

Scientists appear to have prepublication



SCIENTIFIC INTEGRITY

Questions About Go Back Years

Statement of Allison C. Lerner

Inspector General

Since 2003, our investigations have resulted in 120 findings of research misconduct, more than 80 percent of which found plagiarism. Eighty nine percent of plagiarism allegations involved faculty while only 11 percent involved graduate students/post docs. In contrast, 53 percent of falsification/fabrication allegations involved graduate students/post docs, and 47 percent involved faculty. In the past two years, we have had 24 allegations of data manipulation involving students and post docs, which is equal to the number of similar allegations received from 2003-2010.

While NSF has been responsive to the recommendations contained in our research misconduct investigation reports, the actions it takes address incidents after the fact. Extrapolating the number of allegations OIG has received across the 45,000 proposals NSF receives annually, suggests 1300 proposals could contain plagiarism and 450-900 proposals could contain problematic data. Affirmative steps are necessary to counter the trends of increasing integrity related violations. Since NSF funds research in virtually every non-medical research discipline, OIG's Office of Inspector General (OIG) work is to promote the efficiency and effectiveness of the National Science Foundation's (NSF) programs and operations and to safeguard their integrity. My office is committed to providing rigorous, independent oversight of NSF, and I welcome the chance to discuss my office's work.

False positives: fraud and misconduct are threatening scientific research

High-profile cases and modern technology are putting scientific deceit under the microscope



Alok Jha, science correspondent
The Guardian, Thursday 13 September 2012 13.12 EDT

 [Jump to comments \(241\)](#)



The Dutch psychologist Diederik Stapel was found to have published fabricated data in 30 peer-reviewed papers. Photograph: Hollandse Hoogte/Boxem

Dirk Smeesters had spent several years of his career as a social psychologist at Erasmus University in Rotterdam studying how consumers behaved in different situations. Did colour have an effect on what they bought? How did death-related stories in the media affect how people picked products? And was it better to use supermodels in cosmetics

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Featured Research

from universities, journals, and other organizations

Scientific misconduct is real, but rare

Date: February 13, 2013

Source: Boston University College of Arts & Sciences

Summary: While instances of scientific misconduct in the publication of research findings is a matter of serious concern, such occurrences are extremely rare, according to new research.

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Richard Primack, Boston University professor of biology and editor-in-chief of the journal *Biological Conservation*, observes in the current issue of that publication that while instances of scientific misconduct in the publication of research findings is a matter of serious concern, such occurrences are extremely rare. Primack shares his views on this matter in an editorial in the current issue of *Biological Conservation*.

Primack's observations are related to a case where certain results from a paper published in *Biological Conservation* had to be removed and the paper revised

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Science In Mind

04/08/2013 | 3:50 PM

Harvard investigation of stem cell scientific misconduct provides insight into secretive process

By Carolyn Y. Johnson / Globe Staff

5 43 7 0

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When a former stem cell researcher at the Joslin Diabetes Center was found to have committed scientific misconduct last year, the report detailing her wrongdoing was brief and succinct. An investigation had revealed that Shane Mayack reused images from unrelated experiments in two scientific papers, according to a note government authorities published in the [Federal Register in August](#).

The full report of the internal Harvard Medical School investigation on which the federal authorities based their finding has now been released to the Globe through a Freedom of Information Act request. It provides deeper insight into how this particular case of misconduct was first detected and gives a sense of how the highly secretive investigations of serious, potentially career-ending allegations unfurl.

Previous post

[Two reports detail woeful state of Europe's seas](#)

Next post

[US Navy's Arctic strategy forecasts ice-free shipping routes](#)

NATURE NEWS BLOG

Evidence of misconduct found against cardiologist

24 Feb 2014 | 18:03 BST | Posted by [alison abbott](#) | Category: [Ethics, Health and medicine](#)

The scientific community has long been [sceptical of claims](#) made by German cardiologist Bodo-Eckehard Strauer that stem cells derived from bone-marrow cells can repair damage in diseased hearts, and [critical of his clinical trials](#).

Now an investigation committee at the University of Düsseldorf, where he worked until his retirement in 2009, has found evidence of scientific misconduct in papers reporting the trials' findings, according to a statement the university sent to reporters by e-mail.

The university has referred the committee's report to an internal disciplinary procedure, which is not expected to draw a conclusion until next year. In the meantime the university is providing no further public information about the nature of the misconduct — nor the outcome of a parallel investigation into the whether clinical trials involving 537 patients complied with rules of good clinical practice and the provisions of the German Medicines Act. But Benedikt Pannen, acting chief executive of the University Hospital in Düsseldorf, says that the report of the clinical investigation had been sent to the city's public prosecutors.

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3 April 2014, Volume 508 Number 7494 pp7-144

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— Michael Lerman

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— James Vance

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Misconduct Found in STAP Case

An investigating committee at Japan's RIKEN research center finds evidence of falsification and fabrication in two recent *Nature* papers that touted a new way to induce pluripotency.

By Jef Akst | April 2, 2014

1 Comment

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WIKIMEDIA, [BRIAN TURNER](#)

After more than two [months of discussion](#), continued reports from scientists about their [inability to replicate](#) the results (with the exception of [a reported success](#)), and accusations of image duplication, among other issues, an investigation led by officials at Japan's RIKEN research center yesterday (April 1) concluded that scientific misconduct was at play in the publication of [stimulus-triggered acquisition of pluripotency \(STAP\)](#). Specifically, the committee found evidence of data falsification and fabrication, but it did not call for the papers to be retracted. Such a move, along with any other disciplinary actions deemed

necessary, will be determined by a separate committee.

Retraction Watch

Novartis Diovan scandal claims two more papers

with 5 comments

A complicated story involving Novartis's valsartan (Diovan) has led to the retraction of two more papers, one cascading from the other.

Last September, *The Lancet* [retracted the Jikei Heart Study](#) after a [slew of retractions of related work](#) prompted an [investigation of valsartan research](#). That investigation found [evidence of data manipulation](#) and the failure of one researcher to [note his Novartis affiliation](#). The company [has apologized](#).

Here's [one retraction](#), from *Diabetes Care*, for "The Shiga Microalbuminuria Reduction Trial (SMART) Group. Reduction of Microalbuminuria in Patients With Type 2 Diabetes: The Shiga Microalbuminuria Reduction Trial (SMART):"

[Read the rest of this entry »](#)



Written by ivanoransky
April 2, 2014 at 11:30 am

Posted in [cardiology retractions](#), [diabetes](#), [diabetes care](#), [faked data](#), [hypertension research](#), [japan retractions](#), [nature publishing group](#), [society journal retractions](#)

The Cycle

- Problem
- Scandal
- Attention
- Response: Rules, Regulations
- Problem
- Scandal
- Attention
- Response...

Net Effect

- Infectious cynicism
- Erosion of trust
- Increased regulation (in pursuit of accountability)
- Overhead, administrators increase
- Check-the-box compliance mentality
- More cynicism

Individual Issues

- Motivation
- Interest
- Ambition
- Time
- Good Reputation
- Environment

A Lot Going On...

- Bad conduct catches attention
- Human judgment and ambition
 - ▶ Cognitive biases
 - ▶ Pressures, ambition
- Systemic factors
 - ▶ Funding competition, conservative review
 - ▶ Reward systems, institutional / individual
 - ▶ Institutional leadership, structures

Research Tells Us:

“The amount of cheating in which human beings are willing to engage depends on the structure of our daily environment”

The Honest Truth about Dishonesty

Ariely, 2013

Systemic Issues

- Winner-takes-all (“pyramid scheme”)
- Scientific focus / belief in own work (constructive narcissism)
- Verification bias
- System discourages cooperation
- Conservative grant review
- Institutional structures: diffusion of responsibility/authority
- Etc.

As Once Put...

*“Well, sure it’s sleazy
and unacceptable,
but it’s not misconduct.”*

Challenges

- Combating check-the-box mentality
- Scalability, documentation
- Assessing what people are learning
- Reinforcing the integrity of the research environment

Research Integrity Education Issues

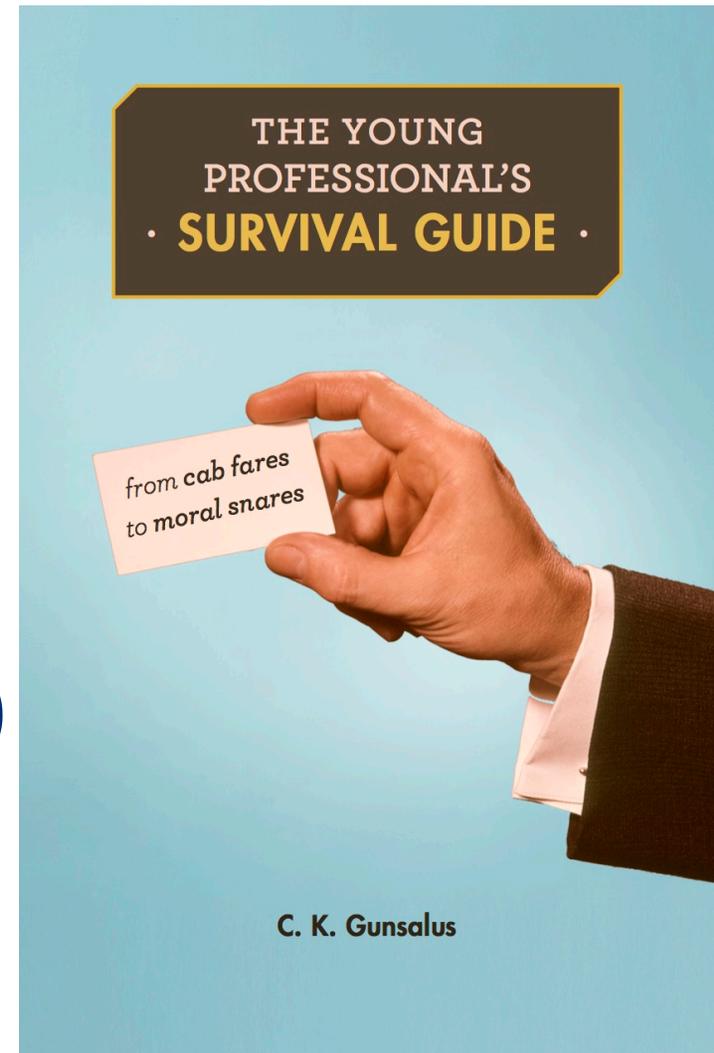
- Format
- Frequency
- Media
 - ▶ In person? On-line? Blended?
- Audience
 - ▶ Who?
 - ▶ Within disciplines or cross-disciplinary?
 - ▶ Level of experience?
- Topics
 - ▶ RCR only or broader “survival skills”?
 - ▶ Questionable practices? Social responsibility?
 - ▶ Safety culture?
 - ▶ Ethics vs. Compliance?
- Focus
 - ▶ Generic or Situated?

Please Note...

- Environment, incentives and pressures can encourage poor practice
- Personal responsibility for one's own actions doesn't change
- These factors affect whether it's harder or easier to perceive and then do the right thing
- The responsibilities of leaders and mentors is to create, maintain an environment that cultivates and supports the best and highest standards

YPSG Career TRAGEDIES

- **T**emptation
- **R**ationalization
- **A**mbition
- **G**roup / peer pressure / authority pressure
- **E**ntitlement, sense of
- **D**eception (of yourself, of others)
- **I**ncrementalism
- **E**mbarrassment
- **S**tupid systems



Status

- Growing RCR programs, offerings, resources
- Some driven by regulations, some by scandal, some by individual passion
- Some empirical research emerging
- The problems RCR education addresses aren't going away

Questions

- How do we know if what we're doing makes a difference?
- What's the goal? How will we get there?

New Directions

- Empirical research & improved understanding:
 - ▶ efficacy of educational approaches
 - ▶ effects of environment and peers
 - ▶ decision-making, cognitive errors and biases
- Emerging tools
 - ▶ SORC
 - ▶ Research-based approaches



Mumford's Findings: Research-Based Ethics Education

- Active, cooperative, iterative
- Relatively short cases
- Emotional impact; real people, real life
- Positive as well as negative examples
- Analysis modeled and practiced
- Strategies for response
- Labels
- Forecasting (anticipating consequences)
- Emotional regulation; self-reflection

M. D. Mumford et al.,
Ethics Behav. 17, 337
(2007).

M. D. Mumford et al.,
Ethics Behav. 18, 315
(2008).

Put Another Way:

It's about the audience.

A Grad Student's Dilemmas

- 1. How do you decide if something you've been asked to do is wrong?** What if you just don't know enough and it is not your place to ask questions?
2. When an objection may seriously harm your relationship with those above you, how do you decide when to avert your gaze or quietly extricate yourself and **when must you report the problem to the proper authority?**
- 3. How do you know when to draw the line?** If you have serious misgivings about something you are asked to do, how serious should it be before you raise questions or refuse to participate? What if the response to your objections is "everybody does it"? What if everybody else is doing it?
4. What do you do when **someone with power over you** is doing things you know are wrong, and is **pressuring you to participate?** Or if you stumble across what you think is serious misconduct in your environment? What if the people doing those bad or illegal acts are your friends? What if it is your boss? How do you do the right thing and survive the experience? Or even just avoid participating in the bad acts? If it becomes necessary, how do you blow the whistle and still have a career afterwards?
- 5. What if you see no good choices in a situation?** How do you select among a set of terrible options to find the least bad one? How do you reconcile your bad situation and your self image as a good person?
- 6. How do you tell when you've crossed the ethical line and are rationalizing?**

Real-World Needs

1. How to have a dispute professionally
2. How to maneuver in the trenches for getting credit and giving it vs. the formal rules of authorship
3. How to choose a mentor and colleagues for character
4. The line between making your data look "pretty" and manipulating/altering data and images
5. Finding the line between inappropriate self-promotion and taking care of advancing your career sensibly
6. How to get useful advice, and recognize it, when you encounter a problem

2MC (Two-Minute Challenge)

I had just become a post doc for a PI who gave me data on 50 subjects to work with. However, the research coordinator, who was resigning, told me that fMRI scans had only been done on 6 of the 50 subjects and that the results did not support the PI's hypotheses. I felt like I had just been handed a smoking gun, and wanted out immediately.

What are the issues; what should the post doc do?

Based on an interview by Joan Sieber

2MC: Authorship

You are a beginning graduate student. Your advisor asks you to proofread and check the correspondence between numbers in a data sheet and a manuscript. It's by one of the postdocs in your group. All of the work described in the paper was completed before you arrived on campus. You do as you are asked, verifying that all the numbers were transferred correctly to the paper from the data sheet and suggesting some minor editorial changes. Your advisor then sends you a note asking you to affirm that the presentation of data in the manuscript is accurate, as best you can tell.

A week or so later, you learn that the paper was submitted for publication the day after your proofreading was complete and accepted for publication not long thereafter. The authors on the paper are the postdoc and you.

What are the issues in this situation and what, if anything, should you do?

Based on a published research integrity investigation report.

TWO MINUTE CHALLENGE: AUTHORSHIP New Kid on Project

You are a beginning graduate student, having started in the program six months ago. Your advisor hands you a manuscript by one of the postdocs in your group and asks you to check the correspondence between numbers in a data sheet and the paper and to proofread it carefully. All of the work described in the paper was completed before you arrived on campus. You do as you are asked, verifying that all the numbers were transferred correctly to the paper from the data sheet and suggesting some minor editorial changes. Your advisor then sends you and the postdoc the following note:

Your name: You need to send me an email stating that you have examined the data with Dr. PostDoc and find the presentation of data in the manuscript to be accurate (as best you can tell.)

Postdoc's name: upon discussion with [your name], after you are done modifying the manuscript with figures, etc., send me a separate email note stating that you feel the manuscript is ready for journal submission to enable me to confirm that with the editor-in-chief.

A week or so later, you learn that the paper was submitted for publication the day after your proofreading was complete and accepted for publication not long thereafter. The authors on the paper are the postdoc and you. What are the issues in this situation and what, if anything, should you do?

By C.K. Gunsalus, Based on the investigation report dated 4/18/08 and available at <http://news.unc.purdue.edu/x/2008b/080718PurdueReport.pdf>.

Issues

Do you qualify for authorship?

How can you find out?

If you do not qualify, how can you get your name taken off the article without alienating your advisor?

Rules and Regulations

Journal policies on authorship

University policies on research integrity

Federal regulations on research integrity

Questions

What is the editorial policy of the journal to which the manuscript was submitted?

Do you qualify as an author under that policy?

Is this just a perk of being in this lab?

If asked to sign a copyright form that specifies your contributions to the paper, what will you say?

Are you comfortable being listed as an author on this paper?

Resources

Campus and federal regulations

Research integrity officer on campus

Mentor

Colleagues

Parents

National ethics center website

Options

Add the paper to your CV right away

Talk to a mentor or someone you trust about whether this is a problem and what you might do

Talk to the research integrity officer on your campus

Talk with the PI and say you do not think you qualify for authorship

Talk with the graduate advisor in your department for advice

Takeaway Lessons:

- 1) Authorship carries privileges and responsibilities. It is your obligation to stand behind publications that have your name on them. If you are not able to do that, you should not be an author.
- 2) Getting help. If you are uncomfortable with what your advisor has asked you to do, or has later notified you has already taken place, you need to know how to get assistance.

And what about that barrel?



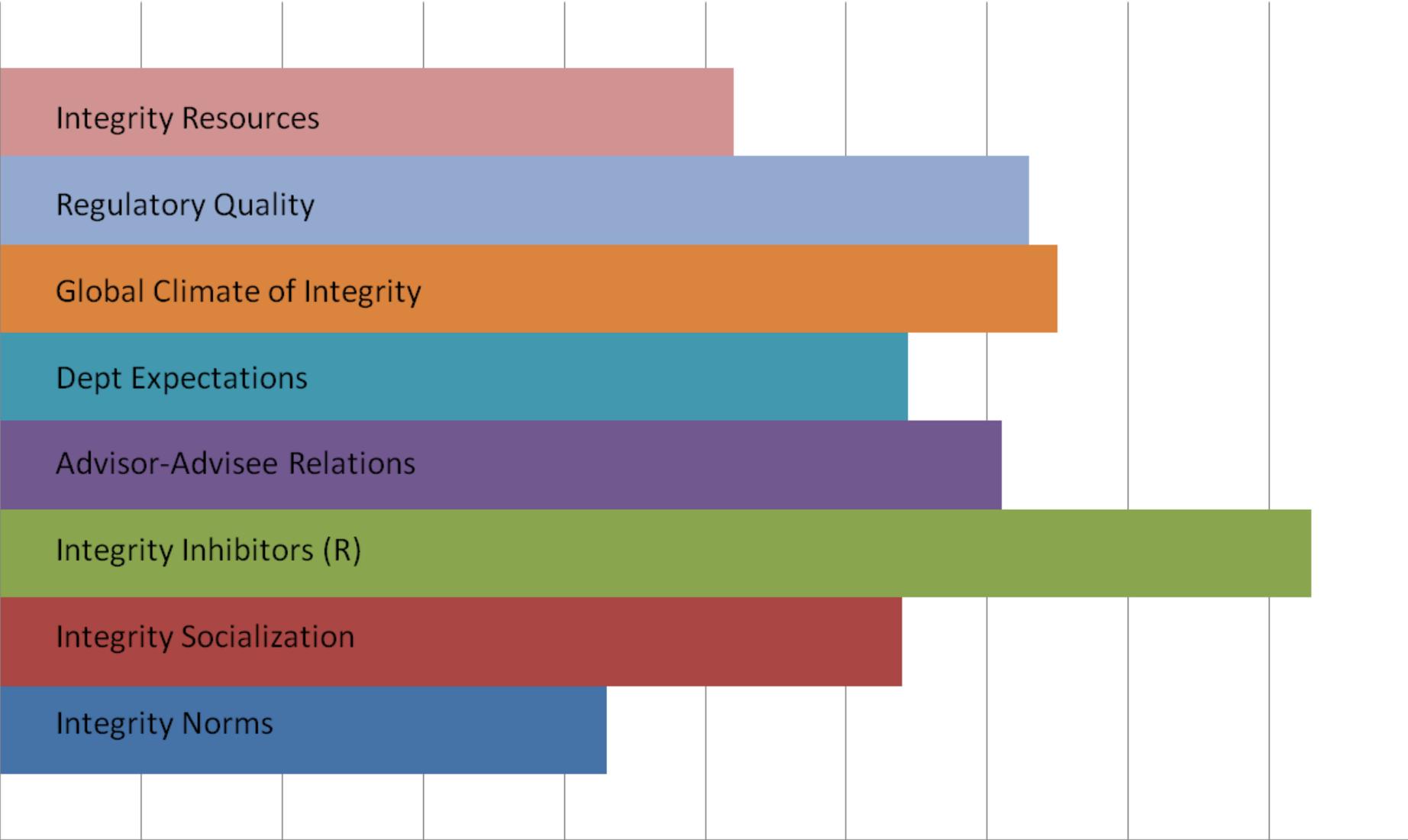
Survey of Organizational Research Climate (SORC)

- Measures key institutional-level factors to deal with threats to research integrity
- Statistically validated with large sample
- Correlation between climate scores and individually-reported research behaviors
- Developed and validated with CGS and ORI support
- Benchmarks, data for institutional leaders
- Ability to measure success of efforts over time

“Dashboard” report – Dept “A”

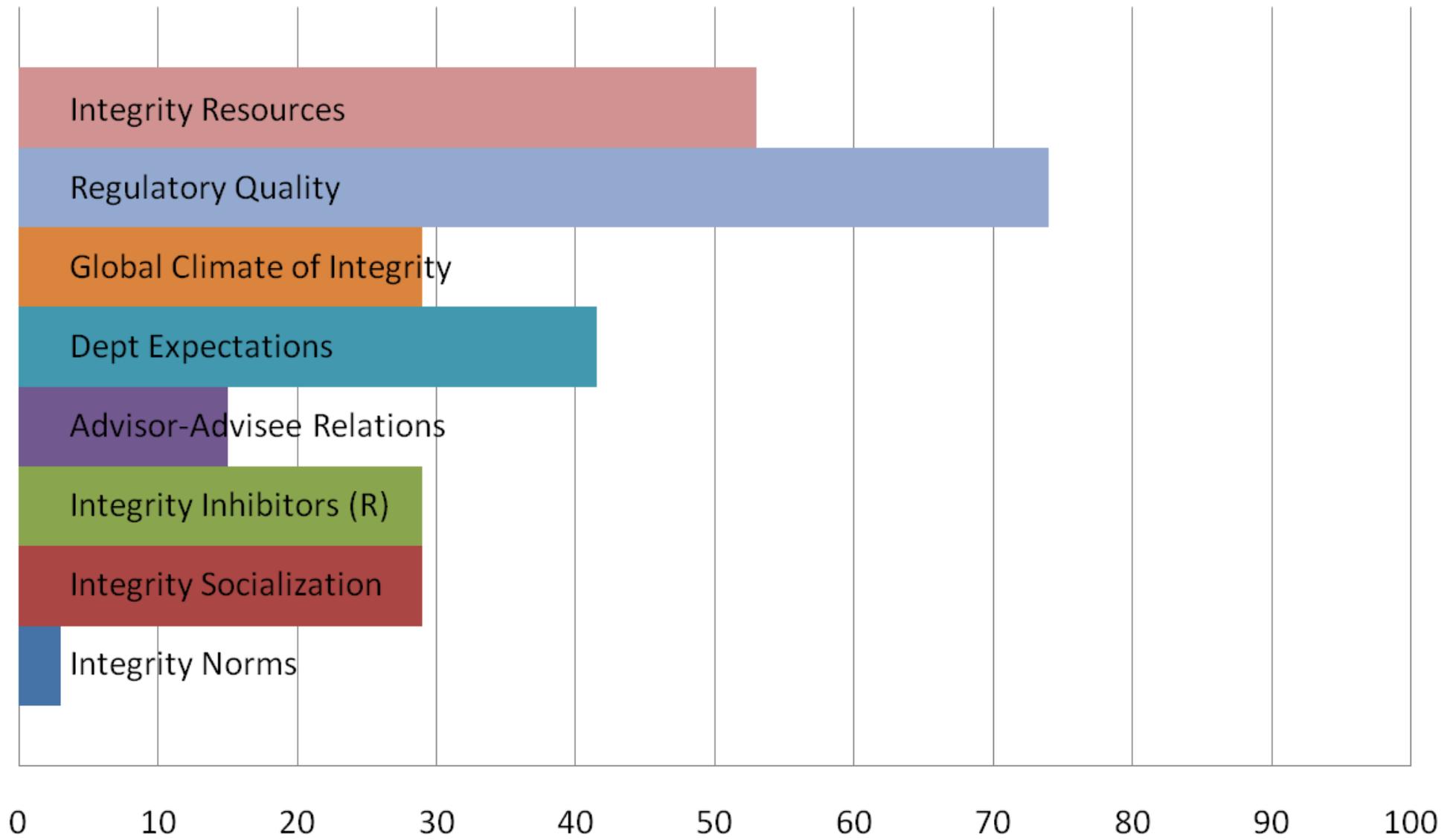
Graduate Program:	Department A			Field of Study:			
N of Cases:	16			Broad Field of Study:			
	Your Department's Results			Comparative Results (Relative to Avg)			
			Program's	All Depts	Field of	Broad Field	
	Average	Percent ≥ 4.5	Percentile	75th	Study	of Study	University
Integrity Climate Scales	Score	(Scale of 1-5)	Rank	Percentile	Average	Average	Average
Integrity Norms	4.15	16.7%	43	4.28	4.15	4.17	4.17
Integrity Socialization	3.63	15.4%	64	3.73	3.63	3.50	3.52
Integrity Inhibitors	4.42	54.5%	93	4.16	4.42	4.03	3.94
Advisor-Advisee Relations	4.04	21.4%	71	4.06	4.04	3.89	3.90
Dept Expectations	4.00	35.7%	64	4.04	4.00	3.70	3.83
Global Climate of Integrity	4.47	60.0%	75	4.47	4.47	4.26	4.34
Regulatory Quality	3.90	28.6%	73	3.91	3.90	3.72	3.72
Integrity Resources	3.43	33.3%	52	3.63	3.43	3.43	3.42

Department A Percentile Rank



0 10 20 30 40 50 60 70 80 90 100

Department B Percentile Rank



SORC Predictive Validity

Are researchers who perceive more hospitable research climates more likely to engage in more desirable research behavior?

- ▶ SORC scores predict desirable, undesirable research behaviors
- ▶ Short answer: *Yes*

A. L. Crain, B. C. Martinson, C. R. Thrush, Relationships Between the Survey of Organizational Research Climate (SORC) and Self-Reported Research Practices, Journal of Science and Engineering Ethics, 2013.

SORC Predictive Validity

Are shared perceptions of the research climate related to research behavior? What about individual differences relative to shared perceptions in a department?

- aggregate of all researchers in a department
- individual perspectives relative to department aggregate

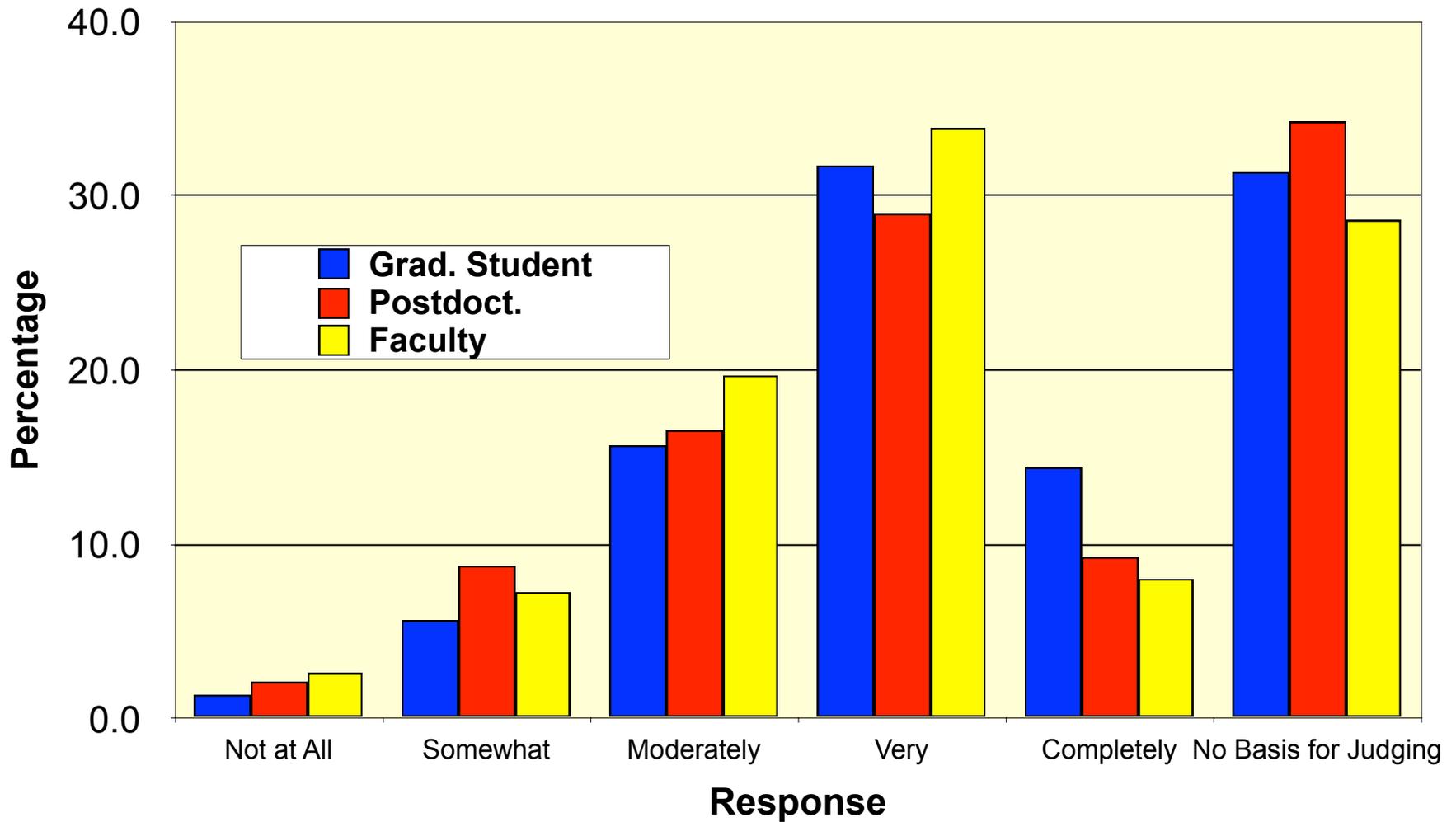
➔ Short answer: *Yes, climate is at least as important as individual perceptions*

A. L. Crain, B. C. Martinson, C. R. Thrush, *Relationships Between the Survey of Organizational Research Climate (SORC) and Self-Reported Research Practices*, *Journal of Science and Engineering Ethics*, 2013.

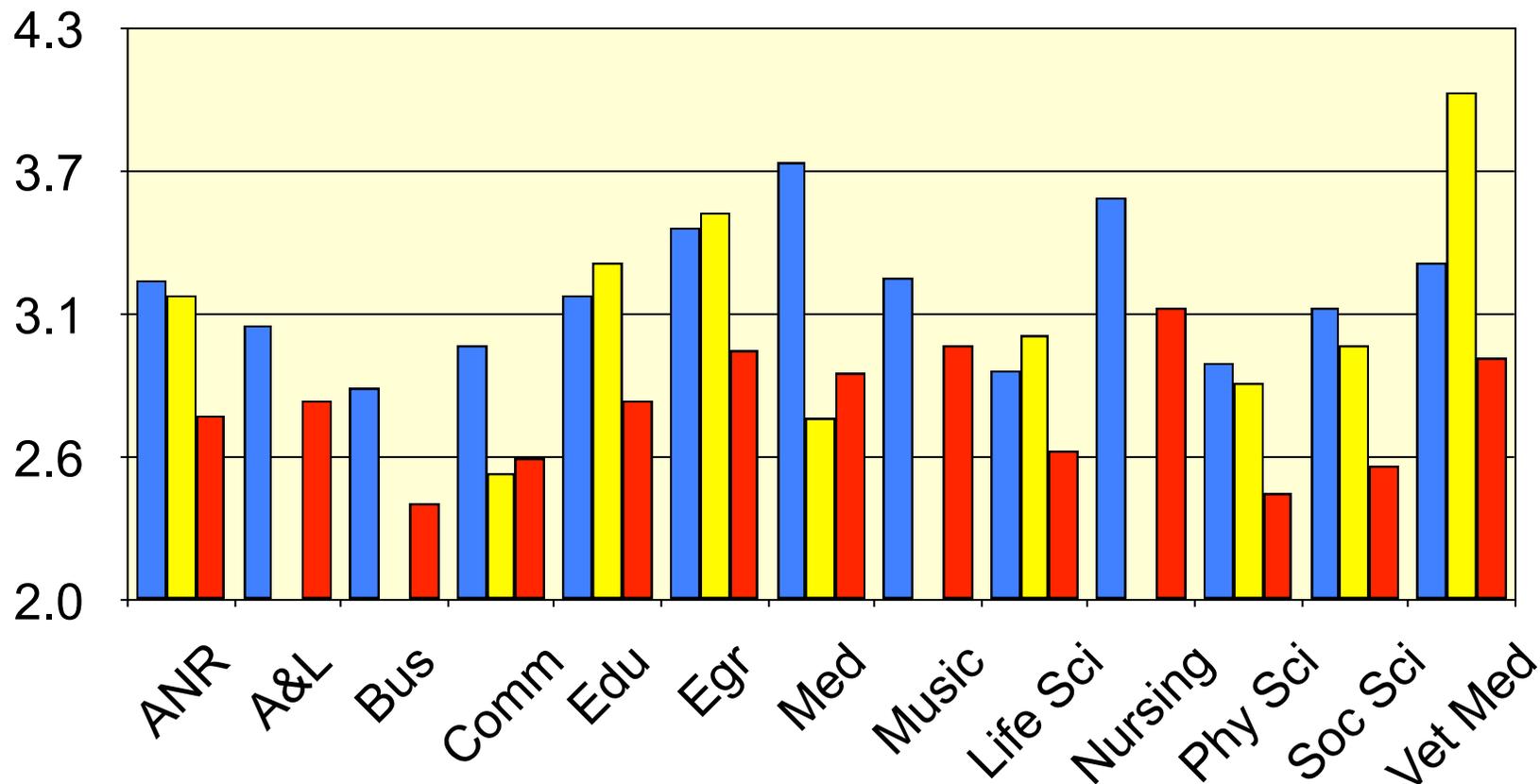
Feasibility of Implementation

- Fielded in 40 AHCs for validation study
 - ▶ Response rate ~45%
- Fielded and developed into feedback for institutional leaders in universities – CGS/PSI project
 - ▶ Response rate ~ 50%
- Michigan State University, Pennsylvania State University, University of Wisconsin – Madison
- University of Alabama Birmingham, University of Arizona, University of West Florida, Columbia, Emory

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



How beneficial would it be for people in your department / program to receive additional instruction?



Messages

- If the needs and interests of the audiences aren't factored into RCR program designs, we're wasting our time.
- We must think about the barrel: what do you know about your environment, and what metrics are you/can you use to assess it over time?
- Personal and institutional ownership, leadership provide clarity on goals and directions in a changing environment.

Collaborate With Us!

National Center for Professional and Research Ethics

Home of Ethics CORE, national online ethics resource center

Collaborations Director:

Gene Amberg

gamberg@illinois.edu

NationalEthicsCenter.org

*Creating communities of
professionally responsible practice.*