



Moral and Economic Incentives of Investigating & Reporting Allegations of Research Misconduct

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Dismissal of research misconduct charges in several high profile cases has resulted in renewed efforts by the federal government to develop uniform policies for all agencies regarding the reporting and investigating allegations of research misconduct. Almost every aspect of this issue is the subject of controversy, including the definition of misconduct, how it should be investigated and who should conduct the investigations. Here we consider how economic incentives impact research misconduct investigations and whether universities are disinterested parties in these investigations.

MORAL AND ECONOMIC INCENTIVES OF DISHONEST RESEARCHERS

The common wisdom is that most researchers who engage in misconduct do so for pecuniary reasons—to secure grant funding, to improve their financial status, i.e., promotion, annual performance assessment, to achieve job security, i.e., tenure or continued salary support, to earn an advanced degree or to secure a job, or to enhance their professional reputations. Dishonest researchers benefit from misconduct by appearing to be more successful than they really are, thus giving themselves a competitive advantage over honest researchers.

The countervailing costs of misconduct are both moral and pecuniary. Misconduct does appear to impose a moral cost on some dishonest researchers. The moral costs of misconduct depend on self-recognition of unethical behavior by the dishonest researcher and the shame resulting from the moral condemnation of peers and others.

The monetary costs of misconduct depend on two factors: the likelihood of detection and the pecuniary consequences of conviction. Because of the moral costs, the pecuniary benefits of misconduct may need to exceed the costs of misconduct by more than just a nominal amount to induce dishonest behavior.

The likelihood of detection of research misconduct depends on the actions of two parties: the whistleblower and the investigating institution. Under current DHHS and NSF policy, the university or other research organization has the primary responsibility for investigating misconduct and for sanctioning dishonest researchers, although additional sanctions may be imposed by these agencies.

CONFLICTING INCENTIVES FOR THE INVESTIGATING INSTITUTION

Universities and dishonest researchers often share a common pecuniary benefit in acts of misconduct. Often the injured parties in an act of misconduct are researchers at other institutions whose efforts to obtain funding are diminished by the unwarranted competitive advantage

conferred by the misconduct. Thus, as a practical matter, research misconduct, if successfully executed, should result in pecuniary gains for both the dishonest university researchers and their universities.

Since universities may be reluctant to kill the faculty geese who are laying the golden funding eggs, the economic incentives underlying the current federal policy of entrusting misconduct investigations to the host university are fraught with potential conflicts of interest. Universities have little financial incentive to detect and punish misconduct when the most common external sanction is debarment from submitting grants for some time period—resulting in even more financial loss. Certainly, no university has a financial incentive to be more honest than it perceives its competitors to be, since greater than average honesty would further diminish competitiveness.

University integrity officers charged with investigating allegations of misconduct usually are housed in research administration offices. The main goal of many research integrity officers is to protect the institution from the irresponsible actions (research misconduct) of its faculty, i.e., to protect the relationship between the university and funding agencies.

Were it not for one additional actor, the economics of research misconduct would predict that publicly identified cases of research misconduct would be rare and largely restricted to instances where detection occurred outside the university of the dishonest researcher and therefore could not be covered up—this actor is the whistleblower.

MORAL AND ECONOMIC INCENTIVES OF WHISTLEBLOWERS

Whistleblowers face a set of economic incentives that are the mirror image of those faced by the dishonest researcher. The whistleblower could receive both moral and pecuniary benefits from reporting misconduct; however, pecuniary benefits are rare. According to the survey on the "Consequences of Whistleblowing for the Whistleblower in Misconduct in Science Cases", "Not a single whistleblower reported that their whistleblowing had a positive impact on their careers."¹ Whistleblowers in research appear to be primarily motivated by ethics, and thus probably enjoy some moral benefit when the act results in successful resolution of the misconduct—although only about 1 in 6 allegations result in a misconduct finding.

Conversely, whistleblowing clearly has costs; most whistleblowers report at least some disruption to their careers. Significant costs to whistleblowers are not rare, up to and including blackballing, demotion or loss of promotion, adverse working conditions, and job loss. Although some minimal efforts are being made to protect whistleblowers, mostly in the form of whistleblower protection requirements by federal agencies, under current circumstances the average whistleblower can be expected to suffer some pecuniary loss as a result of reporting research misconduct. The majority of individuals making misconduct reports will be either those who are unaware of the costs of whistleblowing or those for whom the moral benefits of reporting misconduct are very high.

INTERACTION OF THE PARTIES

Cases in which both parties perceive each other as unreasonable and even reprehensible need to be handled as impartially and objectively as possible. However, current federal policy places responsibility for conducting an investigation in the hands of the host university which has its own powerful interests. Since the misconduct may result in an unfair competitive advantage that benefits both the researcher and the institution, economic incentives may influence the conduct of the investigating university at two levels, university legal counsel and the integrity officers investigating allegations under Federal Compliance Assurances.

Compounding this potential threat to impartiality is the standard practice of employing an inquisitional model of investigation which relies on a neutral expert panel of peers to conduct an investigation on behalf of the university. The inquisitional model normally abridges the due process rights of the parties by denying the right to call and cross-examine witnesses. The inquisitional model is designed to protect low-status whistleblowers from intimidating cross-examination by high-status respondents or to protect the identity of a whistleblower. Further, the inquisitional model emphasizes scientific judgment over adversarial argument.

The chief weakness of the inquisitional model is that it requires scrupulously fair and impartial panel members, integrity officers and legal counsel. Even in very large universities, it can be difficult to assemble a panel which has both the necessary scientific expertise and is also completely neutral to both of the parties.

Institutional integrity officers choose members of investigating panels. Determinations of conflict of interest are made by the integrity officer, usually without full disclosure of interviews with prospective panel members to the parties. The integrity officer instructs the panel members regarding misconduct investigation procedures in private meetings not attended by the parties, and the integrity officer provides procedural advice usually on a private basis to the panel members over the course of the investigation. Integrity officers usually contact witnesses and prepare them for testimony; these contacts are usually made outside the presence of and without full disclosure to the parties. There are a myriad of opportunities for the integrity officer to modulate the investigation of a misconduct allegation to protect the university's corporate interests. These mechanisms to influence the investigation would be completely absent in an adversarial process or courtroom setting where neither the judge nor the parties' attorneys would be allowed private access to the jury.

Universities can also influence the process and outcome of a misconduct investigation through the provision of legal advice and the university indemnification policy. Legal advice to panel members and investigation administrators is normally provided by university legal counsel and is given in private, with disclosure to the parties to the misconduct investigation prevented by attorney-client privilege.

University legal counsel may be able to resist the temptation to protect the corporate interests of the university, but instead provide impartial legal advice to the parties in a dispute. When university legal counsel does wish to protect the university's corporate interest, they have a powerful tool to wield—the university indemnification policy. These indemnification policies typically require the participant in some activity that could involve litigation to continuously cooperate with university counsel. University administrators or faculty panel members who believe that the university is acting improperly in handling a misconduct investigation could be faced with the potential liability of securing their own legal counsel in any subsequent litigation because they were not continuously cooperating with university legal counsel.

Federal regulations and most university procedures require that misconduct investigations be conducted confidentially, at least during the early stages. The stated purpose of this confidentiality is to protect the innocent respondent. Confidentiality also protects the reputation of the university and may alleviate some of the resistance to initiating misconduct investigations of university faculty who are producing research funding.

However, confidentiality can be abused in the hands of a self-interested party. Confidentiality can allow university administrators and integrity officers to modulate an investigation to pursue university interests with little risk of disclosure to the faculty governance system or to public bodies. The university has the capacity to sanction any participants in the investigation who disclose information for which the university claims confidentiality.

CONCLUSION

An analysis of the economic incentives faced by the three parties to the misconduct investigation (the whistleblower, the respondent researcher and the university) raises concerns about the current federal policy of placing the primary responsibility for detection and investigation of research misconduct on universities. From a purely economic perspective, universities employing the inquisitional model have both the pecuniary motive and the procedural means to manipulate research misconduct investigations in their self-interest, possibly at the expense of the integrity of the scientific record.

REFERENCES

1. Lubalin, JS, Ardini, ME, Matheson, JL. 1995. Final Report: Consequences of Whistleblowing for the Whistleblower in Misconduct in Science Cases. Office of Policy and Education, Office of Research Integrity, Rockville, MD.

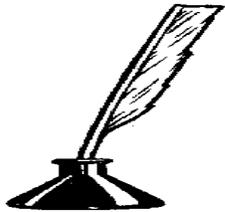


Commentary:
**The Operative Incentives of Research Misconduct:
Response from a Part-time Administrator**

by Jerry Dodgson
Department of Microbiology

The article by Drs. Hogan and Patterson makes several important and valid points. Of particular interest is their analysis of the financial incentives of the university charged with conducting initial inquiries (at least) into alleged misconduct. I agree with Hogan and Patterson that the handling of specific cases (particularly “flagship” cases with high visibility and/or financial impact) can be influenced by the university’s own selfish interests, at least as perceived by its administrators. Unfortunately, when it comes to research misconduct, unbiased arbiters are few and far between. Even a higher authority like NIH’s Office of Research Integrity has financial motives, especially when trying to justify its existence and its budget to Congress and the public.

In my view, the Hogan and Patterson article takes an overly rational view of the motivations of research misconduct, as though both the dishonest researcher and whistleblower engage in an ethical and financial cost-benefit analysis before assuming their respective roles. I suspect that psychological, perhaps even subconscious, motivation is a much greater factor. The dishonest scientist may be motivated by ego and a desire for peer admiration more than by prospects of financial reward. The initial motivation for the accuser often derives from a personal dislike of, or disagreement with, the accused. Satisfaction, if any, for some whistleblowers may come more from the feeling of righteous indignation than a perceived “moral benefit”. No matter how rational the initial motivations, an emotional, potentially explosive, interchange between accuser and accused is virtually certain once a formal allegation is made. As with harassment accusations, a general rule of thumb is that, once outside counsel is obtained, any outcome minimally satisfactory to both accused and accuser becomes highly unlikely. As suggested by Hogan and Patterson, the existing “inquisitorial” model of resolving misconduct within the university can be problematic, especially in high impact cases. Rather, it is designed primarily to handle allegations quickly and with maximum confidentiality. That is, it seeks to keep the “silent majority” of unsubstantiated accusations from creating long term damage to both the accused and accuser. This is no small virtue, especially as there may never be a completely unbiased system to fairly, but efficiently, address the flagship cases of research misconduct.



InkLinks is a regular column in which readers reflect on issues related to the lead article.

Scientific integrity is more than a matter of avoiding the “big three”: falsification, fabrication, and plagiarism. It is a complex moral ideal, calling upon the character of the scientist, to be sure, but also on institutional culture and structure. One scientist in our community has talked about “the relentless opportunity for error in data reporting. It is so hard to keep track of every side effect, adverse event, outcome, that many things go unnoticed.” Pressures for profit (in industry) and for grant funding or stature (in the university) can combine with simple human fallibility in dangerous ways. In addition to these deforming external pressures, institutions can fail to provide the stable infrastructure that is a crucial safeguard against error.

Nonscientists may not realize, as another veteran researcher has remarked, the extent to which research depends on a finely-tuned network of support operating somewhat automatically. When units are restructured—combined or split in new ways—that essential foundation can crack. One of our associates, discussing this problem, speculated that the new “Life Science Corridor” within Michigan could serve to buffer inevitable institutional restructurings: perhaps investigators could be temporarily assigned to established appropriate units in other universities.

Another facet of scientific integrity involves the development of standards in new areas. One scientist remarked, “My work has been called ‘cutting-edge.’ While the label sounds wonderful, what it means in practice is taking significant scientific risks which could mean getting the brass ring or falling off the merry-go-round. It also means being on the “edge”—in fact, the brink—of many regulations because there are no precedents.” How does a community best work together to develop standards in previously uncharted areas?

So, talk about scientific integrity could be more far-ranging than it often is. Below, two of the Center’s Adjunct Faculty talk about other unexplored aspects of that moral ideal.

—JA

Responsibility in Science

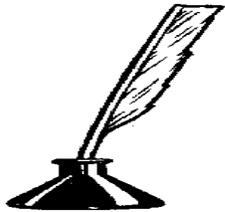
Alice D. Dreger
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We tend to think about misconduct in terms of *irresponsibility*. But in doing research we can also be *ir-responsive*: we can fail to respond to the concerns of those our work will affect. Should standards of conduct include a notion of responsibility for its consequences?

Martha (“Marty”) Crouch first raised this question for me when I was a graduate student. Marty, a biologist at Indiana University, discovered that her well-intentioned botanical research was being used to propagate economically oppressive and environmentally devastating forms of agriculture. She decided she had to abandon her research program. She now works on sustainable agriculture and teaches about the biology of food.

In my own work on human intersexuality, I’ve tried to be aware of how my research and publication affects the medical professionals and intersexuals on whom I focus. The trick has been to think about how to be responsive without sacrificing intellectual freedom and an ideal of

objectivity. In this arena, I have found especially helpful this article, written by two philosophers: Lisa M. Heldke and Stephen H. Kellert, "Objectivity as Responsibility," *Metaphilosophy*, vol. 26 (1995), pp. 360-378.



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Integrity in Publishing Science

Mike Feters, MD

Family Practice, University of Michigan

An essential part of science is publication, and unfortunately there are some gray areas about the integrity of the peer review process. I’ve had three experiences that made me raise my guard. (Identifying details of these stories are changed.)

First, a referee thoroughly trashed a piece I submitted, and then published something very similar himself. (The editor of the journal inadvertently told me the reviewer’s identity.)

To make the story still more complicated, the writer in question sent me a copy of the manuscript he was writing and asked me to comment on it. He had forgotten that he had reviewed mine!

There’s an ethical double-edged sword in reviewing manuscripts. On one hand, someone knowledgeable in the area is the best qualified to review the manuscript; on the other hand, there can be a temptation to incorporate an argument into one’s own work. I think this is especially

true in philosophy where one writes thoughts rather than doing experiments.

Along this same line, I mentioned to someone at a conference that I was working on a grant proposal. She was eager to hear more; I somewhat hesitantly went into more detail. Later this person (now director of an ethics center) submitted almost exactly the same topic for funding. I have a copy of the proposal, so I can assure you that this story is not hearsay. Of course, how I got a copy of the proposal is another issue.

Another ethical problem area concerns the use of references one has not read. In one manuscript, the authors quoted almost verbatim from a piece I had written, including references so obscure that I think it is impossible the authors would have been able to find them. In fact another writer had contacted me about these references, and told me that her paper was in press in a journal whose editors had asked her to provide proof of the references. She contacted me to get a copy of them. She had never read the references, yet included them in the manuscript, and submitted it. This is probably more serious, as well as more likely, in medical science journals because of the pressure to cite all the previous literature. It is not uncommon to have manuscripts with hundreds of references. In philosophy on the other hand, the “meat” of the manuscript is often an extensive examination of what one or several previous authors have addressed. It would be difficult to write a critique if one hadn’t read it.

A third gray area concerns delays in publishing. I had a manuscript accepted at a journal two years ago; it’s still not in press. Do editors have an obligation to publish in a timely fashion? This editor refuses to publish the date accepted because the journal will “look bad.”

The ethical issue here is one of the enormous power the journal holds over authors. To balance this, the journal ought at least to indicate what their turnaround rate is. The paper in question includes a review of the literature that is now more than two years old. When it appears it will suggest that I did a poor literature review, which is not the case. I suggested that the journal do a special edition or a supplement to remedy their backlog, and was told that the publisher wouldn’t pay for it. Unsuspecting authors, whose careers may be at stake, are completely at the mercy of journals.

It should be possible to develop ethical guidelines about these matters. In the meantime, I’ve become uncomfortably cautious about sharing my ideas with others.



Center News and Announcements

Clayton Thomason acted as Planning Committee Chair and Moderator for the 3rd Annual Foglio Conference on Spirituality & Medicine, "Suffering, Healing and Hope in Medicine," co-sponsored by the College of Human Medicine and the Center for Ethics, MSU.

Len Fleck conducted a workshop for the 3rd Annual Bioethics Conference in October in Mackinac Island, MI, sponsored by the Michigan State Medical Society titled, "Just Caring: The Moral and Economic Challenges of Creating Integrity-Preserving Incentives for Health Care Cost Containment."

Judith Andre, Leonard Fleck, and Tom Tomlinson published "Improving Our Aim," in the *Journal of Medicine and Philosophy*, Vol. 24, No. 2, (1999) pp., 130-147.

While in the UK with the MSU Study Abroad course "Medical Ethics and History of Health Care in the UK" **Libby Bogdan-Lovis** presented "Gift Horse or Trojan Horse: Midwives and the Birth of Evidence-based Medicine" to faculty and students at the University of Sheffield's School of Nursing and Midwifery.

Tom Tomlinson moderated a panel of representatives of four religious faiths who spoke on the theme, "End of Life-What Do You Say?", as part of the Anne Tauber Goldman Lecture series on Biomedical Ethics, in Birmingham, MI.

In November, **Howard Brody** will speak at MEDAX, a conference for family physicians in Israel, on the subject "Ethics and Evidence-Based Medicine." He also will be visiting various Israeli family practice training programs and departments.

Clayton Thomason presented a paper titled "An Inclusive Spirit in Medicine: Toward a Spirituality of Practice," to the 9th Annual Wheaton College Theology Conference, Wheaton, IL, to be published in James Callahan and Richard Buttman (eds.), *Healing, Health & Spirituality: Evangelical Theology Engages Scientific Research* (Downers Grove, IL: Intervarsity Press, forthcoming).

Len Fleck had his article "Just Caring: Oregon, Health Care Rationing and Rational Democratic Deliberation," originally published in the *Journal of Medicine and Philosophy*, translated into Chinese and published in the journal *Chinese and International Philosophy of Medicine* (1999).

Judith Andre participated in a panel for the American Society for Bioethics and Humanities (ASBH) speaking on "Feminism as a Heuristic Stance."

Libby Bogdan-Lovis will present "Show Me the Evidence: Midwifery and Evidence-based Practice Policies" in November at the annual American Anthropological Association meetings in Chicago.

Howard Brody presented at ASBH with **Peter Vinten-Johansen** "You See, But You Do Not Observe: John Snow, the Broad Street Pump, and the Limits of Scientific Induction."

In mid-October, **Tom Tomlinson** presented on "Ethical Issues in Refusals of Treatment" at the Great Lakes Cancer Nursing Conference at Novi, MI.

Clayton Thomason and **Howard Brody**, published an editorial "Inclusive Spirituality," in *The Journal of Family Practice* 48(2):21-22 (Feb. 1999).

Len Fleck is serving as director of the community dialogue phase of the NIH ELSI Genome project recently funded for another two and a half years under the title "Communities of Color and Genetics Policy Project." He is creating resource materials for those community dialogue sessions. This is a joint University of Michigan/ Michigan State University/ Tuskegee University project.

Clayton Thomason acted as consultant to the Presiding Bishop's Consultation on Bioethics at the College of Preachers, Washington National Cathedral, Washington, D.C.

Judith Andre participated in a panel on Doctor-Nurse Collaboration with Denise Jacob, RN, Ph.D. for the Michigan State Medical Society Bioethics Retreat, Mackinac Island, MI.