

Responsible Conduct of Research: Not Just for Researchers

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Abstract: *Every research institution employs administrative staff who support the research community on a daily basis. Whether in a central office, department, clinic or laboratory, these people may not be aware of the important role they play in safe-guarding the integrity of the research enterprise. Frequently, research administrators are forced to face ethical dilemmas in an environment of opposing obligations, loyalties, and responsibilities – both personal and professional. This paper outlines some of the ethical dilemmas faced by research administrators. The author argues that in order to make appropriate ethical decisions, research administrators need to develop skills to be able to: 1) recognize situations that may present ethical conflicts and when they might likely occur; 2) become well-versed in institutional, sponsor and/or government research ethics' policies and regulations in order to consider possible courses of action; 3) know who to turn to for help and advice; and 4) effectively implement the best possible solutions to ethical conflicts*

Keywords: *Responsible Conduct of Research, RCR, research integrity, research compliance, ethical decision-making, moral reasoning, moral awareness*

Introduction

Dr. John Galland, former Director of Education and Integrity for the Office of Research Integrity (ORI) of the Department of Health and Human Services (DHHS), contemplated the meaning of Responsible Conduct of Research (RCR) on his research integrity blog. He stated that “RCR is about an individual making choices in a research program that are ethical and legal, but also that are in-line with the individual’s own conscience, the value system upon which the research is based, and generally acceptable research practices of the scientific discipline within which the individual belongs” (Galland, 2009).

In this author’s experience directing RCR training courses for graduate students, MD-PhD candidates and postdoctoral trainees for three institutions over the last 13 years, it has become evident that RCR is not just for or about researchers. As Galland (2009) suggests, it is about “... individuals making choices...” Therefore it is equally important for research administrators to be able to recognize and understand the underlying concepts of RCR. Why do they need to care? In any profession, daily tasks can become routine and are often performed automatically, absent of conscious thought. Is one merely following steps blindly that have been trodden upon by many that came before or is there a bigger picture – a wider realm to consider? How many times have research administrators been accused of being “bureaucrats” lacking proper appreciation for the science that is at stake? This paper attempts to address the divide that happens when scientists separate themselves from staff because of differences in training and academic achievement. This “classism” can create stressful relations that can hinder the proper

administration of research. Scientists and administrators while bound together to work towards securing the necessary funding sometimes find themselves at odds. Deadlines need to be met and compliance points covered that scientists may feel interfere with the creative process. They can be viewed as “unappreciative” of the administrators work process and vice versa. Without a sincere attempt to understand the opposing point of view, researchers and administrators cannot begin to work collaboratively to meet the expected deadlines and compliance points that are essential to a healthy, flourishing research enterprise and at the same time be respectful and protective of the integrity of that enterprise.

Educators or Enforcers?

Research administrators often play multiple roles when it comes to research ethics. They may have some role or responsibility for developing research integrity and compliance policies and procedures, including educating researchers. Yet, they also have responsibility for implementing and policing research integrity. Thus, they find themselves straddling a rather cumbersome fence. On one side they are asked to be educators. Quite often they have a hand in developing or implementing RCR courses or curriculum for students, postdoctoral trainees, and faculty. They may even play a part in delivering lectures or running small group sessions on one or more of the RCR core topics recommended by ORI. These topics have expanded in the US over the years in response to worldwide incidents and changes in political influence, and are considered to be as outlined in Table 1.

However, on the opposite side, these same research administrators are often asked to “police” the science by ensuring compliance with the numerous rules and regulations that are deeply embedded in the administration of research. It is a very fine line one treads between being a positive enthusiastic teacher and a heavy-handed regulator.

Culture of Responsibility

Learning to do the right thing, because it is the right thing to do is the paradigm for RCR success. However, as a former colleague of the author is fond of saying, the consequence for not doing the right thing, is that we “all” might go to jail. Therefore, in the end, it is in everyone’s best interest to be properly prepared and invested in RCR. This is more than either a philosophical or legal debate. It is not enough to know where to find the rules online or in which dusty book on a long forgotten shelf they reside. We must incorporate the spirit of the regulations into our daily work ethic and decision-making processes. It must fortify the way we think about and conduct not only the science, but in the research administrator’s world - the business of research. This is part and parcel of nurturing a sustainable culture of responsibility.

What does a culture of responsibility look like? How is it sustained over time amidst the changing landscape of federal regulations and public opinion? Why is it important to create a culture of responsibility? What role do research administrators have to play? Are they merely silent sideliners watching the main event or do they have a moral (if not legal) obligation to be active, vocal participants in the RCR? How do they begin to weigh the importance of integrity vs. compliance and vice versa? Are these concepts not synonymous? Do the rules and philosophies

Table 1. Core areas determined by the PHS to be significant in conducting responsible research and ensuring integrity of the research record (ORI, DHHS, 2000).

| RCR Core Topics - core areas determined by the PHS to be significant in conducting responsible research and ensuring integrity of the research record (ORI, DHHS, 2000) | |
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| Data Acquisition, Management, Sharing and Ownership (including **enhancing reproducibility) | The integrity of research depends on the integrity in all aspects of the collection, use, retention, and sharing of data. In 2014 NIH began exploring reasons for increased incidents of deficiencies in the ability to reproduce data and duplicate results. |
| Safe Laboratory Practices** | Entails the safety of all project personnel and the proper use of materials in a laboratory setting. |
| Use of Human Subjects | COI - where two or more competing interests create the perception or the reality of an increased risk of bias or poor judgment. |
| Animal Welfare | Human subject research is heavily regulated and based on the principles, respect for persons, beneficence, and justice |
| Research Misconduct | Rules in this area ensure that research entails procedures that will cause the least pain and/or distress to the least amount of animals. |
| Publication Practices and Responsible Authorship | Essentially defined as “ FFP ”: fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. |
| Mentor / Trainee Responsibilities | Authorship is the most visible form of credit and means for sharing and contributing to generizable scientific knowledge. |
| Prepare researchers and research managers for necessary skills and knowledge | Mentors assist trainees in understanding and adhering to the standards of conduct within their profession. |
| Collaborative Science | In today’s global research enterprise establishing shared understanding is key to a successful project. Generally responsible collaborations are defined by openness, communication, and trust. |
| Peer Review | Academic/scientific inquiry is relatively specialized, peers with similar expertise are in the best position to judge one another’s work |
| The Scientist and Social Responsibility** (including Export Control and Dual-use Research of Concern) | Researchers have the responsibility to ethically conduct experiments and to provide accurate and unbiased data to the public. They must also adhere to rules concerning public safety and safeguard against misuse of their science in ways that can be used against the public good. |

** These topics were not part of the original nine recommended for RCR instruction in 2000

change if working with collaborators from other countries? How do they discern the proper course of action when reputations, funding, jobs, and perhaps even public safety are at stake?

These are all valid questions that research administrators (and their institutions) need to sincerely consider with clarity of thought as they perform the daily routine of administering to the research enterprise. Each institution’s “culture” may vary in appearance, but at its core should be a foundation that can withstand the onslaught of political winds and legislative whims.

Training - Not Just for Researchers

RCR training has been around in the US for over two decades, having appeared on the research integrity horizon in the late 1980's and early 1990's. Under the Clinton administration, much attention was given to developing legislation that would have required anyone involved in the research enterprise to be "trained" in RCR. This voluminous legislation was tabled for further consideration under the Bush administration and never quite materialized as originally envisioned. More recently, RCR training requirements have once again gained some momentum with refurbished guidelines from the National Institutes of Health (NIH, 2009) and the National Science Foundation (NSF, 2009). These federal guidelines however, speak only to investigators or key personnel who receive certain types of Public Health Service funding. They do not address the ethical obligations of research staff who may administer those funds and there is most certainly fiscal responsibility inherent in applying for and accepting federally sponsored research dollars (Schaller-Demers, in-press).

The media has also played a big role in focusing national (and global) attention on cases of fraud, plagiarism, and assorted other instances of professional research misconduct (RREE, 2010). This sensationalism has helped to illustrate a growing need and to center the spotlight on RCR education. This past year the issue of deficiencies in reproducibility has made headline news. In response, NIH has announced upcoming additional RCR training materials for its own postdoctoral researchers to help enhance reproducibility. However, Collins and Tabak (2014) state, "Efforts by the NIH alone will not be sufficient to effect real change in an unhealthy environment". They suggest that each institution should be responsible for training research staff in ethics and compliance.

Even journals like *Nature Medicine* (2013) have stated, "Tackling these issues is a long-term endeavor that will require the commitment of funders, institutions, researchers and publishers." All members of the research community have a stake in the outcomes of the scientific enterprise, and therefore a responsibility to become active participants in finding and implementing solutions.

Consider some of the more "notorious" cases – James Wilson (Principal Investigator [PI] in the Gelsinger tragedy at UPENN), Eric Poehlman (first researcher to be sentenced to federal prison time was exposed by one of his lab technicians, Walter DeNino, who once viewed Poehlman as his mentor), Luk Van Parijs (faked data in various papers at MIT), Woo-Suk Hwang (South Korean PI who coerced female lab members into donating eggs for stem cell research), etc. (Basu, 2006; Interlander, 2006). Is it feasible that so many researchers have been found wanting and not more "behind-the-scenes" people knew what was happening? Or did many know and they felt powerless or afraid to intervene? These of course, were major breaches – consider how many lesser offenses fall well below the radar, yet erode the foundation of science if left unchecked.

Martinson, Anderson and de Vries (2005) argue that serious misbehavior in research is obviously important, if for no other reason than it damages the reputation of, and undermines public support for, science. The media loves the "big story" and these cases (as referenced above) get lots of press. Martinson, Anderson and de Vries surveyed several thousand NIH-funded early- and mid-career scientists, and asked them to report their own behaviors. Their findings revealed a

range of questionable research practices (QRP) that are outstanding in both scope and prevalence. Therefore the evidence suggests that routine “regular” misbehaviors present greater threats to the scientific enterprise than those caused by high-profile misconduct cases such as fraud.

Whether misdemeanor or high crime, the larger question becomes who knew what when and what did they do about it? Or better still, what should they have done about it?

Instincts and Training

Back in 2000 President Clinton’s Department of Health and Human Services secretary, Donna Shalala stated: “The explosion in biomedical research has brought new challenges as more researchers are becoming involved in commercial ventures that may create new ethical dilemmas. Today’s actions are designed to further strengthen government oversight of all biomedical research including gene transfer research, and to reinforce institutions’ and researchers’ responsibility to follow internationally accepted ethical standards. Public confidence in clinical trials is essential to the continued advances in medicine we all hope to see in the next century” (Charatan, 2000). It all boils down to trust. Every constituent within the research community and the community beyond that it serves – scientists, staffers, administrators, lawmakers, the media, the public-at-large (potential research subjects) must be able to trust the integrity of the data. The public trust is a very fragile thing, once shattered it is almost impossible to rebuild (Schaller-Demers, 2006).

Moral Reasoning. After directing RCR courses for more than twelve years, this author has heard trainees often lament that you can’t “teach” someone to be ethical or moral. One either is or isn’t by nature. Kidder (2005) defines moral courage as simply the courage to be moral. To be considered moral, he says one’s moral fiber must adhere to one of five core moral values: honesty, respect, responsibility, fairness, and compassion. As one examines the historical record of scientific misconduct, the inherent breaches of research integrity, and the prevailing conditions that cause ethical scientists to make unethical decisions, one needs to appreciate the influences that these basic or core values have on one’s day-to-day decision-making ability (Schaller-Demers, 2006).

It isn’t so much a matter of whether or not a person is moral – it is more about the morality of his/her thinking processes and how that thinking subsequently affects behavior. Honing one’s instincts to become more aware of circumstances that can lead to ethical dilemmas is the first step to making informed and reasonable choices about possible courses of action.

As Galland stated (ORI, 2009), “... RCR is about an individual making choices in a research program that are ethical and legal, but also that are in-line with the individual’s

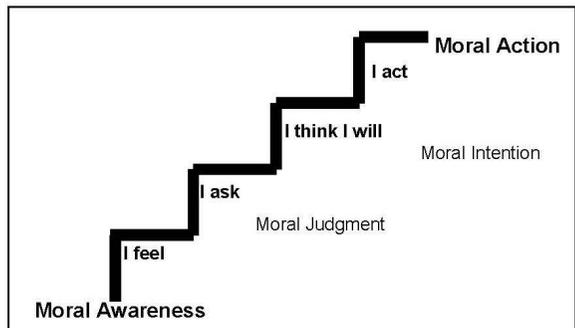


Figure 1. Facilitator’s Guide: The Lab: Avoiding Research Misconduct (p.26)

own conscience ...” Conscience has been blamed for both good and bad decision-making. But understanding the stages that happen before action is taken can help (Fig. 1).

In 2011 the Office of Research Integrity introduced an interactive film entitled “The Lab: Avoiding Research Misconduct” (ORI, 2011). The accompanying facilitator guide deals with the stages of moral reasoning that one goes through to get from moral awareness to moral action.

Research administrators are often precariously placed in the middle of “opposing” forces (e.g., faculty researchers, institutional officials, sponsors - federal, state, private) and yet, are best positioned to see all sides and to recognize when compliance falls short. Their internal moral barometers are finely tuned to know when something just doesn’t feel right and often they are the ones that get caught having to submit or perpetuate faulty information and/or data.

Education and training in survival skills and ethics (Survival Skills and Ethics Program) is essential for researchers on any level – but it is equally important for the people who support those researchers. Knowing how to communicate effectively with all members of the research community is a highly valuable (and marketable) skill. Often administrators feel as though the scientific community looks down upon them and they are labeled as being overly bureaucratic and “non-appreciative” of the great science that is now being obstructed by what may be perceived as petty rules and regulations. Sometimes those in academia feel that they do not need to concern themselves with filling out annoying forms and submitting them by arbitrary deadlines. The research administrator is trapped in an untenable position between wanting to be user-friendly and service oriented and getting the job done right. This is where the communication factor becomes so important. Being able to actively listen even in the midst of a frazzled researcher’s tirade can go a long way to build relationships that can withstand corrective criticism. The aggrieved party can then be more easily guided to the right path and become receptive to doing what needs to be done. This requires open acknowledgement and acceptance of each party’s feelings. The Resolving Conflict Creatively Program (ESR, 1998) back in the 1990s taught basic concepts of conflict resolution. Key to striving for “win-win,” is understanding that winning is not necessarily getting what you think you want, but rather getting something that you actually need. When needs vs. positions are considered, almost any issue can be resolved.

Two Common RCR Topic Areas of Concern

Erickson and Muskavitch (2006) prepared online RCR topic modules for research administrators which can be found in entirety on the ORI website. They are Conflicts of Interest, Financial Management, Mentor-Trainee relationships, Collaborative Research, and Data Management. Since the bulk of a research administrator’s daily responsibilities revolve around finance, two common RCR-related topics that deserve a closer look in relation to the responsible administration of research are Conflicts of Interest and Financial Management.

Conflicts of interest – and conscience. Conflicts of interest are not inherently bad or unethical. Rather, it is the failure to acknowledge and report real and potential conflicts or the failure to manage them effectively that creates damaging situations for individuals and institutions alike (Schaller-Demers, 2008, Erickson & Muskavitch, 2006, Kalichman & Macrina, 2004).

Departmental research administrators can find themselves in problematic situations with regard to conflicts of interest involving investigators to whom they directly report. Sometimes, the interests of an individual can be very different from those of his/her department, and/or the institution as a whole. Personal loyalty to a particular researcher or faculty member, may lead to being asked to perform functions that are in conflict with their obligations to the institution (Erickson & Muskavitch, 2006) – thus further creating another conflict – that of conflict of conscience. Being asked to do something (or in some instances, not to do something) that is in conflict with an individual's inner moral code can create intolerable situations where not only rules are broken, but careers are destroyed.

Erickson and Muskavitch (2006) state quite accurately, that research administrators are entrusted by the institution to administer sponsored projects and to ensure that the institution provides appropriate stewardship of sponsored project funding. This does not mean that each administrator must be a “compliance cop.” Rather, it means that administrators must be able to identify situations in which a conflict of interest has arisen, or is likely to arise. Sometimes the conflict is not real – but the perception is real, and as such it still must be dealt with and not hidden.

Case in point is the story of Jesse Gelsinger, the teenager who died in a gene therapy trial at the University of Pennsylvania (UPENN). Jesse's father, Paul, asked the lead investigator, James Wilson: “What is your financial position in this?” His response was that he was an unpaid consultant to the biotech company behind the research effort. Paul further stated, “Being naïve, I accepted his word and continued my support for him and his work” (Gelsinger, 2001). Once the truth came out, that Dr. Wilson and the UPENN did indeed have a significant financial interest in the outcome of the trial, it was public perception that made the misstep all the more egregious. There is well supported evidence that the informed consent was lacking critical information even beyond the conflict of interest of the principal investigator, including critical information always relevant to a patient's decision to participate in a clinical trial (Obasogie, 2009). Administrators involved with the Institutional Review Board (IRB), the Technology Transfer office, the Conflict Management office, Sponsored Programs office, etc., all could have had knowledge about breaches and errors in Jesse's study. Information disclosed in newspaper articles at the time make it clear that administrative officials at many levels did know of the financial conflict of interest (Obasogie, 2009). An important issue then is, did they feel powerless to act or afraid of retaliation? This speaks to a need for a culture of compliance that is installed at the institutional level (Geller, Boyce, Ford., and Sugarman, 2010)

Financial management. Research administrators working with sponsored projects, either pre- or post-award, are frequently called upon to make ethical decisions involving the development of budgets, the expenditure of funds and the proper accounting of those costs. Again, dividing loyalties can conflict and confuse administrators, especially those working in departments. Those with a central administration role may appear to have more independence, but as stated by Erickson and Muskavitch (2006) they have been trained to be “of service” to the investigators and faculty – acting as their advocate when dealing with sponsors, while at the same time being responsible for the final approval of many actions and expenditures. It is difficult to maintain that balance between being a facilitator and a regulator. Compliance does not always bring out the

best in people who are competing for a diminishing pool of funding. Without the skills and the temperament to deal actively and openly when conflicts and disagreements arise, administrators may feel isolated and afraid to do what ethically needs to be done.

Policies, Policies, Policies

It is probably human nature to both cling to and rebel against rules and regulations. On one hand we hate being told what to do and yet it is comforting to know that there is a set of rules, regulations, procedures and/or guidelines to help us navigate the system. Research administrators need to be “expert” in policy – whether it is on a departmental, institutional or sponsorship level. One cannot begin to be compliant, unless one is well versed in policy and procedure. This is no easy task. Sometimes it feels like the rules are changing on a weekly basis. However, in order to practice proper stewardship and to be able to guide researchers appropriately, administrators must rely on the prevailing and relevant rules to be successful (Erickson & Muskavitch, 2006).

However, a strictly regulatory approach to ensuring research integrity does have its limitations. This type of mindset increases the bureaucratization of science and increases the burdensomeness of “paperwork” (Institute of Medicine [IOM], 2002) – whether actual paper or its electronic equivalent, to a maximum extreme. However, it is virtually impossible for regulations alone to foster a true appreciation and respect for the critical nature of all the nuances of research integrity issues.

In order to be proficient and effective, research administrators need to gain a greater level of understanding and be able to appreciate the researcher’s point of view. They need to find a way amidst the rules and regulations to still be advocates for the researchers in their charge and their scientific endeavors. That does not mean, however, that they should be asked to bend or break rules to prove their loyalty. Understanding what it means on a daily basis to conduct responsible research is integral to being able to facilitate the administration of the research. Often the investigators are not always aware of the prevailing policies or practices. RCR can often be more about conscience than it is about mere compliance. Additionally, many scientific practices are not directly covered by regulations, and scientists and administrators need to know how to proceed responsibly and with integrity in the absence of specific regulatory guidance (RREE, 2009). Training, effective communication, and outreach are necessary to fill in the gaps and to build strong bridges and foundations.

Communication and Outreach

To have everyone within an institution’s research community be of the same mindset is a goal worth striving towards, although a daunting task. Comprehension and compliance with the prevailing best practices are a must to ensure that the research dollars continue to flow and the scientific enterprise flourishes. There is a considerable range of opinions among scientists about how to respond to perceived misconduct -- and an even greater difference between scientists, administrators and institutional officials (Wenger, Korenman, Berk and Hinghu., 1999). Yet, as the National Academy of Sciences (2009) advises, “Someone who has witnessed misconduct has an unmistakable obligation to act.”

So exactly what is the research administrator supposed to do – to whom does his/her loyalty belong? Every decision one makes has inherent consequences. Even when one does the right thing, sometimes one is punished regardless of the intent or the outcome. Allegations of scientific misconduct, regardless of whether they are valid, can disrupt a laboratory's progress, wreak havoc with morale, and even decimate careers (Powell, 2006). So to “blow the whistle” is a very serious step and not one that should be taken without considerable thought and planning. One has to be fairly certain that he/she is in possession of all the facts – with sufficient evidence to back up the allegations. Powell (2006) suggests finding a trusted colleague with whom to confer to support or possibly negate any suspicions. It is hard to maintain objectivity, especially in stressful situations. An unbiased eye can be very useful to help one make the most sensible decisions about what course of action to take. Each of us has a network of people – both within and outside the institution that can help be a sounding board when doubts begin to overwhelm and cloud judgment. The key is finding an objective outside party that one can trust to listen, maintain confidentiality and offer advice without fear of repercussion or reprisal. When policies are discussed openly, and resources and tools are made readily available, decisions become easier. Creating venues and forums where all constituents can be heard, so that all the stakeholders have ownership of the policies and practices is ideal.

Know your audience. Institutions can be quite large and support various sub-communities. Not any one method of communicating will work in all situations and with all groups. “Cultures” vary from discipline to discipline and this affects how the members learn, process information and communicate. The key is to be diversified and flexible.

Keeping institutional websites current with up-to-date information on new policies, procedures, and legislation is a very easy way to reach a maximum amount of people. It takes a vigilant eye to ensure that the information is current. There is nothing more deadly than posting old, invalid information. The sites should be user-friendly. Remember the “three click rule” – if one has to drill down more than three times to find something, chances are he/she will not bother. Consider extranet vs. intranet. Can the researchers and those who administratively support them get to essential information when they are away from the institution? Important information that is buried in cyber space is of no use to anyone.

Electronic newsletters (weekly, monthly, quarterly) or targeted emails to specific groups within the institution can be beneficial for keeping the research community in the loop. To use these tools effectively one has to be aware of tech and information security requirements – are the recipients' mailboxes large enough to support the type of files you are sending? Is there sensitive information or Protected Health Information (PHI) involved?

Feedback is very important. Researchers and staff need to feel that their opinions are honored and they should have multiple opportunities to give voice to their needs and concerns. It is very easy for research administrators to get stuck in the red tape. As professionals, research administrators need to be cognizant of the feelings of the scientists they serve and be able to communicate what needs to be done in ways that do not alienate or escalate into real conflict situations.

Depending upon your institution's communication culture, social media might be a viable option. Of course it brings with it a whole host of ethical/compliance standards that need attention. Twitter, Facebook, LinkedIn, etc. can all be utilized for sharing information, timely articles, case studies, and the like.

Remember the old real estate cliché: "Location, location, location"? The same applies here. Research administrators need to be physically accessible to their researchers. Some people simply hate email and can't be bothered with websites and phone calls. Face-to-face contact has become a dying form of communication. Meeting in person and walking through the process might be enough to make an impression and build trust.

Future Study

The Education and Professional Development Committee (EPDC) of SRA International (SRAI) is working to develop metrics to assess program evaluation. If tools can be developed that would help capture/measure how much knowledge is gained by participants that is then actually utilized at the host institution, it would provide useful information to guide the creation of future program content for its members. It would be useful to determine if training in RCR engenders a more compliant environment. If a metric could be developed to measure subsequent action and decision-making based on learning new skills and information, SRAI would be contributing to the enhancement of RCR policy and practice. Further, if a correlation between the number of research integrity incidences (misconduct and/or QRP) at one's institution and the training administrators of that institution had received could be documented, this would be very important evidence as to the role of the administrator in the responsible conduct of research (Anderson, et al., 2007).

Conclusion

When institutions are aware of the hurdles and take active steps to create, nurture, and sustain a culture of responsibility – scientists and administrators alike become equal partners on a level playing field where it doesn't matter which degree one has earned, where one went to school or what position one holds.

RCR is an ongoing conversation. It does not begin and end with mandated legislation, taking a course or attending a workshop. To be effective it must be part of one's daily functioning – whether that is at the bench, at the bedside, or at the office. It is something that is modeled and passed on between colleagues and from mentor to trainee and vice versa. Anyone can "teach" and the best teaching and learning comes from real-life situations not contrived case studies printed in textbooks or posted to the latest online blog. There is a plethora of valuable online resources, conferences, and organizations that are devoted to RCR-related topics. These are helpful and convenient tools – but they are only effective when incorporated into a culture of responsibility that has been embedded into the organizational structure. A responsible administrator's *raison d'être* should be to serve the research community in a way that honors the people – regardless of

their job description, the science, and the prevailing regulatory controls. This is a juggling act that requires knowledge, skill, and inner calm.

When the existing institutional culture grants research administrators the ability to achieve recognition for their professionalism and the invaluable service they provide to the health and welfare of the research enterprise, it is a “win-win” for all involved. Organizations like SRAI have known for a long time that research administrators are undoubtedly professionals in the workplace and as such are best prepared when they care... and care deeply about the Responsible Conduct of Research.

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References

- Anderson, M. S., Horn, A. S., Risbey, K. R., Ronning, E.y A., De Vries, R., and Martinson, B. C. (2007) What do mentoring and training in the responsible conduct of research have to do with scientists' misbehavior? Findings from a national survey of NIH-funded scientists. *Academic Medicine*. 82: 853–860
- Basu, P. (2006 May). Where are they now? *Nature Medicine*, 12(5), 492-493.
- Brown J. L., Brown, R., T., LANTIERI, L. AND ABER J. L. (2004) The Resolving Conflict Creatively Program: A School-Based Social and Emotional Learning Program . Chapter 9, Building Academic Success on Social and Emotional Learning: What Does the Research Say? Copyright © 2004 by Teachers College, Columbia University. Retrieved from <http://www.lindalantieri.org/documents/Resolving%20Conflict%20Creatively%20Program%20A%20school%20based%20SEL%20Learning%20Program%20-%202004.pdf>
- Charatan, F. (2000, November 4). Clinton seeks heavy fines for breaching research ethics. *BMJ* 2000; 320:1491. PMID: PMC1118090. Retrieved on June 4, 2010 from <http://www.bmj.com/cgi/content/full/320/7248/1491?view=long&pmid=10834875>
- Collins, F.S. and Tabak, L. A. (2014 January 27). Policy: NIH plans to enhance reproducibility. *Nature*. Retrieved on November 11, 2014 from: <http://www.nature.com/news/policy-nih-plans-to-enhance-reproducibility-1.14586>
- Educators for Social Responsibility (ESR). (1998). *Resolving Conflict Creatively Program*.
- Erickson, S. and Muskavitch, K. (2006). Administrators and the Responsible Conduct of Research. Online modules created for the Office of Research Integrity (ORI). Retrieved on June 10, 2010 from <http://ori.dhhs.gov/education/products/rcradmin/>
- Galland, J. (2009 September 14). *The Meaning of RCR*. Retrieved on June 10, 2010 from <http://ori.hhs.gov/blog/2009/09/>
- Geller, G., Boyce, A, Ford, D.E., and Sugarman, J. (2010) Beyond “compliance”: The role of institutional culture in promoting research integrity. *Academic Medicine*, 85(8),1296-1302.
- Gelsinger, P. (2001). *Jesse's Intent*. Retrieved on June 1, 2010 from <http://www.circare.org/submit/jintent.pdf>
- Institute of Medicine (IOM) National Research Council. Committee on Assessing Integrity in Research Environments. (2002). *Integrity in Scientific Research Creating an Environment that Promotes Responsible Conduct*. Washington DC: National Academies Press.

- Interlander, J. (2006 October 22). An unwelcome discovery. *The New York Times Magazine*. Retrieved on February 9, 2015 from: <http://www.nytimes.com/2006/10/22/magazine/22sciencefraud.html?pagewanted=all>
- Kalichman, M. and Macrina, F. (1992-2007). Responsible Conduct of Research Education Committee (RCREC) internet-based course.
- Kidder, R. (2005). *Moral Courage*. New York: Harper Collins Publishers. p.p. 320.
- Martinson, B., Anderson, M., and de Vries, R. (2005 June). Scientists behaving badly. *Nature*. 435, 737-738.
- National Academy of Sciences, National Academy of Engineering, Institute of Medicine (2009). *On Being a Scientist: Responsible Conduct in Research*. Third Edition. National Academy Press.
- National Institutes of Health (NIH). (2009 November 24). *Update on the Requirement for Instruction in the Responsible Conduct of Research*. Notice Number: NOT-OD-10-019.
- National Science Foundation (NSF). (2009 August 20). *Responsible Conduct of Research*, 74 (160), 42126-42128.
- Nature Medicine. (2013 April). Enhancing reproducibility. Vol. 10. Issue 5. Page 367. Retrieved on November 11, 2014 from: <http://www.nature.com/nmeth/journal/v10/n5/full/nmeth.2471.html>
- Office of Research Integrity (ORI). (2011). *Facilitator's Guide: The Lab: Avoiding Research Misconduct*. Retrieved on November 10, 2014 from: <http://ori.hhs.gov/TheLab/TheLabGuide.pdf>
- Obasogi, O.K. (2009) Ten Years Later: Jesse Gelsinger's Death and Human Subjects Protection Bioethics Forum retrieved: <http://www.geneticsandsociety.org/article.php?id=4955>
- Powell, K. (2006 May). So you suspect someone of fraud. What now? *Nature Medicine* 12(5), 49
- Resources for Research Ethics Education (RREE). (2009). Retrieved on June 4, 2010 from <http://research-ethics.net/introduction/why-teach/>
- Schaller-Demers, D. S. (2006, November). Why do ethical scientists make unethical decisions? *Journal of Research Administration* 37(2), 105-112.
- Schaller-Demers, D. S. (2008, Fall). Conflict: A catalyst for institutional change. *Journal of Research Administration* 39(2), 81-90

Schaller-Demers, D. S. (2010, Fall). Why Should Research Administrators Care about the Responsible Conduct of Research? *SRA International Symposium*, Chicago, IL.

Schaller-Demers, D. S. (in-press). Building a Responsible Conduct of Research Program to Sustain an Institutional Culture of Research Integrity and Compliance. In Dade, A, DiBella, S. and Olfason, L. (Eds) *Implementing a Comprehensive Research Compliance Program: A Handbook for Research Officers*. Book submitted for publication. Charlotte, NC: Information Age Publishing Inc.

Survival Skills and Ethics Program. University of Pittsburgh (UPITT). Retrieved on June 10, 2010 from http://www.skillsandethics.org/Survival_Skills_%26_Ethics/Home.html

Wenger, N.S., Korenman, S.G., Berk, R. and Hinghu, L. (1999). Reporting unethical research behavior. *Evaluation Review* 23(5), 553-570