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Librarians and Research Integrity Committees: Finding professional joy and fulfillment in practice and service

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Abstract

This article describes how librarians can benefit from being members of research integrity committees. As two academic librarians, the authors share the ways that they have found professional fulfillment and joy through service on the Institutional Animal Care and Use Committee (IACUC) for vertebrate animal research activities and the Institutional Review Board (IRB) for human subjects research. Their participation on research integrity committees has provided opportunities to build new relationships, demonstrate their expertise, and find meaning in their contributions to research production. Participation on the IACUC has allowed one author to better understand research designs and instrumentation and laboratory techniques. She has built new relationships with research administrators, scientists, and lab managers, and found new opportunities to use her unique search skills. The other author, while serving on the IRB, has extended her professional network and highlighted her expertise as a qualitative researcher. She has built stronger relationships with research administrators and scholars and found new opportunities for advancing responsible data management conversations across campus. Participating in these committees has been professionally empowering and has allowed the authors to contribute to research integrity in important ways.

Introduction

Academic library professional associations have recommended that librarians find ways to participate as experts at the institutional level within their colleges or universities, and these efforts can help demonstrate library expertise, value, and relevance to the mission of the institution (Evidence Base 2021; Association of College & Research Libraries and Oakleaf 2010). Further, to remain relevant in the modern information landscape, research libraries (and their librarians) should act as partners in the full research lifecycle (Auckland 2012; Brown, Wolski, and Richardson 2015; Koltay 2016; Jaguszewski and Williams 2013; Vaughan et al. 2013). One way for science and data librarians to engage in the lifecycle of research at an institutional level is to serve as members of research integrity committees, such as the Institutional Animal Care and Use Committee (IACUC) for animal research activities and the Institutional Review Board (IRB) for human subjects research.

This article examines the work of the authors—one science librarian and one research data librarian—on institutional research integrity committees. The activities of librarians who participate on an IACUC or IRB are represented in the literature; however, scholarship tends to focus on defining roles for librarians and promoting expertise as a benefit to the library or to the institution (Cantwell and Kampen-Breit 2015; Gilbert 2019; Harger and Nordberg 2010; Harnett and Cantwell 2022; Steelman and Thomas 2014). Instead of emphasizing the value to the library or institution of having librarians on research integrity committees, this article focuses on the value of the opportunity to the individual librarian. Through their personal experiences, the authors find that their involvement in research integrity committees provides rich and meaningful opportunities that extend beyond any benefit to the institution. Despite challenges in higher education and the workplace exacerbated by the COVID-19 pandemic, this engagement in the research lifecycle outside of the library is a rare source of professional joy for the authors. For each author, the experience of professional joy is empowering and motivating. It involves learning new skills and encountering challenges that reveal how one's work connects to a broader purpose—in this case, advancing integrity in research and the mission of the university. In this article, we define professional joy as the experience of finding a meaningful connection at work to a set of values that are important to you as an individual. Identifying this connection can allow the professional to better their practice and make contributions in the workplace that they find personally rewarding and important.

The authors share examples of how they have managed, despite professional barriers, to find joy in their work. Issues of low morale and burn-out are well-documented in the profession (Accardi 2015; Ettarh 2018; Geary and Hickey 2019; Kendrick 2017) and for academic librarians, service commitments and service expectations can overwhelm the rest of our workload (e.g., primary professional duties, scholarship, and teaching) (Smale 2020). At our workplace, barriers have included experiencing the impacts of repeated budget cuts and reductions in workforce, and the increased workload, burnout, and lack of support that has resulted from these common constraints in libraries. In addition, navigating the COVID-19 pandemic on personal and professional fronts has amplified the impact of pre-existing barriers in the workplace. Given

this climate, our interest in highlighting professional opportunities for finding joy in work is not meant to suggest that this approach is a solution for burnout or workplace toxicity, which are typically rooted in systematic, organizational, leadership, or structural issues that will not be ameliorated by any individual intervention (Kendrick 2017). We recognize that library leaders and decision-makers can only address burnout and toxicity by addressing structural and systematic barriers that limit recruitment, retention, and employee well-being in their organizations (Ortega 2019; McKinsey Health Institute 2022). Nonetheless, finding joy in professional practice may still benefit the individual practitioner and while not a solution, sharing these strategies may offer others access to a small mechanism for coping.

Given documented issues of burnout in the library profession, an organizational focus on professional wellness can benefit libraries and other organizations. Much of the literature on professional or organizational joy is rooted in clinical settings, especially in primary care where managing burnout is closely connected to the wellness and workplace fulfillment experienced by clinical workers (Sinsky et al. 2013; Sikka, Morath, and Leape 2015; Bernard 2019). Organizations that support workers in finding joy and meaning in their work will foster healthier workplaces (Sikka, Morath, and Leape 2015). Positive work environments can enhance service quality and worker retention (Redman 2006). In a toolkit published in the journal, *Nurse Leader*, authors describe the importance of resilience and professional joy in nursing practice. They note that based on empirical evidence in the literature, leaders of health systems in the United States recognize that joy at work is an important contributing factor to the well-being of clinicians and their patients, and they aim to support hospital staff in fostering professional cultures that bring more joy into practice to avoid burnout (Bernard 2019). Researchers conducted a follow-up study of nurse leaders to understand the relevance of the toolkit since the COVID-19 pandemic, and their survey results indicated that factors that increased workplace joy included impactful roles on committees and projects, collaborating with other departments, and having opportunities for professional growth (Raso 2021).

To bring the lens of professional joy to academic librarianship, the authors explain the personal outcomes of their engagement with the IACUC and IRB, including accessing professional development, building new relationships, demonstrating and refining expertise, and finding meaning in their contributions to research production. The aim of this article is to inspire other science and data librarians to consider these opportunities as ways to find professional joy and fulfillment in their practice. We recognize that research integrity service may not bring other librarians anything close to "joy" in the workplace. Rather, such an obligation may be another service duty among many. We share our perspectives as examples of possible opportunities for meaningful and refreshing engagement in one's work for some professionals. Those who do not find these roles compelling, may seek other opportunities for professional joy related to their work. The text below provides a close examination of two librarians' experiences on research integrity committees (a science librarian on an IACUC and a research data librarian on an IRB) to highlight personal outcomes and make recommendations for the benefits of participating. For each committee experience, the authors:

- Provide a brief overview of the committee and its role in research integrity compliance at universities,

- Describe opportunities for professional growth through mentorship and practice,

- Give examples of how new professional relationships were established,

- Explain the ways we are able to use and demonstrate our unique expertise,

- Details how we have contributed to the production of research.

Background: Research Integrity Committees

IACUC

An Institutional Animal Care and Use Committee, or IACUC, in the United States is a federally mandated board that provides oversight for vertebrate animal research activities at any research institution. The regulation of the care of animals for research in the United States has evolved through several pieces of legislation related to the Animal Welfare Act since the 1960s (National Agricultural Library 2022). IACUCs were established as part of the 1985 Food Security Act, which extended care and use regulations previously established for breeding and transport to include activities within laboratory settings (Osinski 2011). Members of an IACUC at an institution regularly review the activities of Primary Investigators (PIs) who use vertebrate animals in their research or teaching and monitor facilities that house vertebrate animals (National Institutions of Health 2022). Animal researchers submit an application (sometimes called a protocol) to the IACUC for review before beginning their research involving vertebrate animals. These protocols outline general information about the research objectives in plain language, describe the research team and their qualifications, explain the study design, and detail use of the animals and other procedures.

In addition, researchers may need to document a search of the literature for alternatives to animal use. More specifically, PIs are asked to look to the literature to evaluate what is commonly referred to as the "3Rs" of animal research:

- *Replacement* — Is there evidence that using non-animal models or lower-order organisms can achieve similar research objectives?

- *Refinement* — Will modifying care, handling, or experimental procedures improve well-being and reduce pain and distress in animals?

- *Reduction* — Can fewer animals be used to reach the study objectives, while also maintaining statistical validity? (Osinski 2011).

This section of the application is the primary hook that connects librarians to the work of this institutional research integrity committee. Librarians may offer support by performing literature searches, providing guides and tutorials, or serving as a member of the IACUC.

Librarians are commonly members of IACUCs at research institutions, especially at medical schools (Steelman and Thomas 2014). Literature provides background and guidance for librarians currently or aspiring to work with their institution's IACUCs (Barton 2022; Chilov et al. 2007; Osinski 2011; Ratajeski and Miller 2022; Wood, Hart, and Weng 2005). Other studies related to IACUCs explain the potential roles of the librarian, including mediated searching for researchers working on protocols and for the committee, the latter of which may have research needs around animal welfare policies or procedures (Harnett 2022; Osinski 2011; Ratajeski and Miller 2022). Otherwise, the literature on librarians and the IACUC emphasizes involvement as an opportunity to demonstrate the value of the librarian to the researcher or the institution. Involvement can be an opportunity to promote relevant library resources and services or for librarians to highlight their search skills by conducting searches for or with researchers (Gilbert 2019; Harnett 2022; Lingle 2008).

IRB

Institutional Review Boards (IRB) review, approve, and monitor research that involves human subjects. IRBs were established to prevent unethical and abusive research practices. IRBs and the approval of human subjects research are governed by the Code of Federal Regulations Title 45 Part 46 (45 CFR 46 subparts A-E), which is promulgated by the Department of Health and Human Services (U.S. Department of Health and Human Services 2018). According to these regulations, an IRB should consist of at least five members "with varying backgrounds to promote complete and adequate review of research activities commonly conducted by the institution" (U.S. Department of Health and Human Services 2018, 45 CFR § 46.107). Membership must include at least one community member not affiliated with the institution, one member who is not a scientist, and one member who is a scientist.

Outlined in Subpart A of the 45 CFR 46, referred to as the Common Rule, are the basic requirements that researchers must satisfy to conduct research using human subjects. These include ensuring that: risks to participants are minimized and reasonable based on anticipated benefit; informed consent is sought and provided; data are properly handled; recruitment is equitable; and no vulnerable populations are unduly targeted (U.S. Department of Health and Human Services 2018, 45 CFR § 46.111). Leading up to the development of 45 CFR 46 is a lineage of foundational documents addressing a history of unethical use of human subjects in research (Smale 2010; Cantwell and Van Kampen-Breit 2015).

Table 1: Foundational documents leading to the Common Rule.

Year	Document
1947	Nuremberg Code
1964	Declaration of Helsinki: Recommendations Guiding Medical Doctors in Biomedical Research Involving Human Subjects
1974	National Research Act (Public Law 93-348) that established the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research
1979	"Ethical Principles and Guidelines for the Protection of Human Subjects of Research" (known as the Belmont Report)
1981	U.S. Code of Federal Regulations Title 45 Part 46
2018	Most recent revision of U.S. Code of Federal Regulations Title 45 Part 46

These foundational documents provide context for the role of the IRB and add meaning to librarian contributions as a member of the IRB.

Participating as a member of the IRB as a librarian is not a novel concept. Librarians generally engage with the IRB in one of three ways: as a researcher submitting protocols for review; as a consultant, liaison, or non-voting member supporting researchers or reviewers in literature reviews; or as a voting member of the IRB (Cantwell and Van Kampen-Breit 2015; Shields and Sarino 2022; Frumento and Keating 2007). Most of the literature, in fact, focuses on health, medical, and hospital librarians, highlighting their work providing protocol development training and literature review consultations (Frumento and Keating 2007; "Medical Librarians" 2011; Raimondo, Harris, Nance, and Brown 2014; Renison 2017; Robinson and Gehle 2005). Increased involvement of health, medical, and hospital librarians on biomedical IRBs, in particular, is often attributed to a highly publicized incident at Johns Hopkins in the early 2000's related to failure to identify relevant literature that resulted in a potentially avoidable death of a research subject/participant; since then, librarian participation has evolved into more full board roles (Greenberg and Narang 2015; Harvey 2003; "Medical Librarians" 2011).

Working with the IRB is a service engagement with advantages and disadvantages. In a recent survey of librarians conducted in Canada, time commitment, workload, and lack of recognition for their work were noted by some respondents as negative outcomes from their involvement with IRBs (Lacroix 2021). However, all respondents who served on IRBs indicated that they benefited professionally from the experience and most considered it a positive experience (Lacroix 2021). Participating on an IRB can help librarians establish

new relationships, learn about research at their institutions, and improve their understanding of research process (Lacroix 2021; Harvey 2003). In this article, we focus on the benefits to the librarian of taking on a service opportunity on a research integrity committee and the importance of opportunities for professional growth and fulfillment.

Background: Research Integrity Committees

IACUC

The science librarian was invited to join the IACUC at the University of New Hampshire (UNH) in 2018 as a non-voting faculty member. Her service on this committee has been, as the literature predicts, a professional learning opportunity, a way to demonstrate her expertise, a new role in the research lifecycle, and an opportunity to raise the profile of the library. More importantly, it has given her a great amount of professional joy. Recently, the 3Rs of animal research have been challenged by biomedical ethicists as inadequate. They have made calls to expand the framework of the 3Rs to better assess and critique the social benefit of animal research in addition to welfare (DeGrazia and Beauchamp 2019). Information seeking skills are essential for investigating the social costs and benefits of research and best practices in biomedical science. For the science librarian, the experience on the IACUC has provided nuance to her understanding of the sensitivity and ethics of research involving vertebrate animals. Serving as a member of the IACUC has afforded her the opportunity to find mentors in the sciences, build fulfilling relationships with colleagues outside of the library, practice and hone sophisticated search skills, and find meaning in her contributions to improving vertebrate animal care and research at her university.

Professional Development

Through this work, the science librarian has found a new window into the research activities occurring at her university. The IACUC meets for two hours once a month during the academic year. Prior to each meeting, members are given a packet of newly submitted applications to read and review. To understand the study objectives and procedural details of each study, members devote considerable amount of time to reading each protocol. To critique the literature searches included in the applications, one must understand all the study's details. Through practice, careful review, and listening to fellow IACUC members, the author has gained a better understanding of scientific research designs, scientific literacy, research labs and field sites, and instrumentation and techniques in animal research. During IACUC meetings, PIs often attend to present their protocols and to explain decisions they have made about their study design before members discuss whether to approve or deny an application. As a librarian without formal education in the life sciences, the science librarian found it illuminating to be privy to how scientists critique each other's work, and this helps her support other researchers in the sciences more effectively. In addition, members are asked to visit facilities housing vertebrate animals for semi-annual inspections, and facility inspections at

land grant universities, in particular, are fascinating and fun, because the research facilities include working farms.

Building Relationships

Getting involved as a librarian with your IACUC is a pathway to building new relationships. The Director of Research Integrity Services has been a wonderful collaborator and advocate to both librarians. In addition, the science librarian has enjoyed meeting faculty on campus, both those who serve on the committee and those who submit to the IACUC, many of whom she might not have otherwise interacted. For example, like many subject or liaison librarians, the science librarian participates in library outreach work through common communication channels to promote library instruction, research consultation, collections request, or scholarly communications support. However, these channels may never reach some faculty members' attention. This role on the IACUC provides a new avenue to meet faculty (as well as lab managers and student researchers) and talk about other opportunities where they might work together.

Demonstrating Expertise

Typically, when the science librarian is working with library users outside of the IACUC it is to refine or simplify their search methods and make the research process more streamlined. In contrast, animal research protocols require investigators to perform a series of searches for animal alternatives or the three Rs. Not only is this searching different from the searching that is typically done for a grant proposal or a manuscript on a research topic, research studies that cover vertebrate animal alternatives or strategies for improved animal welfare are rarely indexed as such and can be difficult to find. These searches can be technical and complex, so as a librarian who sits on the IACUC, she is able to engage with PIs before and after the submission of their protocol and recommend improvements to their search strategies to better represent current evidence to address the 3Rs. This type of searching is an opportunity to celebrate the unique skill sets that librarians can offer during the production of research.

Contributing to Research Production

The science librarian's involvement in the IACUC has been an opportunity to contribute to the larger research landscape at her institution in tangible ways. Her interactions with researchers in this role fall within a context that is specific, timely, relevant, and important to them, because they are eager to get their research protocols approved. The support has provided an avenue to build a culture among vertebrate animal researchers of accountability, compliance, and rigor around the value of a careful and intentional review of the literature. Librarians are typically in positions of service or advisement; they meet with a researcher and provide suggestions, which can be adopted or ignored. Conversely, in her role on the IACUC, the science librarian finds herself in a position where the researcher is accountable directly: their research cannot move forward until she is satisfied that the person has made a good faith attempt to review the literature. She

has a respected voice on the committee in providing oversight into animal activities, and researchers are required to listen to the expertise and follow recommendations, which has been an empowering and unique professional experience.

IRB

The research data librarian at the University of New Hampshire (UNH) has served as a voting member on the IRB since 2018. UNH does not have a medical school that conducts biomedical clinical research, so for the most part, the UNH IRB reviews social, behavioral, and educational research (SBER). The IRB is committed to helping researchers uphold key tenants of beneficence, justice, and respect for persons as outlined in the Belmont Report (U.S. National Commission for the Protection of Human Subjects of Biomedical, and Behavioral Research 1979) and not just comply with regulations but conduct their research with integrity. The research data librarian brings expertise to the IRB as a qualitative researcher and a data stewardship specialist. This is important because many members on IRBs are quantitative researchers, so having members who specialize in qualitative research is needed to provide comprehensive review of all research activities. Her expertise in data stewardship benefits conversations around data sharing, data storage, and data management planning questions that arise in protocols.

Professional Development

The author's membership on the IRB provides her with access to informal and formal professional development outside of her core professional responsibilities. Informally, she learns from the vast expertise of the other IRB members during discussions about applications that are under review. During the full board reviews, IRB members discuss if the researcher has satisfied requirements set forth in the Common Rule (and other subparts as appropriate) or if they need to address contingencies presented by the IRB to meet the requirements. While she participates fully and meaningfully to these conversations, she always learns a great deal from them—she finds them to be thorough, engaging, and informative. More formally, she has had the opportunity to attend conferences in research ethics and administration, such as National Council of University Research Administrators (NCURA), Three Is & Biosecurity, and Public Responsibility in Medicine and Research (PRIM&R). She has presented about both data management and its role in research integrity, and qualitative research and the IRB. Attending these conferences has afforded her the same benefits as attending conferences in her professional area, including networking, sharing her expertise, expanded learning opportunities, and bringing fresh ideas back to incorporate into her work.

Building Relationships

Membership on the IRB provides an avenue for cultivating and fostering relationships across campus. In part, the invitation to serve on the IRB came because the research data librarian had already developed strong partnerships within the Research Integrity Services Office and these continue to grow. But through

the IRB, she makes connections with other IRB members. These are different kinds of relationships than she builds through her work in the library or with researchers who go to her for data management support. Members of the IRB view her first for the expertise that she brings to the board and second as someone who can provide them support with their own data needs. While these networks increase research data consultation referrals, the context of this relationship-building is valuable and rewarding to her.

Demonstrating Expertise

Participating on the IRB provides the research data librarian opportunities for demonstrating and applying her expertise in new contexts. As a member of the IRB, she is both "librarian as researcher" and "librarian as practitioner" in equal parts. This opportunity helps her maintain her knowledge in qualitative research methodologies. The attention of a practitioner librarian is often diverted from their own interests in support of the interests and needs of users. In the case of the research data librarian, she was trained to conduct research, and the study of research practice and methodology is a particular interest of hers; however, the degree to which she engages in ongoing learning and discussion in this area varies because her core professional work takes precedent. The IRB provides one mechanism in which she can continue to hone her proficiency and demonstrate her knowledge in research design, methodologies, and research process.

Contributing to Research Production

Through her work on the IRB, the research data librarian contributes to advancing conversations around human subjects data management at an institutional level. The IRB application has a section in which the researcher outlines plans for storing, securing, analyzing, sharing, and managing the human subjects data that they are collecting. In addition, funding agencies increasingly require data management plans (DMP) that emphasize responsible data sharing (for example, U.S. National Institutes of Health 2020). In her role as an IRB member, she applies her expertise in areas of human subjects data management. Poorly managed data can increase the risks to participants, such as a breach of confidentiality. She contributes to larger institutional conversations about aligning data management plans with data management practices. For the IRB, that means aligning details in the DMP submitted with grant applications with information in the informed consent form. The work that the research data librarian does with the IRB is confirmation that her role has an impact on research production and research integrity at the University of New Hampshire.

Next Steps

Library leaders and the library professionals have work to do to address issues of burnout and workplace toxicity and to foster a culture that promotes wellness and joy in the workplace. Finding professional joy on an individual level will not address these systemic problems but can help individuals create some balance. Be mindful of overcommitment, and volunteer for opportunities that directly align with your career goals and

bring you professional joy and fulfillment (Spencer 2022). With this in mind, research integrity committees can be valuable opportunities for librarians to learn and contribute outside of the library workplace.

If the authors have inspired you to pursue joining a research integrity committee, here are some strategies for finding your way onto a committee at your institution:

- Reach out to the director of research integrity or committee chairs at your university to learn more about possible roles for librarians.

- Promote the value that you bring with your unique scholarship expertise and in areas such as literature searching, responsible data sharing, secure storage, and data management planning.

- Review your university's IACUC and IRB protocol application forms to identify ways that library resources or expertise may improve an application.

- Read, learn, and network. There is a lot of "how-to" literature about librarians on the IACUC or IRB and other learning opportunities through online webinars, professional associations, and colleagues.

This article explored the personal experiences of a science librarian and a research data librarian who have found meaningful professional benefits and opportunities through their work on the IACUC and IRB, respectively. Participation on the IACUC has allowed one author to better understand research designs and instrumentation and laboratory techniques. She has built new relationships with research administrators, scientists, and lab managers, and found new opportunities to flex her unique search skills. The other author, while serving on the IRB, has extended her professional network and highlighted her expertise as a qualitative researcher. She has built stronger relationships with research administrators and scholars and found new opportunities for advancing responsible data management conversations across campus.

Ultimately, serving on a research integrity committee is a responsibility that has brought great professional joy to the authors: they have met new colleagues, engaged in the research lifecycle in new ways, honed their skills, challenged themselves intellectually, increased their scientific literacy, and felt empowered by their contributions. While other academic and hospital librarians may have recognized the IACUC and IRB as opportunities to demonstrate the value of librarian expertise, they may not have seen these service opportunities as sources of professional fulfillment. By fostering relationships with colleagues outside of the library and engaging deeply in the improved integrity of research activities at an institution, librarians may find great meaning and joy in the roles.

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