Building a Culture of Compliance at Liberal Arts Colleges and **Predominantly Undergraduate Institutions**

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Abstract: What barriers to compliance do research administrators face at liberal arts colleges and predominantly undergraduate institutions? What solutions can be offered to overcome these challenges? All academic institutions that receive government funding must abide by the same federally imposed rules and regulations for financial assistance, whether for student aid or sponsored projects. However, universally imposed grant requirements are fundamentally flawed because they assume that all colleges and universities operate with similar structures. Liberal arts colleges and predominantly undergraduate institutions must meet the same grant requirements imposed on larger institutions, but research administrators at these establishments often lack the infrastructure and institutional investment to effectively manage compliance. The existing literature recognizes that compliance with federal regulations requires capacity and additional financial resources. However, recent studies fail to address the challenges faced by research administrators at a micro level. Through a survey of the field, this project ultimately shows that a culture of compliance can be achieved through a shared commitment at the individual, institutional, and federal level.

Keywords: Compliance; liberal arts college; predominantly undergraduate institutions; research ethics

Introduction

Research administrators (RAs) at small liberal arts colleges (LACs) and predominantly undergraduate institutions (PUIs) are faced with two common problems. First, the environment at a LAC or PUI necessitates that an RA be a generalist. Often part of an office of one or two staff members, the RA generalist is tasked with managing grant funding and finding ways to increase grant activity while remaining well-versed on the continually evolving rules and regulations of grant administration (Cuhel-Schuckers et al., 2016). Juggling these responsibilities properly has become increasingly difficult with the adoption of the Uniform Guidance in 2014 and the newly revised Common Rule in 2018, chief among recent overhauls to the rules and regulations that govern the research landscape. Although these changes are intended to streamline federal regulations, the RA generalist needs a way to more easily navigate ever-evolving, unfunded federal mandates.'

RA generalists at LACs and PUIs are often faced with a difficult dilemma. As the institution's sole RA and often the only individual familiar with how to remain in compliance with federal regulations, they must develop new policies and procedures while ensuring old policies and procedures remain up to date. The RA must simultaneously find a way to communicate the



importance of grant compliance to researchers and senior leadership. Doing so provides the RA generalist with necessary support from those who are actually conducting the work in question and from those who have the greatest ability to affect change at an institution.

Problem and Purpose of Study

RAs at LACS and PUIs are faced with the challenging responsibility of single-handedly managing all aspects of research administration, spanning pre- and post-award. Such an obligation can feel like an impossible task as federal grant compliance evolves, becoming increasingly complex. The RA's work grows more difficult without a shared commitment to upholding federal grant compliance as an institutional priority. This research aims to explore how to foster a culture of compliance at LACs and PUIs. While regulatory burden has been discussed at length, there remains a significant gap in the literature on how to address the difficulty of managing federal regulations at PUIs and LACs. By exploring the issues that are inhibiting a culture of compliance and offering solutions to these challenges, the researcher's goal is three-fold: 1) to offer RAs at LACs and PUIs the tools they need to be successful in their work; 2) to better protect LACs and PUIs from the consequences of an audit finding, which can impact an academic institution's ability to conduct research, recruit high-quality researchers and students, and continue to receive and increase external funding; and 3) to advocate for a commitment to a higher standard of research ethics.

Over the past few decades, there have been a number of changes to the regulations that govern the acceptance of federal funding. The impact of these revisions is largely positive, as they promote the responsible conduct of research and attempt to streamline regulations. However, they also pose challenges for the research community, including remaining knowledgeable and fully informed on the ever-evolving requirements. Increased regulation necessitates additional institutional resources to fully comply with federal standards, regardless of an institution's size. A study that addresses how to build a culture of compliance will contribute to scholarship and critical discourse on the subject, and has the potential to reorient creative approaches for RAs at LACs and PUIs.

Project Questions

Addressing obstacles to compliance at LACs and PUIs requires an examination of the current landscape for research administration at these types of institutions. Before it is possible to offer solutions, it is important to understand to what extent the RAs influencing the results of this research are currently engaged in research compliance. Respondents were given the option to indicate varying levels of engagement with research compliance: 1) a significant amount (more than half their day); 2) a fair amount (roughly half of their work day); 3) a fairly insignificant amount (less than half of their work day); or 4) hardly any engagement at all. The researcher acknowledges that the answer to this question may be influenced by pressures associated with the RA generalist's conflicting responsibilities. To account for this, respondents were asked if they would devote more time to research compliance activities if time allowed. With this information, the researcher can gauge if the issue exists and to what extent.



Building a culture of compliance also requires a greater understanding of the current challenges at an institution. Those with an active role in research compliance were asked to identify particular areas of difficulty associated with managing research compliance alongside other duties. Respondents were also invited to share the challenges they have experienced in building a culture of research compliance at their institution. The responses were used to explore the issue at the micro level while also examining trends across institutions.

The researcher aimed to begin the conversation about how a culture of compliance may be established by recognizing that effective models may already exist. Respondents were encouraged to share ways in which they are navigating the challenges and successfully establishing a culture of compliance at their various institutions. Further, preliminary research showed that some LACs and PUIs have successfully advocated for employing a dedicated research compliance officer. Respondents had the option to share more information about such arrangements. These details may prove helpful as other institutions consider similar measures.

Exclusions and Limitations

While LACs and PUIs share many similarities and for the purposes of this research are being considered in one broad category, it is important to recognize that all LACs and PUIs are not the same. Distinguishing characteristics include: campus size; how long an institution has been operating; its endowment and other financial resources; an institution's research environment; the number of active grants and their funding sources (private vs. government entity); as well as an institution's commitment to research and available infrastructure. The researcher acknowledges these differences and the way they may influence the culture of compliance at each institution surveyed.

Further, the researcher realizes the challenges posed by the breadth and generality of this topic. Compliance takes on different meanings for different people. One RA may consider compliance as narrowly focused on research involving human or animal subjects while another considers compliance as responsible conduct in research, broadly defined. Additionally, compliance may also refer to the financial regulations governing an award. For the purposes of this research, the investigator left the definition open for interpretation. Doing so allowed participants to direct the focus of this research, naming challenges that may not have been a previously considered topic for discussion in building a culture of compliance.

Most importantly, this research is intended to create opportunities for future research. It is an impossible mission to set out with the belief that this research will provide the solution to the compliance issues that persist at LACs and PUIs. Considering the exclusions and limitations noted, because of the sheer differences that exist between each LAC and PUI, the challenges unique to each institution, and the generality of this topic, the researcher can only hope to address a fraction of the issues that may present themselves at LACs and PUIs. Nevertheless, she hopes this research will provide RAs with a starting point for considering how a culture of compliance can be established for the benefit of all.



Literature Review

A History of Research Compliance

Compliance, as it pertains to research, is a relatively new term. The research enterprise has grown at an exponential rate since the federal government first began investing in university research and development (R&D) following World War II. By 2018, the United States' investment in R&D had grown by more than 112%, to over \$500 million (Congressional Research Service, 2022). This influx of funding led to an explosion of new technology and innovation, resulting from an outcropping of federally-supported funding agencies—the National Science Foundation, the National Institutes of Health, and the Department of Defense were a few of the most notable of these agencies.

As federally-funded research evolved, so did the federal rules and regulations that govern the implementation of research. Governmental funding agencies needed policies to ensure transparency with the use of taxpayer dollars to support these R&D initiatives. Regulations began with the passage of the Federal Grant and Cooperative Agreement Act in 1977, which helped outline the broader function of grants, contracts, and cooperative agreements (grants.gov, n.d.). A year later, the Office of Management and Budget (OMB) developed guidelines—the OMB Circulars—to help govern the spending of federal dollars to support work as defined under the Federal Grant and Cooperative Agreement Act.

Beyond the rules and regulations governing the transparent use of federal dollars, funding agencies developed policies to help govern the ethical practice of sponsored research. The absence of such policies was brought sharply into focus in the second half of the 20th century. The Nuremberg Trials—during which Nazi physicians were tried for the inhuman treatment of prisoners of war in medical experiments—called global attention to the lack of international laws governing the treatment of human subjects in research. The Tuskegee Study—in which 400 low-income, African American men with syphilis were intentionally left untreated—brought this international issue to the United States. In response to the atrocity of the Tuskegee Study, the United States government enacted the National Research Act in 1974, which led to organizational oversight through the establishment of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. This commission adopted one of the foundational documents for the protection of human subjects: the Belmont Report, guidelines to systemically address unethical research practices. The National Research Act also led to the adoption of informed consent, which requires researchers to receive voluntary agreement from all individuals before participation in research (Center for Disease Control and Prevention, 2020). The creation of such documents provided a stepping stone toward a more systematic approach of governing the ethical conduct of research.

Through the creation of the Belmont Report, researchers were provided with a needed framework for the treatment and protection of human subjects in research, but it only served as a starting point for the federal government's call to action in addressing unethical research more broadly. High-profile cases of research misconduct in the late 1970s and early 1980s, like that of Andrew Wakefield and John Darsee, made the Public Health Service aware that it needed to do more to



protect the credibility of the research enterprise and the continued advancement of high-quality R&D (Kalichman, 2013). The creation of the National Institutes of Health's Committee on the Responsible Conduct of Research and its Responsible Conduct in Research (RCR) compliance requirement in 1989 was just one response to the damage caused by these prominent cases. Today, there are thousands of pages of information relating to mandates imposed by Congress that all recipients of federal grants must comply with in order to continue to receive federal funding (Task Force on Federal Regulation of Higher Education, 2015). These regulations govern not just the receipt of sponsored research funding, but the financial assistance institutions receive for students as well. Thus, remaining in compliance is not just of importance to researchers and research administrators, but a vital mission that extends across all facets of an academic institution.

The Evolution of Regulatory Requirements

As R&D has continued to expand over the last several decades and the federal regulations governing R&D evolve and intensify in response, issues relating to ethical research remain at the forefront of public scrutiny. Some, for instance, have questioned the impact the rush to respond to health pandemics like the COVID-19 novel coronavirus might have on a researcher's inclination to skirt ethical considerations (Da Costa Thome & Larson, 2020). As research issues emerge, Congress responds with new and increasing levels of regulation to ensure the highest level of ethical research possible. All institutions are required to comply with these regulations, regardless of the organization's size or level of research activity.

The culture of compliance that exists on today's campuses is vastly different, and in many ways greatly improved. Many seasoned RAs can recall a time when there was no ethical code, no animal welfare act, or RCR requirements. Researchers were initially resistant to new formalized requirements, seeing the processes and procedures as yet another layer of bureaucracy impeding research (Freed, L., personal communication, March 5, 2020). The new generation of researchers is more familiar and accepting of these standards as evidenced by new requirements, like RCR, that are a required part of a researcher's formal training as well as the increased number of full-time employees dedicated to research compliance and in-house compliance training programs. The challenge now, particularly for LACs and PUIs, has shifted to one that requires additional resources like time and capacity.

With a focus on the Department of Education, the Task Force on Federal Regulation of Higher Education—appointed by the U.S. Senate—conducted an examination of the growing burden of federal regulation on institutes of higher education. The U.S. Senate was motivated to conduct this study because it recognized the expansion and evolution of federal compliance as a problem "exacerbated by the sheer volume of mandates . . . and the reality that the Department of Education issues official guidance to amend or clarify its rules at a rate of more than one document a work day" (Task Force on Federal Regulation of Higher Education, 2015, p. 1). The federal government understood the growing problem this trend would create. Through campus site visits and interviews, the appointed task force concluded that, despite the value of universities and colleges as drivers of the nation's economic development (as evidenced by federal investment) and the importance of federal oversight of taxpayer dollars, regulations imposed on those receiving government funding were creating a labyrinth of bureaucracy. This maze of



regulation was creating unsurmountable issues with compliance because the many rules and regulations were becoming too overwhelming for RAs to contend with, not to mention problems with confusing jargon, making it difficult to comprehend the extent of the regulations. These issues are exacerbated for RAs at LACs and PUIs who, unlike those at large institutions, don not often have the support of an entire office of individuals to help wade through the many federal requirements and responsibilities or develop a specialty in a particular area of compliance.

Of the many challenges facing institutes of higher education, the task force pinpointed cost of compliance as one of the most prohibitive. According to a study conducted by Vanderbilt University, roughly 11 percent (\$150 million) of the institution's expenditures were devoted to compliance efforts (2015). Researchers at Hartwick College—a small institution more comparable to smaller LACs and PUIs—reported that compliance cost roughly 7% of its operating budget (not counting the portion devoted to salaries and benefits) or \$297,008 annually (Zack-Decker, 2012). Hartwick College also reported that nearly 7,200 staff hours were devoted to gathering data to meet compliance requirements (Zack-Decker, 2012). The Task Force on Federal Regulation of Higher Education found that institutions as a collective were devoting more than 26.1 million hours only to fulfill Department of Education reporting requirements without taking into consideration the time spent implementing compliance requirements (2015). This increased regulatory burden has created the need for additional staffing to effectively comply with federal mandates and, in turn, has led to higher budgetary costs. These costs impact the unsustainable rise in tuition costs at colleges and universities across the country. Without solutions, these indirect challenges may have a lasting effect on higher education that goes far beyond the impact the research office sustains.

Considering the Challenges to Compliance at LACs and PUIs

In the years that have followed the initial creation of overarching national guidelines that govern recipients of federal funding, compliance has become so intertwined with successful sponsored research pursuits that many institutions of higher education dedicate an entire team of individuals to its successful management. Feedback obtained from research administrators by the American Action Forum revealed that within a decade's time, the number of officers at universities and colleges who identified as a "compliance officer" had risen by roughly 33% (as cited by the Task Force on Federal Regulation of Higher Education, 2015). While offices staffed with compliance officers may be common at large research institutions, the same level of resources are not often present at LACs and PUIs. At these institutions, the burden of regulatory compliance typically falls to one individual, who is often also trying to balance the responsibilities of a sponsored research office and sometimes the workload of a combined sponsored research-foundation and corporate relations function (Cuhel-Schuckers et al., 2016). The question is then if all institutions accepting federal funding are held to the same expectations when it comes to compliance with federal rules and regulations, how do RAs at LACs and PUIs—without the same level of dedicated resources—manage the workload that comes along with properly navigating the risk associated with accepting federal funds for research? And how can they help foster a culture of compliance that is truly a shared institutional responsibility?



Balancing the challenges of a small office with the tall task of remaining on top of the need for proper research compliance is a frequent topic discussed by RAs at LACs and PUIs. However, there remains a significant gap in the literature on how to navigate these challenges. The research that does exist largely centers on pleading the case for why compliance is important and why RAs need to build a culture of compliance at their institutions, rather than on how to then address the problem itself. Linda Freed, former Director of Sponsored Programs and Faculty Development at University of Wisconsin-Oshkosh, and Frances Vinal Farnsworth, Associate Director of Grants and Sponsored Programs at Middlebury College, offer a starting point for considering a culture of compliance at LACs and PUIs. In an article published in the CUR Quarterly, a publication of the Council on Undergraduate Research, Freed and Farnsworth (2001) recognize that for LACs and PUIs, one major barrier to such a culture is a perceived lack of time. At these teaching-intensive institutions, Freed and Farnsworth note that there is a prevailing attitude that compliance is an extra layer of administrative burden. Instead of viewing compliance as an ethical duty, researchers instead see research compliance obligations as an additional roadblock to research. LACs and PUIs may also see compliance as an added financial burden. At large research institutions, compliance costs are frequently treated as a general operating expense, supported through funds for facilities and administrative costs (F&A), or indirect costs, received through federal grants. This is frequently not the case at LACs and PUIs (Freed & Farnsworth, 2001). The research environment at a LAC and PUI is very different than that of a large research-intensive institution like John Hopkins, the leading recipient of federal research and development funding (National Science Foundation, n. d.). In academic circles, the notion is that research is a primary function of a faculty member at such large research institutions, where the idea that a researcher's career trajectory depends on their publication record. While research and the generation of new knowledge is foundational to LACs and PUIs, researchers do not find their upward mobility at LACs and PUIs to be as interconnected with their research prowess as their colleagues at larger research colleges and universities. Because research is important, but the teaching load greater at LACs and PUIs, research is at times not prioritized in the same way (Ramirez, 2016). It often falls on RAs to convince the college community that the responsibilities that accompany an institution's grant awards deserve the same attention as other institutional priorities.

Developing a Framework for Reducing Regulatory Burden

For more than 70 years, the Council on Government Relations (COGR)—a coalition of research universities, affiliated medical centers, and independent research institutes—has advocated for reducing regulatory burden and building a stronger institutional commitment to research compliance. In 2016, COGR released a guide to assist in its mission to facilitate a culture of compliance at research institutions. For COGR, effective compliance requires "looking at compliance as a systemic enterprise rather than discrete practices in response to specific regulations. Thus, while compliance will take a different form in meeting financial, administration, or performance requirements, all these activities reflect a commitment to compliance across the organization" (COGR, 2016, p. 3). Due to a lack of resources in comparison to larger counterparts, LACs and PUIs tend to adopt a more reactive approach to regulatory requirements. When a situation, like an audit, calls for a greater level of compliance, the institution only then acts to diffuse the problem. Such an approach is inherently flawed, bringing with it risk of audit



findings or worse, unethical research practices that place students, research participants, and the reputation of science in danger.

COGR suggests that institutions can combat these liabilities by putting into place a "comprehensive strategy" that clearly outlines how the university or college will handle federal, state, or local compliance requirements. Such a strategy employs four basic practices: First, the institution must not only develop clear policies and procedures that address the proper program management, but ensure that they are regularly reviewed and updated to reflect new or revised regulations. The everevolving research landscape necessitates such reviews as institutional protocols quickly become obsolete with the passage of newly updated regulatory standards. Second, policies are only good if those at an institution use them in their daily work. An institution's compliance strategy must be widely understood and used by the institution's senior management and flowed down to the research assistants employed in an institution's labs. Proper compliance requires different levels of personal responsibility. It's important that there are "clearly established lines of responsibility, i.e., a delineation of the roles and responsibilities, for all sponsored programs and administrative personnel involved in the conduct of and management for sponsored programs . . . that personnel understand and accept their specific roles and responsibilities" and that "the institution obtains confirmation that the principal investigator understands and accepts their specific responsibilities for financial and administrative management of the proposed project" (COGR, 2016, p. 1). A culture of compliance does not occur in a vacuum. It involves a clearly defined and understood vision and buy-in across the institution. A shared commitment to compliance means RAs at LACs and PUIs are no longer shouldering the unsustainable burden of compliance management alone. A culture of compliance requires community involvement.

Further, a compliance strategy is most effective when the institution's senior leaders are invested in its success. COGR suggests this involves assigning an individual with senior-level authority to "oversee sponsored programs compliance" (2016, p. 4). It requires someone with power at the institution who is familiar with the intricacies of this strategy, and who is invested and able to ensure it operates most effectively. This individual will serve as a conduit to the institution's governing board, which is imperative because building a culture of compliance also requires a financial commitment. It takes funding to maintain or receive additional funding. An initial investment in compliance may have a greater long-term payoff. Senior leadership needs to understand and communicate this long-range vision.

An effective compliance strategy involves both training opportunities and educational programming to encourage a culture of compliance. This includes training that is appropriate for different positions (administrator vs. lab scientist) and opportunity for understanding specific areas of compliance (i.e., human or animal research, work that involves hazardous materials, etc.) Similar to the institution's policies and procedures, these training opportunities must be regularly reviewed and updated to reflect changing regulatory requirements. This is understandably a tall task in today's frequently changing research environment, but one that is essential to safeguard against the risks associated with falling out of compliance with grant terms.



Compliance Training and Institutional Buy-In

In a case study evaluating research administration training and compliance at the University of Central Arkansas (UCA), a PUI, researchers recognized the burden regulatory compliance places on RAs at institutions that do not have large scale research infrastructure more commonly found at large research-intensive institutions. Smaller operations, still required to conform with state and federal regulations, are forced to do "more with less" and funding agencies fail to make up for the increasing cost of grant compliance (Temples et al., 2012, p. 2). Because research administrators at PUIs are managing heavy workloads—often balancing pre- and post-award duties along with compliance—they may only feel able to simply "push grants through the system," sometimes at the expense of having a full understanding of the research behind these proposals and the implications of that research (i.e., ethical considerations and potential compliance issues). The authors of this study are not suggesting this is a responsibility of RAs alone. In fact, they acknowledge that RAs cannot and should not single-handedly manage this regulatory burden. Instead, the authors offer that a culture of compliance requires further reinforcement that includes educating not just researchers, but departmental support personnel who are integral to researchers. Faculty often rely on departmental support staff to manage administrative duties, like grant management, in order to focus more fully on teaching obligations and research. By offering targeted educational opportunities for both researchers and department personnel—with the goal of sharing a deeper understanding of the importance of the grant programs they are administering—RAs can foster a greater understanding of the shared responsibility that compliance requires and communicate why institutional investment is needed for sponsored research activities. Whereas departmental support staff in the UCA study noted they were well versed in the basics of hiring grant personnel and fulfilling purchase requests and travel reimbursements, they indicated both a need and a desire for a greater understanding of the basic terminology associated with the grants they were administering, cost principles and allowable costs, and the role they as support staff could play in the grant process. More than 93% of respondents expressed their interest in a training program that involved education on grant compliance. Further, 100% of respondents supported the development of a compliance "checklist" to complement training activities and assist support staff and their faculty with remaining in compliance post-training. Such a strong response shows that there may already be a desire for a culture of compliance in existence at LACs and PUIs, but that there exists a lack of infrastructure to address the issue.

In addressing the issue of infrastructure, respondents also recognized the importance of buy-in that goes well beyond the RAs who manage research administration as part of their daily work function. A culture of compliance requires senior leadership to understand the importance of and commit to infrastructure that supports a culture of grant compliance. Survey respondents suggested including senior institution leaders as part of "roundtables with grantees to discuss impediments to grantsmanship and useful, practical, and more meaningful forms of encouragement of faculty grant writing than an annual recognition Ceremony" (Temples et al., 2012, p. 9). In the absence of such conversations, the efforts of researchers and RAs stop short of achieving the goal of effectively creating change, which often requires an additional financial commitment.



Whereas the need and desire for such programming was clear, significant barriers to implementation exist. To complement their exploration of UCA personnel, the authors of this study surveyed 57 RAs at PUIs through the National Council of Undergraduate Research Administrators (NCURA). A majority of respondents worked at institutions, like small LACs, where there are often no trained grants personnel at the departmental level and only 20% of those surveyed said they provide formal training opportunities to providing grant support. A lack of time was one of the greatest hurdles keeping RAs from offering such programming. Of those who did develop training programs, many noted that it took a minimum of five years to establish training programs while others stated that these training opportunities are continually evolving. To navigate the time commitment associated with developing training programs from the ground up, many of the RAs surveyed emphasized the importance of remembering that those interested in offering compliance training do not have to reinvent the wheel. There are resources available to help PUIs and LACs get started with creating a culture of compliance, offered through NCURA workshops and training materials. Others recommended reaching out to others already engaged in offering educational opportunities through professional organizations for RAs. While recognizing that all programming won't seamlessly fit at all institutions, materials can be modified and adapted to meet an institution's needs.

Federal Partners as Integral to a Culture of Compliance

Advocacy groups like COGR and the Federal Demonstration Partnership (FDP) and professional organizations like NCURA have been vital in developing educational resources that can assist RAs in their mission to build a culture of compliance at their institutions. However, it is important to recognize compliance as a duty that extends beyond the institution. Institutes of higher education are the primary drivers of R&D in the United States and vital to the country's economic diversity. Yet, colleges and universities are also hindered by the greatest level of government regulation (Olt, 2018). Phillip A. Olt, in a study on the cost of compliance on LACs, concedes that regulation to some degree is essential. However, he also argues that the government needs to do its part to work with its institutional partners to strike a balance. By offering financial support to assist institutions, like LACs and PUIs, to make hires associated with compliance, federal funders are helping their institutional partners to build the culture of compliance they seek while delivering a higher standard of research. The result benefits both the awardee, who is making efforts to be compliant and perform good work, and the grantee, who wants to support ethical and innovative research.

Federal grant compliance is relatively new in the history of R&D, but within a short timespan has proven to be immensely impactful to research administration. While in many ways compliance benefits the research enterprise—advocating for better, more ethical work—its exponential growth has also left RAs and institutions scrambling to find effective ways to manage the increasing workload. RAs at LACs and PUIs are further disadvantaged because of the relative lack of compliance infrastructure and institutional investment. Only with institutional buy-in and additional support offered by federal funders can RAs begin to start building a culture of compliance.



Methods

To address the research questions—how to build a culture of compliance at LACs and PUIs and circumvent the challenges posed to creating such an atmosphere—the researcher used a mixed methods approach with both qualitative and quantitative assessments. Through quantitative means, the researcher was able to understand the shared challenges experienced at LACs and PUIs. Further, a controlled survey representative of the field was necessary to draw any sort of conclusion about what stands in the way of research compliance at such institutions. With more detailed information provided through individual interviews, the researcher was able to better understand emerging trends and learn more about particular hardships or strengths experienced by RAs at specific institutions. Qualitative evaluations were necessary to discern the obstacles to research compliance at LACs and PUIs, and to offer solutions to those hurdles. The researcher used the results to identify trends at the micro- and macro-level, ultimately synthesizing a broad series of recommendations from praxis-based investigations.

The researcher developed an online survey to reach the broadest number of RAs working at LACS and PUIs as possible. The researcher focused the inquiry on challenges and best practices for building a culture of compliance at LACs and PUIs, creative ways to address these challenges, and how these obstacles can impact the research environment. Questions took the form of both multiple choice—to more generally survey the environment of research compliance and the ways in which the RAs surveyed contributed to this climate of compliance—and long-form answers, allowing participants to provide more detailed explanations of their specific challenges and successes. The survey comprised a total of 16 questions. Google Forms was the mechanism through which individuals filled out the survey. This format was selected due to the capability of Google Forms to sort information received, providing pie charts to help visualize the responses to multiple choice questions and grouping together responses to assist the researcher in analyzing data for trends and themes.

Individuals who are a part of the Colleges of Liberal Arts Sponsored Programs (CLASP) group were the primary target for the survey. This professional organization is comprised of more than 500 research administrators working at LACs and PUIs across the United States. CLASP members provide a wealth of firsthand experience with the issues specific to this research. Sixtyone individuals responded to the survey. After organizing the responses recorded and checking for incomplete information, all feedback was ultimately included in the analysis. It is important to note that a couple individuals included in this analysis reside at the same institution. The researcher made this decision because, ultimately, the RAs' experiences and duties were starkly different, even if working in the same office or at the same institution.

Notes from these interviews were reviewed and a thematic analysis was conducted. Several themes emerged from these interviews and data was sorted according to its relevance to each topic. After the information was sorted, the researcher examined each theme more closely to achieve a greater understanding of the responses. In particular, these interviews were helpful for providing context as to why certain issues persisted at specific institutions and, for those who are achieving a culture of research compliance, what factors led to their eventual success.



Results and Analysis

Examining the Role of Compliance Within Research Administration at LACs and PUIs

Of the 61 research administrators who participated in this research, a vast majority (75%) indicated that their role involves some level of research compliance. While 61% are responsible for multiple facets of sponsored projects—pre-award and post-award activity in addition to managing research compliance among other responsibilities—only about a quarter of these respondents noted that research compliance makes up a significant percentage (more than 50%) of their work day. An equal number of respondents spend hardly any portion of their day devoted to compliance duties while one said that some portion of each month is reserved to review compliance matters, broadly speaking. The greatest number of survey respondents (36%) stated that less than half their day is spent on compliance. Interestingly, several outliers indicated that research compliance doesn't have a central "home" at their institution. Instead, many different individuals from separate departments handled compliance on a case-by-case basis. However, these individuals lacked a central manager—someone to prevent gaps in compliance or to prevent duplicating work. Only one respondent came from an institution with a central office dedicated to compliance.

Notably, although most of the RAs surveyed said a significant portion of their time is not spent on compliance, just over half acknowledged that they would like to be able to spend more time on regulatory activities if time allowed. Those who did not respond to this question conceded they are simply maxed out and don't feel they have any more hours in the day they could possibly devote to the subject. One respondent shared, "More time needs to be spent on research compliance at my institution, but ideally I would hire another staff person into a dedicated research compliance position." Another shared that their office is currently down a staff member and, given how their office is currently strained, the question was difficult to answer. With little bandwidth, many research administrators find themselves focused on filling vacancies to assist with basic responsibilities rather than considering compliance as a function of their role. This points to a common institutional problem of having a disproportionately strong focus on the number of proposals an RA submits or the amount of research funding received during a given year. There is a tendency to favor quantitative goals over qualitative goals like efforts made to build a culture of compliance, which cannot be so easily quantified. Such a tendency forces RAs to make sometimes costly concessions. A disproportionate focus on pre-award over grant compliance could ultimately risk the grant funding the institution prizes.

In exploring what obstacles are preventing a culture of compliance at LACs and PUIs, four themes emerged:

The Generalist's Dilemma, Compliance as a "Lesser" Priority

The greatest challenge for the RAs surveyed is the persistent struggle in balancing compliance with other duties as assigned. Many expressed a frustration with the RA generalist's "dilemma," managing competing priorities. One respondent shared, "I juggle three jobs and compliance only gets 2.5 days of my time per week. Quite often it is not enough." The trouble remains when serving



multiple important functions at an institution; how does an RA decide which takes precedent? By focusing on post-award issues, an RA jeopardizes a culture of grant seeking. By concentrating on pre-award, an RA might be unable to properly track compliance issues or the proper spending of a grant. Inevitably, when balancing many duties, something is neglected to the detriment of the institution.

For those surveyed, compliance often falls to the bottom of the priority list. This is because deadline-driven grant work trumped less deadline-focused compliance responsibilities. An RA works as a "mediator-expeditor" with three primary goals: 1) assisting grant seekers to increase research success, 2) serving an institution's overall research mission, and 3) matching a sponsor's goals with the research being conducted at an institution and ensuring rules governing funding are met (Beasley, 2006, p. 18). However, understaffed and overburdened, many RAs felt unable to achieve all three of these tenants. There is an awareness that failing to deliver on all three goals is problematic, running the risk of missing out on a grant opportunity or letting the institution fall out of compliance with the terms of an award. One RA surveyed—responsible for pre-award, post-award, and compliance—stated that, "Juggling all three [responsibilities] while making sure all awards are in compliance runs the risk of something falling through the cracks." With one person responsible for all aspects of sponsored projects at an institution, inevitably there is some aspect of research administration that receives less attention. Often, compliance becomes a lesser priority, which exposes the institution to risk when accepting external funding.

As expressed by another participant, "Pre-award tasks such as application submission take precedence over tasks such as subaward monitoring." One survey participant communicated that this is often the result of management's prioritization of measurable goals over other more qualitative outcomes. General attitudes at academic institutions favor the number of proposals submitted or amount of grant funding received over other grant activities. Focusing on meeting such metrics can quickly dominate the RA generalist's time. The perceived value of measurable goals over qualitative outcomes oftentimes is the result of a lack of true understanding of the RA's function. This lack of understanding leads to an underappreciation of the RA's role and a lack of awareness about why compliance is important. As one respondent puts it, "the most difficult part is that while I have a role relative to research compliance at my institution, my position is not invested with sufficient authority. Thus, I need to utilize the tactic of 'convincing' those with authority that certain things need to happen."

There is a general misconception that the RA's work ends when an award is received. Such a misunderstanding has serious consequences. This is not to say that external funding is unimportant. However, concentrating on funding alone without proper stewardship may ultimately result in less funding should the institution be cited for an audit finding. Educating institutional leaders about the importance of and risks associated with award acceptance becomes another responsibility unto itself, and one that many RAs said they simply do not have time to navigate. A greater level of infrastructure or support from across the institution is needed to give compliance the attention it needs to properly protect both the college and research.

Lack of Consistency Across Funders and Lack of Time to Stay Ahead



RAs who have been in the profession for the last several decades recall when there was an overall lack of regulations governing federally sponsored research. Today, the reverse seems to be true. A majority of RAs surveyed acknowledge that they felt bombarded by the overabundance of federal regulation and its complexity. RAs said that understanding what the regulations are trying to communicate is its own full-time job. Some also said they feel overwhelmed by the continually evolving rules and the lack of consistency among federal funders. When managing day-to-day deadlines and other general duties, many felt there would never be enough time in the day to conduct sufficient research to fully comprehend the latest compliance requirements in addition to reviewing, revising, and adding to institutional policies to ensure full compliance. It is difficult to build a culture of compliance when keeping track of what it takes to remain in compliance is so cumbersome. However, failure to do so can place the institution and its researchers at significant risk, including a potential loss of future funding or criminal charges.

While many RAs expressed serious concern that compliance issues would "fall through the cracks" because of the lack of time and lack of institutional prioritization of these issues, they also acknowledged concern over what can be described as "regulation fatigue." The RA generalist is disadvantaged in trying to remain up to date on general grants policy, regulations governing animal care and use, human subject research, research integrity, etc. As one respondent noted, "It is too much for any one person to be expert on." LACs and PUIs are further disadvantaged because they operate in a much different way than larger institutions, and the policies and regulations developed by federal funders are often written with larger institutions in mind. Because these guidelines make assumptions about an academic institution's infrastructure, they are not only difficult for RAs at LACs and PUIs to understand, but also impossible to apply. Due to a general lack of time and because LACs and PUIs don't often deal with more complex awards—often serving as a subrecipient, for instance—many have adopted a reactive rather than a proactive approach to research administration and grant compliance. However, a failure to invest in compliance training means the institution is ill-prepared and scrambling when, inevitably, it is the primary applicant for a more complex award and is held liable for subaward monitoring and other more advanced, time-consuming compliance responsibilities.

Gap in Oversight and Lack of Compliance Infrastructure

Large institutions have the benefit of infrastructure, like an office of compliance, allowing them to be proactive in developing a culture of compliance. The RAs surveyed share a concern over the absence of such resources. Many LACs and PUIs failed to even have one individual whose main job is to focus on compliance issues. LACs and PUIs do not often handle compliance in a holistic manner. One RA wrote that the finance office handles post-award compliance at their institution, while all other research compliance activity is distributed among various offices: finance, purchasing, and legal, among others. Distributing compliance responsibilities in this way—not uncommon at a LAC or PUI—can be problematic when there is no individual overseeing all compliance activities to eliminate potential gaps or redundancies. RAs said they feel the weight of this burden in addition to a sense of helplessness caused by a lack of "authority" to address the problem. This is one reason why compliance takes a backseat to other priorities at a LAC or PUI—lack of ownership or shared responsibility for compliance. Remaining in compliance



with federal regulation is essential to fulfilling many aspects of an institution's mission, and yet its investment is treated as subordinate to other institutional priorities. It becomes difficult to convince others to take compliance issues seriously unless their hand is forced with an audit finding. RAs struggle to find ways to convince the institution at large that the rules do not just apply to researchers. As the institution is the recipient of all federal awards, the rules apply to everyone connected with the institution. To remain in compliance, the entire college community needs to be invested in some way.

Strategies for Building a Culture of Compliance: Fostering Institutional Allies

A vital part of the RA's job at a LAC or PUI is outreach or building a culture of grant seeking. At large research institutions, a faculty member's research may be viewed as the most important factor when it comes to obtaining tenure and thus creates very enterprising, research-focused faculty. Researchers at LACs and PUIs, however, have many competing priorities. LAC and PUI faculty are expected to manage research plans along with a heavy course load and service to the institution—all of which are part of consideration for tenure. In trying to balance these competing interests, faculty may decide against pursuing sponsored research because they simply do not have the time to deal with the administrative burden associated with finding and applying for external funding.

Additionally, faculty may not realize institutional support exists to assist with their sponsored research pursuits, and thus it becomes the RA's job to educate the community about their existence as an important institutional support system. Through a focus on outreach efforts, many RAs at LACs and PUIs have been able to successfully build both a culture of grant seeking and compliance at their institutions. As one respondent noted, "It's all about relationship building. In this way I have been able to build trust and increase compliance success." Outreach activities include:

- Hosting a faculty luncheon before the start of the school year or introducing compliance topics at faculty meetings, guaranteeing attendance
- Subsequent workshops throughout the academic year
- Hosting a "compliance café" as a "one-stop shop" to get PIs to sign time and effort forms, conflict of interest forms, and to come discuss their Institutional Review Board (IRB) and Institutional Animal Care and Use Board (IACUC) questions in person
- Focused, individual outreach or "check-ins" once a semester

An initial investment of time often reaps rewards. As the RA's presence becomes well-known, less outreach is needed. Further, many RA's surveyed have leveraged relationships built with faculty to encourage others to buy-in to a culture of compliance. These faculty allies help to build capacity for an RA who does not have the institutional funding to support the hire of a dedicated compliance officer.

Communication across institutional departments was also cited as a crucial part of building compliance at LACs and PUIs. Without a compliance office, many LACs and PUIs lack central control over regulatory issues, which creates a gap in critical regulatory oversight. Without a central



compliance manager, how can the RA meet all compliance requirements? One solution might be the development of a system of internal controls that can help facilitate better communication across departments. One survey respondent shared that their institution formed a group called Grants Administration Management (GAM), composed of representatives from sponsored research, finance, the provost's office, legal, and purchasing. GAM meets once a semester to talk through compliance issues. Working across divisions in this way serves to keep compliance issues at the forefront of institutional priorities and helps to alleviate the burden compliance may impose on any one individual. It creates a shared sense of responsibility and can help illustrate to senior leadership the importance of devoting resources to compliance.

A third crucial part of building a culture of compliance at LACs and PUIs is buy-in from leadership. Their support gives authority to matters that might otherwise fly under the radar. Many respondents expressed that they were able to successfully build a culture of compliance once they had one leader, often a dean or associate dean, who could serve as a conduit between the RA, the faculty and other institutional leaders at the highest levels of the institution. RAs were able to convince associate deans of the importance of this work by using peer-reviewed information to provide justification for why they should be following the correct procedures.

Reliance on External Networks for Support

Fostering allies across an institution is vital to building a culture of compliance. However, RAs noted that it often takes additional support systems to make this culture a reality. Through professional networks specifically targeting LACs and PUIs, RAs can lean on others for support, and share best practices for combatting the challenges thwarting efforts to grant seeking and compliance. Organizations like COGR and the FDP offer resources like subaward monitoring templates so that RAs don't have to reinvent the wheel when dealing with compliance issues on their campus. This is particularly helpful for an RA at a LAC or PUI who struggles to find the time to focus on developing such materials. Professional networks like CLASP—of which all survey participants are members—are especially helpful for LACs and PUIs because they provide a forum for discussion tailored to the issues faced by smaller colleges and universities. When in doubt, several survey responders said they have turned to peer college grant managers to provide guidance on compliance issues, often sharing these responses to successfully advocate for additional compliance support. Colleagues at other LACs and PUIs are wonderful resources, offering models for how a culture of compliance may take shape at other similarly structured institutions. An RA may feel limited in what they can achieve in a one-person shop at their LACs or PUIs, but by leveraging a network of PUIs and LACs from across the country, their power and capacity can go much further.

Making Compliance Accessible

Large institutions often have advanced technological infrastructure available to help manage grants and to offer large-scale training programs for researchers. In the absence of time to develop compliance training and education opportunities, many RAs at LACs and PUIs said they are taking advantage of Electronic Research Administration (ERA) systems to make a culture of compliance within reach. Several survey respondents pointed to the Collaborative Institutional



Training Initiative (CITI) program as one of the most crucial ERA tools for building a culture of compliance at their institutions. CITI offers a number of educational courses tailored to different areas of research compliance and ethics training. While online courses alone are not enough since in-person training sessions are a part of compliance requirements, CITI offers LACs and PUIs an important starting point albeit at a cost that might prove to be restrictive for some institutions.

In addition to online training programs, several RAs said that by making as many resources as possible available online, they not only save themselves time, but make it easier for faculty and staff to buy-in to a culture of compliance. One respondent shared, "[I] use compliance as a service or a way to show people that it is a framework in which to work and not administrative red tape. I have worked... to make forms/websites/trainings efficient: fillable forms, completely new websites with tools to answer questions (decision trees, drop down FAQs, templates and forms), streamlined CITI trainings, etc." Though this might seem like a great deal of work, there is no need to reinvent the wheel. Many RAs shared that they once again turn to their professional networks, such as CLASP, to find existing resources like compliance checklists to make it easier to build a culture of compliance at their respective institutions.

Investing in a Dedicated Compliance Officer

Several respondents agreed that to balance research compliance with other responsibilities, their institutions need additional staffing. In particular, staffing devoted specifically to the task of managing compliance as a full-time responsibility. While a majority of RAs surveyed come from institutions that do not have a dedicated compliance officer, roughly 26% (16 RAs) said that they have been successful in advocating for a full-time compliance manager at their institution. A majority of those surveyed said that funding for this position came from institutional funds while roughly a quarter of respondents said they used external funding, like F&A costs, to support the position. Regardless of funding source, several RAs said the existence of this position has made all the difference in building a culture of compliance at their institution. One RA said:

Our compliance officer, who is housed in our three-person office, does a lot of outreach with faculty and students. She gives in-class presentations on compliance issues and provides in-person assistance with IACUC/IRB applications. She requires the faculty mentor of any student researcher to sign off on the protocols before they are submitted for consideration. In this way, we have been able to get the word out about compliance even without much upper administrative support.

For many, this position was not about enforcement, but instead focused on protecting the institution. By dedicating resources to such a position, RAs said their institutions have been able to be proactive instead of reactive, "in front of the issues" instead of scrambling to familiarize themselves with regulations in the event of an audit finding. For one respondent, not only has the addition of a compliance officer allowed them to feel more confident that the institution is covering all of the aspects of research compliance, but it has enabled the sponsored projects office to offload the burden of partially overseeing RCR compliance in order to focus on grant activities with a higher return on investment. An investment in the short term may pay off in the long run, both in terms of allowing the RA to focus on increasing grant-seeking activity while also offering the institution better protection from the damage of an audit finding.

Conclusion and Recommendations

Building a culture of compliance is within reach for RAs at LACs and PUIs and, as evidenced by the research, successfully occurring at institutions across the country. However, systemic issues persist—even for RAs who have experienced some "wins" in the compliance arena. Widespread success requires investment and a concerted effort from RAs, researchers and other institutional leaders, and federal funders.

Whereas the following recommendations address ways in which RAs at LACs and PUIs can find support in compliance at the individual, institutional, and federal level, it is important to acknowledge that the scope of this study does not delve deeper in addressing the question of audits noted by some of the surveyed RAs or the number of LACs and PUIs that have been subject to the consequences of an audit finding due to a lack of institutional compliance. Acute attention should be paid to the financial and practical concerns as a result of compliance failures and the comparison between larger institutions and smaller LACs and PUIs. This broader area of investigation was not addressed in the research conducted for this study, but merits further examination. One of the results of the findings has been to illuminate the need for more research in this area, which the researcher hopes to address in further studies.

First Recommendation

RAs at LACs and PUIs must continue to be active participants in professional networks that influence the regulatory environment for peer institutions. The RAs are more closely aware of the challenges and tribulations faced by LACs and PUIs when it comes to external funding and governmental affairs. It is therefore imperative that they remain engaged participants in a professional community, like CLASP, that has the potential to influence real change in the regulatory landscape. RAs at LACs and PUIs serve as a vital support system to their peers and peer institutions, sharing best practices and well-developed policies, and helping to interpret new regulations and the way they may impact LACs and PUIs—generally holding their colleagues to a higher level of research ethics and grant compliance. Sharing the way in which one institution complies with a requirement like RCR training prompts others to reevaluate how they approach the same issue.

Furthermore, while organizations like COGR and the FDP are imperative to the field of research administration, they are largely comprised of individuals hailing from large institutions. RAs and LACs are generally absent from the conversation about how government regulations impact academic institutions. Through networks like CLASP or the Council on Undergraduate Research (CUR), RAs from LACs and PUIs can ensure their voices are heard. Whereas the internal conversations that occur within organizations like CLASP and CUR are useful and productive, RAs should not underestimate the importance of the leadership roles they can and should take up in the larger arena of research administration. Though the level and type of research activity that takes place at a LAC and PUI may be different than at large institutions, all colleges and universities have a role to play in enhancing shared knowledge and training the next generation of researchers.



Second Recommendation

RAs alone cannot be held responsible for ensuring an institution's adherence to federal regulations. A culture of compliance relies on investment at all levels: administration, faculty, and management. RAs can advocate for a culture of compliance through outreach efforts that may include hosting compliance cafés at least once a semester, sending regular emails with up-to-date information on new compliance policies and opportunities, or participating in regular meetings of representatives from across the institution who can play a leadership role in the enforcement of institutional compliance. However, RA generalists are limited in their bandwidth. To truly safeguard the institution from the potential devastation a lack of compliance can have, a proactive stance is needed. The ability to act proactively requires that institutional leadership make an investment in compliance. The optimal solution is an institution investing in hiring a full-time compliance manager devoted to building a culture of compliance, ensuring the institution is safeguarded against the risks associated with falling out of line with federal regulation, and able to build its federal portfolio in a responsible way. Of course, this is untenable for all institutions of higher education. As a lesser, but improved, alternative, institutions should invest in memberships like CITI to give existing staff the tools to more effectively manage compliance. Programs like CITI make it easier for the institution to track RCR obligations and meet requirements to offer compliance education and training (though it should be noted that federal mandates still require some in-person training). A small investment in programs that help with federal compliance has a payoff—sometimes literally—for faculty, administration, and students.

Third and Final Recommendation

Federal funders play a vital role in the ultimate success of the projects they fund. It is not enough to provide funding for the direct costs of research or to impose a set of guidelines without also investing in the improvement of research infrastructure. Programs like the National Institutes of Health Biomedical/Biobehavioral Research Administration Development (BRAD) Award Program have been instrumental in providing financial support to improve research administration, recognizing that infrastructure is a vital aspect of the continued growth of the nation's R&D. Unfortunately, these funding opportunities are disappearing. Colleges and universities, the drivers of the nation's R&D and economic development, are increasingly left to bear the brunt of the high administrative costs that the acceptance of federal funding requires. Academic institutions need assistance to meet the demand for increasingly sophisticated research infrastructure. Investing in the direct costs of a project alone are not enough. The federal government needs to be willing to continue to collaborate with RAs to improve the research enterprise and the regulations governing its advancement.

These recommendations and concerns are not to suggest that federal regulations are inherently bad or that complying with laws that govern federal awards is not important. To the contrary, compliance is vital to ensure the highest-possible standard of research. The stakes are high, which is why being thoughtful about building a culture of compliance in a way that includes all stakeholders is so imperative. By upholding compliance as a top institutional priority, college and university leaders demonstrate a commitment to ethical work, help to better distribute the burden of compliance in a way that is sustainable, and help situate their institutions to receive more federal



funding. By regularly assessing the way new and increasingly complex regulations impact R&D and by listening to and acting on the concerns of RAs from a wide variety of institutions, the federal government can partner with academic institutions to ensure the continued proliferation of the innovative work that has reaped resounding benefits for institutes of higher education in the 21st century.

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