ABSTRACT

The research enterprise is constantly fluctuating due to changing policies at either the sponsor or institutional level, including changes in how research is viewed and conducted. With the amount of research funding expended in the U.S., institutions need to maintain educated and capable research administrators who can handle the stress and workload that comes with sponsored research. Research administrators have an important role in the research enterprise and need to be able to adapt to any circumstance that arises. In order for institutions to maintain a successful research administration, there needs to be more awareness of the importance of research administrators, more research administration degree programs, and more continuing education opportunities to aid in professional development.

Using responses from a questionnaire and articles on the important role research administrators play in advancing the research enterprise, this project aims to demonstrate the need for more well-rounded research administrators, as well as the need for more degree programs and continuing education opportunities. Responses from the questionnaire demonstrate research administrators' interest in having more opportunities to learn about all areas of research administration instead of only the area in which they are currently employed.

Educated and capable research administrators not only help the institution retain research funding, but they also help researchers navigate the complexities involved with sponsored research by providing customer service qualities and removing administrative burdens so researchers can focus on their research.
Although there are five universities that offer graduate degrees in research administration—Johns Hopkins University (JHU), University of Central Florida (UCF), The City University of New York (CUNY), College of Health Sciences at Rush University in Chicago (Rush), and Central Michigan University (CMU)—there need to be more opportunities, especially for undergraduate students, to learn about research administration. Increased awareness and professional development opportunities will help recruit future research administrators and bring more legitimacy and interest to the pursuit of a professional career as a research administrator.
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CHAPTER 1
INTRODUCTION

Background

When thinking of research, a few things might come to mind, such as clinical trials, researchers, scientific findings, and federal research funding. However, the administrative support that helps the research come to fruition and ensures researchers abide by federal, state, and institutional policy and regulations is rarely talked about or even known.

Administrative rules and regulations can be seen as a burden, so it is important that research administrations do their best to assist grant coordinators, research staff, and more specifically, researchers. This allows researchers to focus on their research and not spend time on administrative paperwork. Research administration is a job that needs to move smoothly and sometimes quickly in order to keep the process of research moving forward and to ensure compliance. Poor research administration can result in research funding being taken away and possible legal troubles for the researcher and for the institution.

According to Kulakowski and Chronister’s book, Research Administration and Management, in 1999 seven major industrialized countries (United States, United Kingdom, Canada, France, Germany, Italy and Japan) contributed $461 billion on Research and Development (R&D) expenditures. By 2000, the U.S. alone reportedly spent $265 billion on collective (federal, private, other types of funding) R&D activities (Chronister & Kulakowski, 2006, 3). Fifteen years later, in 2015, the U.S. had increased its collective R&D expenditures to around $495 billion (National
Science Foundation, National Center for Science and Engineering Statistics, 2018). This increased R&D funding has led to the demand for more accountability from institutions, including competent research administrators who can properly manage this level of funding. Federal regulations, reporting requirements, and procurement management also contributed to the need for research administrators.

Before World War II, federal research funding was solely for federal research that would support federal projects that were “mission-oriented” (Beasley, 2006, 16). There were no grants awarded to universities and no federal agencies conducting research. Before 1950, “research administration was vested with and the responsibility of scientists and their research staff members” (Beasley, 2006, 9). After 1950, with the creation of multiple federal agencies such as the National Science Foundation (NSF) and the National Institutes of Health (NIH), as well as the increased number of research collaborations with universities and other institutions, more personnel was needed to handle the increased research activities. As a result, “recipient institutions [receiving federal funding] had to create research administrative systems and employ qualified people to manage research programs” (Beasley, 2006, 17). The development of these administrative systems resulted in the birth of research administration as we know it today to “fulfill this institutional need” (Beasley, 2006, 17).

**Statement of the Problem**

Vital research that seeks to cure diseases, improve agriculture, advance technology, and maintain national security through military development requires funding to accomplish its goals. Research must be funded and supported in order to
bring potential advances to everyone around the world. Institutions require funding to conduct research, and most of this funding comes from external sponsors. American Association for the Advancement of Science (AAAS) provides an interactive tool showing the national expenditures for R&D from all funding sources over time since 1953 (Figure 1)¹. These expenditures have steadily increased since 1953 creating a need for capable administrations to correctly manage these funds.

![Figure 1. AAAS interactive tool showing National expenditures for R&D from all funding sources between 1953 - 2017.](https://www.aaas.org/programs/r-d-budget-and-policy/federal-rd-budget-dashboard)

An often overlooked but important role contributing to the success of research is the research administrator. Research administrators are responsible for managing, monitoring, and reporting research activities, including making sure that

the institution remains compliant with any federal, state, or institutional regulations. Research administrators are required to stay abreast of changes to policies and regulations, as well as changes in levels of federal funding, in order to help researchers successfully carry out their studies appropriately.

There are inconsistencies in policies and regulations between agencies administering funding, including different federal agencies. For example, the U.S. Department of Agriculture (USDA) has multiple agencies such as the Forest Service (FS), Foreign Agricultural Service (FAS), and National Institute of Food and Agriculture (NIFA), to name a few. Even though all are under USDA, these agencies require different documentation for grant applications and have different requirements depending on the sponsor guidelines for each Request for Applications (RFA). This is just one example of these inconsistencies, which also exist between other types of funders such as foundations and industry.

These complexities have led to the need for more research administrators. Veteran administrators are retiring, and at the same time, the research enterprise is constantly growing. However, there are very few ways to get people interested in becoming a research administrator. Most people do not know about the research administration field until they become a research administrator. Such poor awareness has led to a shortage of qualified administrators.

Once people are aware of the profession or even become a research administrator, there are few educational and training options. There are also few degree programs or courses to prepare new research administrators. It is difficult for research administrators to continue to develop professionally and to keep up
with changes in research-related policies when there are few easily available continuing education opportunities for those handling research funding.

To increase the number of research administrators and expand their capabilities, there needs to be more opportunities for continuing education and an increased awareness of the importance of this career field. More emphasis on the value of research administration and the increased ability of institutions to maintain an organized and well-rounded team of research administrators will contribute to better funding for vital research.

**Project Questions**

Maintaining written policies to ensure compliance with federal, state, and institutional regulations for handling millions, or even just hundreds of thousands, of dollars necessary for beneficial research is extremely important. So, why are there degrees at almost every college and university for public administration or business administration but only a few institutions offering degrees in research administration, even with increased funding spent on research and research-related activities?

Similar to research administration, the goals of public administration have a similar focus, yet the educational opportunities for the two fields are clearly unequal. Why should non-administrators and those not involved in research be concerned about the need for more educational opportunities or a better understanding of research administrators and their importance? If federal agencies provide more opportunities for institutions to build degree programs for research
administration, that may lead to increased interest in educational and professional development in research administration.

This project hopes to provide more information about the need for qualified, reliable, and well-rounded research administrators and a greater awareness of the various jobs available in this field. For example, there are opportunities in grants and contracts, accounting services, grant writers, grant coordinators, as well as in compliance, legal and regulatory offices. This project also hopes to explain the importance of and increased need for institutions conducting research to maintain a functional and knowledgeable research administration through degree programs and professional development. Institutions need to build a great research administrative environment in the same way they strive to recruit and maintain functional and knowledgeable faculty researchers who bring in external research funding and collaborations.

**Objectives**

The objective of this project is to identify the various needs and benefits for providing continuing education that is easily accessible. This project also aims to highlight the few current degree-granting or graduate-level courses for research administrators. Another objective is to provide a detailed and convincing argument for the need to increase the awareness and importance of research administration. This will hopefully encourage institutions to cultivate their research administrations to function efficiently and effectively and provide sufficient resources to maintain their success.
Significance

This project is significant because there is an ongoing need to find and hire competent and well-rounded research administrators, yet there is not enough awareness brought to the field of research administration. Once institutions find research administrators, there are not enough educational or training opportunities available to those new hires. There are also few higher education opportunities or continuing education programs, other than a few courses and certifications, which are not as comprehensive as degree-level courses. Providing education on research administrative functions and how they affect researchers will lead to more effective research institutions and more productive faculty members. It also will lead to better communication, workflow, and outputs by research administrators and researchers.

Better-educated research administrators will also benefit institutions that have limited personnel and resources for their research administration but still need to function and provide research outputs that can compete with institutions that have more personnel and resources. In addition, better-educated research administrators will help researchers and institutions follow required research-specific policies and procedures. This will help reduce the chances of institutions having audit findings or not being compliant with applicable state and federal regulations. Perhaps most importantly, institutions with competent and knowledgeable research administrators allow investigators to focus on their research activities.
Research administration is more than filling out dozens of forms, and it should be viewed as a legitimate and important profession. Research administrators need to be able to communicate clearly and be able to handle multiple tasks at once. Research administrators need to be the helpful, unbiased voice of reason assisting institutions and helping researchers wade through the murky waters of sponsored research without drowning.

**Exclusions and Limitations**

This project is focused on research and research administration at any type of institution in the U.S. and all U.S.-controlled territories involved in sponsored research. Although this project can be used as an argument for more educational opportunities throughout the world, research administration at institutions outside the U.S. is beyond the scope of this project. Research for this project encountered limitations from the lack of catalogued information about research administration available to those both involved and not involved with research. Even with exclusions and limitations found in this paper, this project aims to include all research administrators regardless of the specific area of research conducted or the type of institution involved.

The acceleration of technology, frequent changes in federal regulations surrounding research activities, and the lack of standardized policies and procedures for research institutions make it difficult to create consistency within research administrations. This paper attempts to compile similar thoughts and ideas by other research administrators to back up the argument that there should be more research administration awareness, research administration degree
programs, and continuing education for research administrators throughout their professional career.
CHAPTER 2
LITERATURE REVIEW

To understand the importance of research administration, it is crucial to understand the definition of research administration. There are varying definitions for research administration, making it difficult for people who are rarely or never involved in the research enterprise to understand the important role of research administrators. A search of Merriam-Webster’s website for the definition of research administration, finds there is no definition available. The site displays the message: “The word you’ve entered isn’t in the dictionary. Click on a spelling suggestion below or try again using the search bar above” (2019).

It is also difficult to find a consistent definition in the literature, though there seems to be one common theme: customer service. The most common description of research administration found in many articles published in the National Council of University Research Administrators (NCURA) magazine is providing excellent customer service and support for the faculty and institution with regard to the research enterprise. The roles and duties of research administrators have expanded over time, but supporting researchers and having great customer service skills have always been included when describing research administrators.

This paper defines research administration as the administrative offices supporting institutions and faculty with all research and research-related activities. These administrative offices can be centralized or decentralized and include pre- and post-award, accounting, legal, regulatory, and compliance services.

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2 https://www.merriam-webster.com/dictionary/research%20administration
Little of the literature available captures the full extent of the roles and duties of research administrators and their place in the research enterprise. One of the main sources of literature used for this project was the 2006 book by Elliot Kulakowski and Lynne Chronister, *Research Administration and Management*. This book contains almost a thousand pages of information relating to research administration and management, from an introduction to the research enterprise to post-award activities, technology transfer, and everything in between. In Kulakowski’s and Chronister’s book, Dr. Kenneth Beasley calls research administration “the support required for success in research programs” (2006, 9). He then describes the changing roles and duties of research administrations since World War II ended.

Before World War II, scientists and their staff were the research administrators. During the war, the Office of Science Research and Development (OSRD) was created to “centralize scientific research to defend the country and engage scientists in targeted research projects” (Beasley, 2006, 12). The OSRD’s successes during the war led scientists and politicians to develop a system for procuring and managing research awards between the federal government and the research laboratories, using grants and contracts in order to establish the goals, financials, and reporting requirements (Beasley, 2006, 12).

A need arose for professionals solely dedicated to being research administrators who would be trained to properly manage the influx of research grants and contracts awarded. As Beasley states, “after 1945, a new type of research administrator emerged to create a new professional position and launch the rapid
growth of research administration” (2006, 9). Kulakowski’s and Chronister’s 2006 book is still applicable to the current state of research administration for both senior and entry-level research administrators as a guide to the history and basic principles of research administration. The book provides an overview of the various duties involved with research administration, how those duties changed over time, and how research administrators are vital to the success of the research enterprise.

There are not many ways to learn about research administration or the importance of research administrators for those outside of the profession. Few scholarly publications about research administration are available to administrators. Those publications include NCURA’s Research Management Review Journal and the Society of Research Administrators International’s (SRAI) Journal of Research Administration. Even though journal articles provide great information, including insights to the commonalities among research administrations, those articles are available only to those with subscriptions and to those already aware of the existence of these publications.

Without awareness of research administration as a profession, institutions face challenges finding interested and capable employees who may not have any experience in research administration but are willing to learn. Without a steady pool of applicants to choose from like some other professions may have, institutions must be creative when recruiting research administrators who can handle the changing roles and duties of a research administrator. NCURA publishes a magazine for research administrators that provides tips on how to recruit people from other
areas of expertise since it can be difficult to find people with experience in some aspect of research administration.

Not only is it hard for people not involved in the research enterprise to learn about the importance and professional career possibilities offered to research administrators, but it is also hard for current research administrators to learn and develop their skills so they can move forward in their careers. Even Kulakowski and Chronister write that their book is “the first book on research administration and management in nearly a quarter of a century” (2006, 5).

Articles from journals published by NCURA or SRAI that were used for this project demonstrate shared views on the importance of being a successful research administrator and best practices for accomplishing this success. Research administrators are the help behind the scenes of the research enterprise. They manage research activities, handle the constantly changing institutional environment, and must be able to adapt to differing research administration offices. This ability to adapt is important because of the many different ways institutions manage research activities.

A common understanding found throughout the literature review is that research administrators must be resilient and understand that “the only constant across the research landscape is change” (Beckman & Caban, 2018). Research administrations, especially at public institutions of higher education, must deal with budget cuts and a reduction or complete lack of resources while still maintaining high standards and excellent customer service. Some research administrative offices have five or fewer employees to help hundreds of faculty members constantly
involved in research and research-related activities throughout the year. These small research administrative offices are expected to perform at the same level as other institutional offices that have more personnel and resources. This ability of research administrators to manage more with less is one of the many ways the literature demonstrates the importance of research administrators.

Other important qualities for being a research administrator include the ability to communicate clearly, have appreciation for the demands on a researcher, work cooperatively, multi-task, handle all administrative duties that free up time and attention for the researcher to focus on their research, and understand the importance of their role in the success of researchers and the success of the institution. All of these qualities establish the value and significance of research administrative positions and support the need to recruit more research administrators with these qualities.

In Shuna McMichael’s article, “Aim High: Career Exploration in Research Administration” published in NCURA magazine, she writes about her job as a research administrator leader looking for “bold new ways to promote the research administration profession” in order to “sustain a successful research enterprise” (2018). Ms. McMichael agrees that not only do many research administrators admit that they did not plan to become a research administrator, but many adults also do not know what research administration is about or what a research administrator does (2018). This is why she tries to educate high school students on the importance of research administration and how it can lead to a successful career through her participation in high school career days and visiting classes to share her
passion for research administration, and encouraging others in her field to do likewise (McMichael, 2018).

Kaitlin Thornton, who received her Master’s in Research Administration from Johns Hopkins University, describes why research administration matters in her NCURA article, stating:

In a time when the landscape of Research Administration is evolving due to the implementation of eRA systems, funding climate changes, and new federal regulations, the defining of Research Administrators roles and responsibilities has never been more important. As the roles of Research Administrators remain broad in scope and require more expertise due to increasing regulatory complexity, ensuring Research Administrators have roles and responsibilities they understand and can point to as a foundation for their day-to-day activities is a powerful tool in creating a footing of quality and trust among a Research Administration office staff. (2018)

NCURA magazine articles provide arguments and justifications for why research administrators and their roles are important within the research enterprise. But as previously pointed out, these articles are not seen by anyone who is not already in the world of research administration. They are found in publications that are only accessed by other research administrators or NCURA members. These articles need to be more widely published in periodicals that will be read by those interested in research or science and by people looking for professional careers.

Andre Walker, who served on the NCURA Pre-Award Neighborhood Committee, wrote a NCURA article reviewing the book Steer Your Career: A Research Administrator’s Manual for Mapping Success by Sarah Lampson and Katie Porter. Mr. Walker acknowledges that the short 103-page book aims “for a lofty goal: to provide career guidance to the broad and varied world of Research Administration,” but “despite its shortcomings,” he considers this book as a “sorely
needed resource” (2012). Mr. Walker ends his book review with a great argument for why research administration educational programs are needed, saying, “if Research Administration is to become a first-choice career, rather than a convenient job, it must present would-be entrants and working administrators with clear career paths and development opportunities” (2012).
CHAPTER 3

METHODOLOGY

The objective of this project is to explain the importance of research administration and the need for more awareness of career opportunities in research administration, for more university undergraduate and graduate academic programs in research administration, and for continuing education opportunities to support professional development and successful careers. The importance of these objectives has increased, especially with the lack of qualified applicants, or any applicants at all, looking for a research administrator job as a valid career option. Most research administrators, including the author herself, did not know about research administration as a career but rather fell into the profession.

Publications from NCURA and SRAI, responses to a questionnaire created and distributed by the author, and information gathered from personal conversations with other research administrators were used to design and conduct this project to demonstrate the need for more awareness and educational opportunities in research administration. Data found from the author’s literature review and other online resources were also used to provide background information, examples of the many ways research administrators are the glue that holds the research enterprise together, and suggestions for creating a successful research administration program.

The author created a questionnaire using Qualtrics software that was available to the author through her place of employment. The questionnaire aimed to collect participant ideas and opinions on research administration regardless of
the participant’s level of knowledge or understanding about research administration. The questionnaire consisted of twenty-one questions that would appear based on the participant’s previous responses. Using branching logic on the questions allowed any individual the opportunity to participate without having to be a research administrator or know about research administration.

The majority of the questions contained answers with radio buttons or check boxes. Two or three short-answer questions were also included as free-text answers in the questionnaire for participants to provide their own views on certain questions. These free text responses were used for questions that could not easily be answered through predetermined choices. Answering each question was mandatory, but the minimum length for free-text responses was five characters. To avoid excessively long responses, a maximum character limit of 1,500 characters was set.

The questionnaire was divided into three categories: general information, for researchers only, and for research administrators only. After the participant read the introduction and consented to participate by clicking the “Continue” button, the participant was required to answer an authentication question set as the first question for all participants. The authentication question asked participants to verify their age in order to determine eligibility to complete the questionnaire. Participants could continue the questionnaire only if they were 21 years of age or older. This allowed the author to abide by her institutional review board (IRB) approvals mandated for any research involving human subjects (See Appendix 1).
This question also removed the required informed consent form needed for all participants under 18 years of age.

The first section of the questionnaire had seven general questions used to provide basic information and lead the participant further in the questionnaire. One question in the general information section asked if the participant was a researcher, research administrator, both, or neither. This question was used to determine the participant's next section of questions based on branching logic. The general questions were also used to hopefully remove limitations on potential participation by including a few questions that would provide useful data without participants abandoning the process because they did not find the questionnaire applicable. These general questions also helped demonstrate the various ways research administration is described by those in research administration and those outside the profession.

The second section of the questionnaire was directed only at participants who were researchers. These five questions asked participants if they worked with a research administrator previously and how much experience they had with their research administration, if any. These questions were meant to gauge the level of involvement researchers had with their research administration and how they viewed research administrators.

The last section of the questionnaire was directed only at participants who were research administrators. These nine questions asked participants about their experience with researchers and their opinions on continuing education. These
questions were included to find out how other research administrators feel about the importance of research administration at their institution.

The author distributed the questionnaire using an anonymous link sent to a listserv with at least one thousand research administration subscribers. The questionnaire also was distributed to potential participants through emails from the author herself or others who shared the questionnaire. The listserv used is for research administrators and is available to anyone to subscribe. The questionnaire was set up to limit participants to only one response in order to maintain data integrity.

The questionnaire was a good tool to use for ascertaining other views on research administration, but it could have been expanded in order to get more information from participants. The questions created a good initial response from participants, but there could have been more follow-up questions. For example, one question asked participants if they had the Certified Research Administrator (CRA) certification. If they answered "yes," they were then asked if they thought it was necessary to get the CRA certification in order to be a good research administrator. This question provided information about the number of research administrators with CRAs and their thoughts on the certification, but a good follow-up question would have been to ask why they thought it was not necessary to obtain CRA certification. Since many participants answered that they would be interested in taking continuing education courses, it would have been good to know why participants would take continuing education courses if offered, but did not think it was necessary to have the CRA certification. Despite the lack of follow-up questions,
the questionnaire data provided preliminary information from research administrators, as presented in Chapter 4.
CHAPTER 4

RESULTS AND DISCUSSION

The results of the questionnaire and the literature review support the need for more educational and professional development opportunities for research administrators. The amount of money the U.S. spends on research activities, the continuous changes research administrators experience, the various rules and regulations at the institutional, state, and federal level, and the responsibility research administrators have to researchers and their institution are reasons given for creating more degree-granting programs for research administrators.

The target number of participant responses allowed for the questionnaire was set at 150 participants, which the author thought would be a sufficient number of responses to generate data for this project. The questionnaire gathered valid responses from 147 participants. All participants who said they were research administrators thought that there should be more continuing education opportunities in every area of research administration, not just in their speciality area. This demonstrates an interest in having more opportunities to learn more about research administration as a whole and not just in one area. It is hard for current and future administrators to gain knowledge of every aspect of research administration without any degree programs to aid them. Institutions can only provide so much training for their research administrators, making it difficult to evolve in other areas of research administration.

Many NCURA articles show a consensus among research administrators that it is hard to maintain a successful research administration with constant turnover
and “lack of applicants who have previous experience in research administration” (Smelser & Wade, 2018). More awareness of research administration as a valid career option and its importance to the research enterprise can change the dynamics of how people become research administrators and how they develop professionally.

David Smelser and Stacey Wade’s 2018 NCURA article detailed the way they tried to deal with turnover and gauge whether other research administrations found it hard to hire administrators with previous experience (Smelser & Wade, 2018). Smelser and Wade believe research administrations are “constantly fighting the turnover battle” and “are lucky enough to be fully staffed,” and they attribute this turnover to research administration not being a “highly paid profession” as well as the stress that comes with the job which “can be quite significant” (2018). Smelser and Wade think that even with lowering the turnover rate institutions experience, the real problem is trying to hire staff with some experience as a research administrator (2018). They concluded that the majority of individuals with experience in hiring research administrators thought that it was “relatively challenging to hire candidates who have research administration experience” (Smelser & Wade, 2018).

Research administrators who have years of experience are getting closer to retiring. This leaves research administrations with even more pressure to find suitable candidates to hire and train before most of the experience is lost. Institutions that do not have consistent training or educational opportunities available add to the problem of losing experienced staff to retirement. According to
the National Academy of Social Insurance (NASI) the current retirement age to receive full benefits “is 66 years and 2 months for people born in 1955, and it will gradually rise to 67 for those born in 1960 or later” (National Academy of Social Insurance, n.d.).

As shown in Figure 2, the author’s questionnaire revealed that out of 147 total responses, 122 were 45-years of age or older and that more than half of those over 45-years old were nearing or already at retirement age. Of those 122 respondents, 57 respondents were both research administrators and 45-years or older.

![Figure 2: Out of 147 responses to the questionnaire, 38.0% were both research administrators and 45-years of age or older. 57% of the responders who said they were research administrators are nearing or already at the retirement age.](image)
This leaves the younger generation of research administrators to carry their institutions with little experience and fewer educational opportunities available to grow as a professional in their field. With the difficulty of recruiting and hiring capable research administrators and with the experienced research administrators getting closer to retirement, it is a “more common experience...for leaders to find themselves propelled into positions of responsibility without receiving formal training” (Edmondson & Floyd, 2012). This then leads to “the ultimate ‘trial by fire’ experience” (Edmondson & Floyd, 2012), which makes it hard for research administrations to become successful and reliable for the faculty at their institution.

Educating new research administrators occurs primarily through mentoring by senior personnel, attending webinars and conferences, and from on-the-job experience. There are few degree-level educational opportunities for those who want a career in research administration.

Recently, some universities have started to provide online courses for those who want to take graduate-level courses in research administration, with some universities providing graduate certificates for taking those courses. However, there are only five universities that offer graduate degrees for individuals who want to get more than a certification in research administration. Those universities are Johns Hopkins University (JHU), University of Central Florida (UCF), The City University of New York (CUNY), College of Health Sciences at Rush University in Chicago (Rush), and Central Michigan University (CMU). Three or four universities offer graduate degrees in clinical research administration, but those five universities previously listed are the only ones that offer graduate degrees in research administration, with
CMU’s program offering a graduate degree in administration with a concentration on research administration.

Courses offered in these programs provide students with the ability to learn more than just one area of research. For example, JHU's graduate program³ requires students to choose two of the four academic tracks: Program Administration and Facilitation; Financial Management of Sponsored Programs; Compliance, Legal, and Regulatory Issues; and Concentration in International Research Administration Management. In addition, students are required to take elective courses from each track before being eligible to graduate. JHU is a great example of the way degree programs should be set up for research administration degrees because it provides a more well-rounded view of research administration and its importance to the research enterprise.

Academic programs for research administration degrees are needed to help maintain and grow the field of research administration. Even having undergraduate elective courses about research administration would be a good way to bring awareness to the profession in hopes that more young adults become interested in research administration. Undergraduate elective courses in research administration would also benefit future researchers by introducing them to the requirements of the grant application process.

There needs to be a next generation of research administrators to learn from those with decades of experience and knowledge to share before they retire or leave the institution. Without continuing education programs and with veteran

³ [https://advanced.jhu.edu/academics/graduate-degree-programs/research-administration-4/degree-requirements-2/](https://advanced.jhu.edu/academics/graduate-degree-programs/research-administration-4/degree-requirements-2/)
administrators reaching retirement age, the next generation of research administrators will be left without capable mentors to help advance their professional development.

Certification as a research administrator requires the applicant to pass the CRA exam, and that option is only available after working as a research administrator for at least three years. The CRA provides a five-year certification that can be renewed only after the individual submits five CRA exam questions and maintains eighty hours of continuing education. The CRA exam requirement for recertification further support the need for continuing education.

Although having a CRA certification does not make research administrators more qualified than those who do not have the certification, the CRA does provide credentials of legitimacy as a research administrator. It “is one indication of competence” and “provides formal recognition of basic knowledge” in the field of research administration (Research Administrators Certification Council, 2017).

Even with the CRA certification available, more than half of the research administrators who responded to the questionnaire did not have the CRA certification or think it was necessary to get one in order to be a good research administrator (Figure 3). However, 54% of the 95 participants who encountered the question answered that they thought all areas of research administration (pre-award, post-award, accounting services, legal, regulatory, and compliance) need more training and educational opportunities and that they would take advantage of those opportunities, if provided. As discussed in Chapter 3, it would have been a good idea to ask follow-up questions about why the participants didn’t think it was
necessary to have CRA certification but is necessary to have more educational opportunities in all areas of research administration.

There is an increased interest among research administrators who want to expand their knowledge of research administration and want to be a more well-rounded research administrator.

Tom Wilson explained in his article, “Graduate Degree in Research Administration: Why Me?” that even though it is difficult to remain an expert in all research administration areas, it is also important to at least have some understanding of all areas in order to excel as a research administrator. Wilson argues that “success in the future...will very much depend upon your knowledge in all areas of research administration” (2012). Wilson stated that advanced degrees...
and scholarships are “pivotal to advancement” and although a “graduate degree in business administration, law, technology transfer, or science is very helpful,...those disciplines will not give you the knowledge or experience specifically tailored toward success in research administration” (2012). In a publication in NCURA’s scholarly journal, Research Management Review, Jo Ann Smith and Laurianne Torres from UCF discussed why it is important to have graduate programs in research administration. They argued that “graduate professional programs in research administration are needed to prepare highly skilled research administrators who will help the nation meet its growing demand for research innovation and economic growth” (Smith & Torres, 2011).
CHAPTER 5
RECOMMENDATIONS AND CONCLUSION

Recommendations

It is vital that institutions and the federal government work together to create more degree programs and continuing education opportunities for research administrators. This is especially important with the current experienced research administration personnel reaching retirement age and the difficulty institutions face have in recruiting professionals who can handle the day-to-day challenges and pressures of the job of research administration. One recommendation is to create more awareness of research administration and its importance within the research enterprise by making it more accessible to learn and read about research administration. Offering undergraduate elective courses and including NCURA articles in mainstream publications to reach more people will create more opportunities to generate awareness and interest in the work of research administration.

There need to be undergraduate degree opportunities and more graduate-level programs available throughout the U.S. Creating undergraduate elective courses in research administration is a good start for institutions that cannot afford to create full undergraduate and graduate degree programs. The federal government should encourage institutions to develop degree programs in research administration through grant funding or other incentives. With the few graduate programs offering research administration degrees, there is little incentive for
current research administrators to attend graduate school once they have accumulated a few years of experience.

A lack of institutional support for tuition is a deterrent for research administrators who want to go back to school but may have to take out student loans. Some institutions offer reduced tuition and other incentives for employees to take continuing education courses at the institution. But since most institutions do not offer research administration courses, research administrators would have to pay full tuition and fees to attend one of the five universities offering graduate degree programs in research administration unless they work at one of the five universities.

Although current graduate programs address some of the educational needs of research administrators, undergraduate courses and easily accessible continuing education would bridge the knowledge gap between people coming into the job with no research administration background and those with experience or a graduate degree in research administration. Undergraduate courses and continuing education will hopefully create more interest in research administration and lead more students to want to consider this as a career and encourage the investment of time and money to attend graduate programs.

Degree programs and other educational opportunities should be provided before students make final decisions on their career choices. Even providing elective courses in research administration for those planning to become researchers would be beneficial for research institutions. Such courses would show how valuable research administrators are and may even spark interest in research administration
for those not fully committed to becoming a researcher but who want to be involved with the research enterprise.

Another recommendation is for institutions to develop more concrete mentorship opportunities to connect experienced research administrators with those new to the profession. Mentorships are an important way to help foster an environment of learning and professional development that can make up for the lack of degree-level courses and educational opportunities. Institutions need to utilize the current experience of research administrators by creating or encouraging mentorships. As Donna Edmondson and Maggie Floyd state in their NCURA article, mentorship experience is critical to professional development because “it cultivates knowledge, skill and confidence necessary to take purposeful action toward advancing in a career path that empowers staff and faculty to have a greater positive impact on the mission of [one's] organization” (2012).

Conclusion

Attending conferences once or twice every year is not the best way to become an expert in the field of research administration. It is difficult to keep up with the swiftly changing pace of research administration. Occasional conferences do not provide research administrators with a comprehensive understanding of all aspects of research administration. Published articles and books on research administration need to be made easily accessible to those not already in the field so outsiders can learn more and possibly gain interest in becoming an administrator. There should be more advertisements for the jobs available in research
administration for those looking for new opportunities. There might be more interest in research administration if people knew what research administration was and why it is important. People might also be interested in learning about the various specialty areas available for research administrators. Research administration jobs have multiple options that can appeal to a wide variety of job seekers. These research administrative roles include grant administration/management; grant writing; financial administration; and legal, regulatory, and compliance administration.

Finding more people interested in research administration, developing knowledgeable staffs, and creating an atmosphere of prompt customer service, resiliency, and efficiency will benefit every institution involved in research and research-related activities. This will also enhance the faculty’s research by allowing them to focus on their science and without worrying about the administrative burdens involved with research and research-related activities. “When a PI knows that they can rely on their research administrator, they can focus on what matters most, their research” (McDonald, 2018).
BIBLIOGRAPHY


APPENDIX 1

IRB Approval

Homewood Institutional Review Board
3400 N. Charles Street
Wynnewood Park Building, Suite N468
Baltimore MD 21218-2685
410-516-6880
http://homewood.jhu.edu/

Michael McCloskey, PhD
IRB Chair

Date: June 7, 2019

PI Name: John Carfara
Study #: HIRBo00008877
Study Name: Research Administration Questionnaire

Date of Review: 6/7/2019
Date of Acknowledgement: 6/7/2019
Expiration Date: 6/7/2022

The above referenced study has been acknowledged.

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<td>Funding Agency:</td>
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<td>Grant or Contract Number:</td>
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No changes may be made to the protocol or the consent form without the approval of the Board.

To keep the Homewood IRB files current, we are assigning an expiration date to projects that qualify as not human subjects research or exempt. You will receive an email notification prior to the expiration date shown above, providing guidance to extend this project.

Please keep this message in your files for future reference. Thank you for contacting the Homewood IRB about this research and for providing the requested information to make this determination. Your cooperation is greatly appreciated.
Please keep in mind that it is your responsibility to inform the HIRB of any adverse consequences to participants that occur in the course of the study, as well as any complaints from participants regarding the research. In conducting this research, you are required to follow the requirements listed in the HIRB Policies and Procedures Manual.

Approved Documents:

Consent or Assent Materials:
Proposed Consent/Assent
Duplicate copy of proposed consent/assent

Recruiting Materials:
Questionnaire Email Script

Study Team Members:
Sydney Smith

APPROVAL IS GRANTED UNDER THE TERMS OF FWA#: 00000000 FEDERAL WIDE ASSURANCE OF COMPLIANCE WITH DHHS REGULATIONS FOR PROTECTION OF HUMAN RESEARCH SUBJECTS
INTRODUCTION

By completing this survey or questionnaire, you are consenting to be in this research study. Your participation is voluntary, and you can stop at any time.

This is a questionnaire on research administration. This questionnaire will be used to help write my research paper that is required in order to receive a Master's in Research Administration from Johns Hopkins University. I really appreciate you taking some time out of your busy day to take this brief questionnaire.

No personal information is requested, and your responses will be used anonymously as data in my paper. Please answer all questions honestly and to the best of your ability. This questionnaire is completely voluntary, and you can quit at any time.

Please feel free to send a link to this questionnaire to anyone that would be interested in completing this assessment and helping me out with my research paper. This questionnaire is designed for people in the research administration world, but it is open to anyone who wants to provide their responses.

To share with others, copy/click following link: Take Research Administration Questionnaire

Click Continue to start questionnaire.

Q1 What is your age?

- Under 21
- 21-34
- 35-44
- 45-54
- 55-64
- 65+
Q2 Are you a researcher or a research administrator?

- Researcher
- Research Administrator
- Both
- Neither

Q3 What is the type of your institution?

- Government
- Public/State Controlled Institution of Higher Education
- Private Institution for Higher Education
- For-Profit Institution
- Non-Profit with or without 501c3 status (other than Institutes of Higher Education)
- Other

Q4 How long have you been at your current position?

- 0-5 years
- 6-10 years
- 11-15 years
- 20+ years

Q5 How would you define Research Administration?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
Q6 Do you think research administration is important?

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Q7 Based on your response to the last question about whether or not you think research administration is important, please explain your choice

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Q8 Have you ever submitted grant proposal applications for external funding?

- Yes
- No
- Sometimes

Q9 Does anyone help you complete the grant application/sponsor required forms?

- Yes
- No
- Sometimes
- I don’t submit grant applications

Q10 Do you work with or have you ever worked with your Research Administration Office?

- Yes
- No
- Sometimes
- No Response Provided
Q11 Does your institution’s Research Administration Office respond to inquiries in a timely matter?

- Yes
- No
- Sometimes

Q12 From the following list, what institutional information do you know regarding your institution’s DUNS, EIN, Assurance numbers for human subjects and/or vertebrate animals, F&A rate, Fringe benefits rate, tuition remission rate, without looking it up? (check all that apply)

- DUNS
- Federal EIN/Tax ID
- Human Subjects Assurance Number
- Vertebrate Animals Assurance Number
- Facilities & Administrative Rate
- Fringe Benefits Rate
- Tuition Remission Rate
- All of the Above
- None of the Above

Q13 What area do you work in research administration?

- Pre-Award
- Post-Award
- Accounting Services
- Legal, Regulatory, Compliance
- All of the Above
- Other

Q14 Briefly describe how you became a research administrator.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Q15 How do you describe your job to those outside of research administration?

__________________________________________________________________
Q16 Do you think people at your institution, specifically researchers, know/understand what your office does?

- Yes
- No
- Maybe

Q17 Do you have the Certified Research Administrator (CRA) certification?

- Yes
- No
- I Don't Know

Q18 Do you think it’s necessary to get the CRA in order to be a good research administrator?

- Yes
- No
- Maybe

Q19 Do you know of any continuing education opportunities for research administration (e.g. certifications, graduate programs, trainings, etc.)

- Yes
- No
- Not Sure

Q20 If there were more advanced education opportunities for research administration, would you attend?

- Yes
- No
- Maybe
- Not Sure
Q21 What areas of research administration do you think needs more opportunities for training or educational opportunities? (choose all that apply)

- [ ] Pre-Award
- [ ] Post-Award
- [ ] Accounting Services
- [ ] Legal, Regulatory, Compliance
- [ ] All of the Above
- [ ] None of the Above
- [ ] Other
APPENDIX 3

Biography

Sydney Smith graduated from Louisiana State University (LSU) in 2012 with a bachelor’s degree, majoring in English-Creative Writing and minoring in Film & Media Arts, after which she planned on working behind the scenes as a producer or screenwriter in the film industry before deciding against it. She joined Pennington Biomedical Research Center (PBRC), an institution in the LSU System, as a student worker in 2009 and then worked as a WAE (When Actually Employed) employee for 15 months before applying and being hired full-time as a grants specialist in PBRC’s sponsored programs office in August 2013. Starting in February 2017, she began working in another institution within LSU’s System, LSU Agricultural Center, where she remains to this day. She received her CRA in November 2018. She has knowledge and experience with federal, private, and state grants and contracts in agricultural and extension research and research involving clinical trials. This includes, but is not limited to, proposal preparation, award review, and contract negotiations.