AN ANALYSIS OF ACADEMIC RESEARCH ADMINISTRATION CENTRAL
OFFICE STRUCTURES

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Abstract

The purpose of this Capstone Project was to assess academic research office structures. A descriptive and qualitative research method was used in the process of conducting a literature review and the analysis of survey results obtained specifically for this project. A sample of five institutions of higher education were surveyed in order to compare and contrast their experiences with the University of Colorado Boulder. There was an investigation into the history of the research administration office, an examination of areas that can impact a research office structure, and an analysis of recent trends affecting change in the field of research administration.

The results of this capstone project reflect the importance of office infrastructure in the perception of research administration staff and the growing prevalence of the team based model in academic research offices. In an increasingly competitive funding environment, academic research institutions are learning to adapt through change management while working to ensure staff and faculty expectations are met. The results reflect a trend towards the centralization of research administration work on academic campuses. There is also a prevailing desire for better communication and more defined roles and responsibilities by those working in research administration.
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Abbreviations

Cooperative Institute for Research in Environmental Sciences (CIRES)
Council on Governmental Relations (COGR)
Certified Research Administrator (CRA)
Electronic Commerce (EC)
Electronic Research Administration (eRA)
Federal Demonstration Partnership (FDP)
Indirect Cost (IDC)
Institutional Care and Use Committee (IACUC)
Institutional Review Board (IRB)
National Center of Atmospheric Research (NCAR)
National Council for Research Administrators (NCURA)
National Oceanic and Atmospheric Administration (NOAA)
National Renewable Energy Laboratory (NREL)
National Institute of Standards and Technology (NIST)
Principal Investigators (PIs)
Primarily Undergraduate Institution (PUI)
Research Administrators (RA)
Request for Proposal (RFP)
Standard Operating Procedures (SOP’s)
Science, Technology, Engineering, and Math (STEM)
Tech Transfer Office (TTO)
University Corporation for Atmospheric Research (UCAR)
Chapter 1. Introduction

1.1 Introduction

Research is the cornerstone of the most prestigious academic institutions in the nation. It is through robust research programs that academic institutions like the University of Colorado Boulder, the University of California Berkeley, and Texas Tech University attract top faculty and remain competitive among like institutions of higher education.

1.2 Research Objective

The objective of this paper is to examine the different academic research administration central office structures at a number of academic institutions through the use of a survey. There is a brief history of the contributing factors leading to the common research administration structures. The University of Colorado Boulder is used as an example by which an analysis and comparison of a working research administration central office structure can be drawn.

1.3 Research Questions

The primary research question is whether academic institutions believe that their research administration central office structure is the right fit for the institution and is both efficient and supportive towards the research on campus.

1.4 Background.

It was after World War II that the recognizable model for research in the nation’s universities took a foothold. In their book The Rise of American Research Universities, Hugh Davis Graham and Nancy Diamond describe “the distinctive attributes of American higher education – decentralized administration,
pluralistic and research-minded faculties, and intense competition for government funding – have become world standard.”\(^1\) Investment in research support services has become increasingly important to academic institutions desiring to remain competitive to research funding sponsors. A funding sponsor looks for a grantee that has the infrastructure to support the project being funded.

This infrastructure may include:

- A staff of proposal analysts who specialize in the review and submission of proposals to open funding opportunities
- A sponsored programs accounting office with compliant financial management systems/modules
- A grants and contracts office that specializes in negotiations and post-award management
- A tech transfer office that translates research into commercialized products and services
- A research integrity office that oversees conflicts of interest, claims of research misconduct, the Institutional Review Board (IRB) for the ethical

treatment of human subjects, and an Institutional Care and Use Committee (IACUC) for the ethical use of animals in research

- An industry collaboration office that works to enhance the connection between local, state, national, and international industry and business partners

- An innovation office that strives to create opportunities for faculty, staff, students and industry partners to engage with the community through entrepreneurship or in other innovative ways

A sponsor making a determination as to a grantee’s funding management capabilities will look for an institution with research infrastructure that supports good stewardship of funds and compliance. In creating resources, employing support staff, and implementing a research administration office structure that best serves the individual academic institution, a university makes itself a more desirable grantee. The overall coordination between the offices that make-up the research infrastructure and the research administration central office is crucial to the on-going success of a university’s research program. An academic research administration central office provides quality management, compliance, and internal controls to the business of seeking, submitting, receiving, managing, and closing out sponsored projects.

Chapter 2. Literature Review

The National Science Foundation’s report entitled Reducing Investigators’ Administrative Workload for Federally Funded Research discusses the topic of administrative burden. The increasing administrative burden can be argued to be
one of the significant factors in the evolving structure of academic research administrative central offices. The report states that “the administrative workload placed on federally funded research U.S. institutions is interfering with the conduct of science in a form and to an extent substantially out of proportion to the well-justified need to ensure accountability, transparency and safety.”\(^2\) Despite collective Federal reform efforts, “a survey of investigators found that principal investigators (PIs) of federally sponsored research projects spend, on average, 42 percent of their time on associated administrative tasks”\(^3\). In response, Federal agencies and many academic research administrative central offices have been working to reduce administrative burden through uniform guidance, streamlined processes, and the restructuring of the research office infrastructure. In a follow-up task force, NSF identified that both “Federal agency and institutional requirements contribute most to PIs administrative workload”\(^4\). A “decline in institutional administrative support at some universities”\(^5\) was reported as a factor. The report has a discussion of the cost and benefit of new regulations,

\(^3\) Ibid., 5
\(^4\) Ibid., 1
\(^5\) Ibid
arguing it is important to not lose focus on the science and for the elimination of “requirements that are not necessary for the assessment of merit and achievement, accountability, or the protection of research subjects”.

An academic research administrative central office can draw much from this report and the examination of what Principal Investigator’s considered burdensome. In understanding the appropriate level of checks and balances to ensure compliance with Federal regulations without over-complicating the internal requirements for PIs, keeps the focus on the science. Ideally, with the “best fit” research administration office structure and the appropriate number of institutional administrative support, a sponsoring agency and PI would be satisfied with the level of internal controls required to successfully and compliantly manage a sponsored project. A university who is in receipt of a Federal award has certified that they have the required infrastructure (accounting systems, oversight, etc.) to successfully manage a sponsored project. In turn, many non-federal sponsoring agencies may lean on this Federal infrastructure determination to award grant funding for a project being managed by a PIs institution.

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6 Ibid
The Council on Governmental Relations (COGR) released a guide entitled *Managing Externally Funded Sponsored Programs: A Guide to Effective Management Practices* that helps institutions “review their management systems and internal controls with regard to managing sponsored programs.” The real strength of the guide is its use of indicators to test management practices of institutions in receipt of sponsored projects funding. The document, originally published in 1989, is on its 7th edition. The guide proposes looking at “a comprehensive compliance system” as a “framework for all the principles that will follow.” This echoes the goal of many institutions, who strive to create a culture of ethics and compliance around research work and management. The guide refers to this as a “systematic” approach to the research enterprise, instead of a “discrete practice” in response to specific regulations.

The COGR guide describes the process by which the University of Colorado Boulder administration office undertook, in creating a roles and responsibility matrix. As described by the guide in Practice B., “The institution assumes overall responsibility for the programmatic, financial and administrative

\[\text{\ref{footnote}}\]

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conduct; has 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; and ensures that personnel understand and accept their specific roles and responsibilities.”

While under Practice A. the dissemination of these “written policies, procedures, and practices” are called out as an indicator. Another indicator under Practice B. describes the importance of the institution obtaining “confirmation that the principal investigator understands and accepts their specific responsibilities for financial administrative management of the proposed project.” This creation of “written policies, procedures, and practices” as it pertains to sponsored programs and the further dissemination piece, is both important and difficult in a large research university. The creation of a roles and responsibilities matrix requires the collaboration of multiple offices, faculty, staff, and PIs. Internal policy must be referenced, interpreted, and possibly written aligning with the matrix. It can take years for a matrix to be created and even longer for it to be vetted.

11 Ibid, 4
12 Ibid
13 Ibid
14 Ibid
In April of 2015, the University of Colorado published a roles and responsibilities matrix on its website. There was an initial roll-out of the matrix that included mandatory staff meetings for the sponsored programs office and voluntary attendance presentations of the material to campus department administrators, PIs, faculty, and students. The dissemination of the matrix is ongoing. The matrix itself requires regular revision.

Prior to undertaking the defining of roles and responsibilities, the creation of new internal policies, and a possible restructuring of a research administration central office it is important to ask: What can impact an academic research central office structure? In asking the right questions and remaining open to the research community’s responses, an academic research central office has a better chance of developing real solutions and receiving campus buy-in for any change implementation. A few common areas that can significantly impact the structure of an academic research central office structure and that should be closely examined are as follows:

- Electronic Research Administration (eRA) systems
- Needs and preferences of central office constituents (department staff and PIs)
- The departmental use of indirect cost (IDC) or the institutions use of IDC if not reallocated to departments
- Size of institution and type of institution
- Type of research projects being conducted
Electronic research administration has necessitated changes among academic research central office structures. According to Cornell University, in the 1990’s the Federal government initiated the evolution of the coming change in a report entitled, “Creating a Government That Works Better and Costs Less.”\textsuperscript{15} Although, the bulk of this report was focused around the broader subject of Electronic Commerce (EC), there was a section on “improving the federal grant process.”\textsuperscript{16} In response to the identified problems of the current federal grants process – too much red tape, slow review process, inconsistent grant forms and criteria, and redundant reporting requirements – working groups were formed. It was out of these working groups that the need for reform opportunities were identified in the area of “re-engineering” and “automation”.\textsuperscript{17} Electronic solutions were proposed that led to the creation of many eRA’s such as NIH, eRA Commons, and NSF’s Fastlane.\textsuperscript{18}

There are many options for an academic institution pursuing the implementation of an eRA system. A university will often put out a request for


\textsuperscript{16} Ibid

\textsuperscript{17} Ibid

\textsuperscript{18} Ibid
proposal (RFP) in seeking the eRA fit for their structure and established processes. A large academic research administration central office will likely be looking for a comprehensive system that supports not only proposal submissions and management of awards, but also supports integrity and compliance activities. In having one system that can support all of these activities, a research administration office can more effectively support campus departments and PIs in their research.

InfoEd is an eRA system that currently boasts “over 20 modules in almost a dozen areas of Sponsored Projects Administration.”¹⁹ Following a ten year long process of RFP’s, negotiations, implementation discussions, and high turnover among the review committee, the University of Colorado Boulder underwent the implementation of the eRA InfoEd System in July of 2015. Prior to this time, the University was using a platform called Filemaker. One of the greatest initial difficulties was the level of customization both required and desired to make the eRA system fit the already established internal processes of the central office. Customization is both expensive and time-consuming, as the staff quickly learned. It can often be easier to overhaul established internal processes to fit the eRA

workflow than it is to customize the system. There is also the aspect of ongoing upgrades that staff and faculty must learn to adapt to when utilizing an eRA system for their sponsored programs data management.

Electronic Research Administration systems offer an academic institution the possibility of cost savings, time savings, data integrity, transparency, accessibility, and compliance oversight. In providing support in these areas, an eRA can impact the structure of an academic research administration office. An eRA system also provides an institution with metrics and reports, which is the subject of increasing popularity in the field of research administration. In a National Council for University Research Administrators (NCURA) presentation entitled, Implementing Electronic Research Administration Systems – What Are the Things That Matter? the authors cover “key decision-making drivers” for selecting an eRA. The list of key decision-making drivers are metrics, integration, a willingness to change business processes to fit new system, key stakeholder consensus, and sufficient support for upgrades and enhancements. Although, this presentation uses the University of Hawaii and Stanford’s

21Ibid, 26
experiences with an eRA implementation as examples, the stories are similar to that of the University of Colorado Boulder.

The University of Colorado Boulder’s central office structure has had to adapt in the time since the InfoEd implementation. As an example, the eRA system requires University IT support. There is now dedicated University IT staff working solely in support of the InfoEd system and directly with central office staff in both the Grants & Contracts Office and the Sponsored Projects Accounting Office to develop training, Standard Operating Procedures (SOP’s), and internal guidance. The eRA IT staff also works directly with the InfoEd sponsor to prioritize customizations, translate staff questions, build system reports, and push-out system upgrades. In large part, these IT roles had initially gone unfilled as the necessity for them was not apparent prior to the system implementation.

As the NCURA presentation mentions, key stakeholder consensus is another important consideration when considering an eRA implementation.\textsuperscript{22} The central office serves the campus departments and principal investigators in the role of research support and compliance oversight to ensure the quality of the research being conducted. The satisfaction of its campus constituents is important

\textsuperscript{22} Ibid
to the overall research culture on campus; impacting the prestige of PIs the university attracts to the number of awards they receive. A department and its PIs rely most heavily on a research administration central office to ensure fiscal compliance, negotiation of favorable terms to both the PI and the university, and administrative oversight of their sponsored project. The goal of many central offices is to make the administrative management of a sponsored project as least burdensome as possible to a PI conducting research while ensuring the sponsored project is managed according to the terms and conditions set forth by the sponsor and the internal policies established by the university. Although, preferences like one point of contact and accessibility to research administration staff often make it to the top of PIs want list, you often see academic research central offices structured according to expertise. This requires a high-level of research administration support in the PIs home department.

At the University of Colorado, the departments receive a portion of their research funding dollars as Indirect Cost recovery. This IDC funding is reallocated to the department to do as they wish, with a strong desire, from an institutional standpoint, that it be reinvested back into research support at the department level. The large research institutes on campus have robust administrative support and require minimal support from the central office outside of the established role specific duties and checks and balances in place by the central office structure. The small departments, like many in the Arts & Sciences, require a higher level of central office support, as the department has little to no staffing in regards to research administrative support at the department level. This
requires a level of adaptability and flexibility on behalf of the central office staff, who must meet the needs of its constituents at different levels based on need. The desire to see IDC reinvested back into departmental research administrative support staff is a sensitive subject across academia, as many universities may have no established policy for IDC return. This IDC issue is an example of the ways a university's culture influences research policies, procedures, and infrastructure.

The size and type of academic research institution that a university is, can impact the structure of a central office. A university with a large undergraduate and graduate population, with a heavy emphasis on Science, Technology, Engineering, and Math (STEM) graduate programs, will likely boast a larger research platform due to the nature of requirements for students and the faculty the university attracts. A small Primarily Undergraduate Institution (PUI) may receive only a few sponsored projects a year. The size and breadth of these institutions will have very different needs.

The survey results from this Capstone Project, which will be discussed further in Chapter 3: Methodology and Results, reflect a common model for institutions, which is to divide their central office staff into teams based on expertise. This central office model allows for a more even distribution of large workload without a loss of quality/compliance. The research administration at a large research academic institution can also be layered due to the complexity and volume of research projects on-going at the university at any given time. In this way, there may be departmental research administrators (RAs) working closely
with PIs on the day-to-day management of a sponsored project, while central office staff assigned to particular departments and/or PIs will work from more of a “bird’s eye” view to ensure overall compliance, consistency, and adherence to the award agreement. A sponsored accounting unit will work in support of and in conjunction with a department administrator to ensure cost principles are upheld and expenses are reconciled.

The type of research projects being proposed and granted at an academic research institution can impact the structure of the central office. As an example, the University of Colorado Boulder receives many Federal awards in the form of Cooperative Agreements. The city of Boulder, Colorado, where the main undergraduate campus of the University of Colorado Boulder resides, also boasts four national labs; National Oceanic and Atmospheric Administration (NOAA), National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), and National Center of Atmospheric Research (NCAR). It is out of these partnerships with the national labs that the large University of Colorado Boulder research centers/institutes have been established; these are the Cooperative Institute for Research in Environmental Sciences (CIRES) and University Corporation for Atmospheric Research (UCAR). These sponsored project collaborations between Federal scientists and University researchers require specific expertise and understanding on behalf of the research administrators supporting the projects in the central office and the departmental administrators working in the University institute. While these institutes are well-staffed with departmental research administrators, the central office provides the
important checks and balances to compliantly manage these complex collaborative projects between the University and Federal government. These institutes run like well-oiled machines and are the campus model for good research. The experience and number of staff, the respect of PIs for the administrative work of the departmental administrators, and the higher salaries offered by the institutes contribute to the success of these research institutes. In departments or on campuses with smaller and less complicated awards, a single research administrator may be able to support the administrative work necessary to successfully manage the sponsored projects. It can often be the case that an individual departmental staff member will wear many hats, only one of them being the role of research administrator. In this way, a department may require more guidance and expertise from the central office to ensure proper oversight.

Chapter 3. Methodology and Results

3.1 Methodology

This Capstone Project examines academic research administration central office structures using a Descriptive Research Method. An anonymous survey was sent to eight research administrators at various research institutions. The data collected was then analyzed to offer recommendations and a conclusion of the survey results. The University of Colorado Boulder was used as the case-study in the project to exercise some comparative methodologies between the cultures of the universities and the literature review that was conducted. The research is also qualitative in nature; utilizing a small sample size, and looking to answer questions without simple ‘yes’ or ‘no’ answers.
3.2 Study Design

A Capstone Project survey was used to conduct an analysis of different academic research administration central office structures. The project survey was entitled *Questionnaire: An Analysis of Academic Research Administration* and consisted of 21 questions. The survey was anonymous and had a total of eight respondents or a 100% response rate. The respondents were current research administrators of varying titles who are serving in positions at either the central office level or in a department of their institution. The breadth of respondent titles was intentional. The variety of respondent’s titles was to allow for a multi-faceted representation and interpretation of respondent’s academic central office structures and perceptions based-off the survey results.

The questions were selected to investigate the research administration office structure at the respondent’s current institution and to then further evaluate the respondent's overall perception of its success.

The institutions selected to receive the survey were the University of Colorado Boulder, Denver Health (affiliate of University of Colorado Hospital), University of California Berkeley, Texas Tech University, University of Maryland Baltimore County, and Florida Atlantic University. The 6 institutions were selected based on both the diversity of research funding they received and the size of the institution. The information for four institutions was based on research funding reported by the institution. Two universities provided no information on funding but instead provided information on research expenditures. There is a difference between funding received by an institution and
research expenditures but for purposes of this capstone project one or the other is used based on the information provided by the Institution. The following data on research funding or expenditures for each of the participating institutions is listed below:

1. The University of Colorado Boulder received $507.9 million dollars in research funding in 2017.\(^{23}\)

2. Denver Health receives an average of $30 - $35 million dollars in research funding annually.\(^{24}\)

3. The University of California Berkeley received $847.5 million dollars in research funding from 2016 - 2017.\(^{25}\)

4. Texas Tech University received over $73 million dollars in research funding in 2016.\(^{26}\)


5. The University of Maryland Baltimore County saw their annual research expenditures exceed $78.5 million dollars in fiscal year 2017.\textsuperscript{27}

6. Florida Atlantic University had research expenditures of $60,514,705 from 2016 -2017.\textsuperscript{28}

The expenditure data was used for The University of Maryland Baltimore County and Florida Atlantic University, as the data on funding dollars received was unavailable. The variegation among these institutions allowed for the range of models that encompass academic research office structures. The specific examples described in the project from the University of Colorado Boulder, serve to further establish a foundation for analyzing the project survey results, literature review, and in exercising a comparative methodology between other academic institutions.

3.3 Project Results

The project results are representative of the respondent’s perceptions regarding factors that impact their academic research administration office structure. While each question can be examined separately, the questions are best analyzed as a whole. In summarizing the data, recommendations and a conclusion was made to provide readers of

\textsuperscript{28} 2016-17 Operating Budget of Florida Atlantic University (FAU) (pp. 1-18, Rep.). (n.d.). doi: http://www.fau.edu/bot/meetings/05172016/audit/AF-A7%20Approval%20of%202016-17%20FAU%20Operating%20Budget.pdf
this capstone project with a basis for examining their own academic research administration office structure. It is likely there will be results of greater interest to particular readers based on their current institutional culture and structure.

Figure 1. What is your professional title?

3.3.1 Professional Title

In gathering the titles of the eight respondents, this survey identifies the range of personnel whose positions are impacted by the central office structure of their institution. The respondent’s titles included an Assistant Director of the Office of Sponsored Programs, an Assistant Vice President for Research, two Grants Administration Managers (slightly different titles represented), two Research Administrators, a Research Analyst, and a Senior Grants Analyst. The respondents titles themselves represent the variances of possible organizational structures at academic institutions.

3.3.2 Educational Background

There were eight respondents to this survey question, which serves to represent the general education level and background of respondents. All respondents have a bachelor’s degree. One respondent has a bachelor’s of science and a bachelor’s of arts degree. There are three respondents with graduate level degrees and one with a teaching
certification. The respondents that stated their undergraduate or graduate degree area encompass primarily science based fields. None of the respondents have degrees in Research Administration. As the field of Research Administration is a newly defined profession, it is plausible that there will be an increase in this degree type in future years by those working research administration positions. An undergraduate degree likely represents the industry standard for a position in research administration. Interestingly, the two respondents in higher level positions (Assistant Director of Sponsored Programs and Assistant Vice President for Research) did not report education higher than a bachelor’s degree. The two graduate degrees were reported by those with the title of Research Analyst and Research Administrator. In conclusion, it does not appear to be significantly important at this time for a research administrator to have an advanced degree. Although, I hypothesis it will become increasingly important to academic institutions who wish to remain competitive and to do so, strive to hire the best and brightest research administrators. This is an important survey result as it provides a peek into the current level of educational backgrounds of a sample of research administrators across academia and what level of education may be considered acceptable for positions across the central office hierarchy.
3.3.3 Current Position

This survey question serves to represent the length of time the respondents have been in their current position at the academic institution by which they are employed. The large majority, 6 of the eight respondents, have been in their position for only one to three years. The minority of respondents, two of eight, have been in their position for 4 - 6 years. None of the respondents have been in their position for less than a year or more than 6 years. This likely represents that a research administrator will leave a position or change roles, as the survey results represent that respondents have not been in their roles long. The two respondents with Assistant Director and Assistant Vice President Titles have both been in their current positions for 1 - 3 years. It is possible this is due to promotion or restructuring, as the respondent with the Assistant Vice President Title did report a recent restructuring at their institution. In conclusion, it appears that research administrators don’t tend to stay in positions for long periods of time. This lack of remaining in the same position may be due to the variety of positions that exist in the
research administration field and the opportunity for promotion after a few years of experience. It could also speak to the growth of the profession and the increased number of available positions across the research enterprise. This growth could lead a research administrator to pursue a lateral or vertical move at their current institution or seek employment at a new institution.

![Figure 3. Do you feel empowered to influence change in your current position?](image)

3.3.4 Empowered to Influence Change

This survey question serves to represent the level of empowerment respondents feel in their current position. The majority of respondents surveyed do feel empowered to influence change in their current position. Only two respondents of eight chose ‘no’ to feeling empowered in their current position. In both cases, the respondent was in a lower level position or held the Department Administrator title. It is possible that the position level of these respondents or the structure of their academic institutions central office does not lend itself to employee empowerment. As employee empowerment is an important aspect in employee job satisfaction, this is an area that could be further
explored for those interested in research administration infrastructure. In conclusion, those in research administration leadership positions, as well as those research administrators located in the central office do feel empowered. Those research administrators located in an academic department feel less empowered.

![Figure 4](image)

**Figure 4. How many people does your Research Administration Office employ?**

3.3.5 Employment Numbers for Research Administration Office

This question serves to represent the size of the central office structure at the respondent's institution. The surveyed showed that half of all eight respondents work in a research administration office larger than 30. The second largest respondent group represented works in an office that employees 0 - 10 employees. While one respondent works in an office that employs 11 - 20 employees. The structure of a research administration central office is subject, in some degree, to the number of positions it supports. A larger academic research institution will likely see more employee positions in the central office, in support of ongoing research projects, department administrators, and principal investigators. The significance of this question lies in its comparison to the other survey
questions related to current structure and restructures, as there is a trend toward centralizing the research administration personnel and tasks, creating a team structure, and institutions hiring more research administrators. This likely represents the increasing complexity and competitiveness of managing and attaining sponsored projects at universities.

![Diagram showing office structure options]

Figure 5. How would you describe your Research Administration Office structure?

3.3.6 Office Structure

This question serves to define the perceived structure of the respondents Research Administration office. The responses to this question were varied with only the ‘Decentralized’ survey option not being chosen. The majority of respondents, four out of eight, work in an office made-up of ‘Teams’. There was one respondent who chose the ‘write in’ survey option and stated that “CSS RA is split into Teams based on units/departments. Some do cradle to grave, some are split pre/post.” This survey question not only represents the variety of research administration office structures that
are popular across academic institutions but also reflects that ‘Teams’ is the most common structure. The four respondents that work in a research administration office that employs more than 30, also describe their research administration office structure as ‘Teams’. The team structure can be described as specialized groups within a central office whose staff have a level of expertise in specific areas of research administration not seen in different research supports positions on campus. The team structure allows for a natural delegation of roles and responsibilities, as well as a shared workload. One of the largest research institutions surveyed, the University of California Berkeley, has a Central Shared Services model that divides the research administration work into teams based on units/departments. Although, the respondents from this institution were overall dissatisfied with the structure and didn’t find it efficient. In conclusion, many academic research institutions are choosing to migrate their central offices towards a team structure based on expertise. There are many academic institutions that will see staff and faculty satisfaction increase with the migration towards a team structure, as the respondents working in this structure currently were the most satisfied. Academic institutions may also see more fluidity around processes that are associated with working together, similar to the goal and use of an FDP template, with similar office structures in place.
3.3.7 Right Fit

This survey questions seeks to represent how respondents feel about the fit of their research administration office for their institution. A majority, five of eight respondents, feel the current research administration office structure at their institution is the right fit. While three of the eight respondents answered ‘no’, the current structure is not the right fit for their institution. This means that at least one of the respondents that chose ‘Teams’ as their structure feels this office structure is the wrong fit for their institution. Of the respondents, those with titles that included Director and Vice President found their office structure to be the right fit. While a few of those in lower level positions in the central office and/or departments found the office structure to be the wrong fit. This highlights an important perception of staff in non-leadership positions and could be correlated to the responses on empowerment, as two of the three surveyed that answered no to ‘right fit’ also answered no to ‘feeling empowered’.
A follow-up survey question seeks to draw further specifics and clarification as to why respondents feel the way they do about their current research administration office structure.

Figure 7. Who at your institution makes decisions about the Research Administration Office Organization?

3.3.8 Who Makes Decisions

This survey question seeks to represent who at the respondent's institution makes decisions about the research administration office structure. The majority, four of the eight respondents, chose the ‘Director’ as the position title that makes decision about the research administration office structure. In a close second, three of the eight respondents chose the ‘Vice Chancellor for Research’. Only one respondent chose the ‘Assistant VP/Chancellor’. It is clear that academic institutions empower different leadership positions in the area of research administration to make infrastructure decisions. This variance could account for some the differences in overall office structure as different leadership positions have varying degrees of understanding of the day-to-day workings of a research administration office, initiatives, and goals.
3.3.9 Roles & Responsibilities

This survey question seeks to represent whether respondents feel the roles and responsibilities are sufficiently defined in their research administration office. In response, five of the eight research administrators surveyed felt the roles and responsibilities at their institution were not sufficiently defined. As defined roles and responsibilities may be one of the most important aspects in ensuring compliance and quality control for sponsor funded research, this is an area that could use more investigation and resolution for the respondents who chose ‘no’ as an answer. In conclusion, employees understanding their position roles and responsibilities is a good practice that institutions should consider in light of the results. The survey results point show that 62.5% of the respondents did not know their roles and responsibilities. This is a high number that should be a low number. Ideally all employees should know their position role and responsibilities. If their roles and responsibilities were clearly defined
the quality control and compliance to policies and regulations would increase and the risk of financial and non-financial non-compliance could decrease.

Figure 9. Has there ever been a restructuring of your Research Administration Office in the past 10 years?

3.3.10 Restructuring

This survey question seeks to represent the prevalence of research administration office restructures in the past 10 years. As over half of the eight respondents did select that there has been a research administration office restructure at their institution in the last 10 years, it does appear to be a significant occurrence. As research administration evolved to become a more defined profession and adapts to support the increasingly competitive sponsored funding environment we will likely see continued restructuring of research administration offices to best serve the academic institutions research. As discussed in the literature review, with the implementation of an eRA system, a central office restructure can be a necessary byproduct of the new infrastructure required to support an eRA system
and the subsequent workflow. In coming years, there may be an increasing commonality of office structures as academia migrates to the use of a choice number of eRA systems.

Figure 10. How long has your current Research Administration Office structure been in place?

3.3.11 Length of Time of Current Office Structure

This question serves to specify the timeline around the current research administration office structure at the respondent’s institutions. Over half of all respondents reported that their current research administration office structure has been in place five years or less. While only one respondent of eight reported that their institution’s research administration office structure has been in place for more than 12 years. It is clear that many institutions have chosen to restructure in the recent past.

A follow-up survey question seeks to provide further information and clarification as to the restructures that took place at the respondent's research administration offices. The responses from the six respondents unanimously highlight a movement to a more ‘central’ office type structure. As sponsored research becomes increasingly regulated and competitive, it is becoming more important that an institution provide professional and
consistent support to principal investigators and departments. This provides a level of assurance to the sponsors that all research taking place at an institution is being properly managed.

Figure 11. Do you have a separate Sponsored Programs Accounting Office?

3.3.12 Sponsored Programs Accounting Office

This survey question represents a special area of interest regarding the components that make up the respondents research administration office structure. The compliant management of sponsored projects was one of the key points noted in the literature review as a responsibility of the grantee. A separate sponsored programs accounting office plays a pivotal role in the compliant management of research projects. This appropriately aligned with the reported “description” of the respondent’s research office structures. Of the seven responses, one respondent reported that they have a ‘cradle to grave’ office structure. In turn, there is one respondent who has reported that they do not have a separate sponsored programs accounting office. This represents how most research administration office structures, other than cradle-to-grave, lend themselves to a separate
sponsored projects accounting office. In conclusion, many academic institutions choose to incorporate a separate sponsored programs accounting office into their research administration infrastructure in some form or fashion. The financial expertise and additional checks and balances provided by staff solely dedicated to the review, approval, invoicing, and reporting of expenditures on a sponsored project is significant enough that most institutions choose to support a separate office for this.

Figure 12. How would you rate the efficiency of your Research Administration Office?

3.3.13 Efficiency

This survey question seeks to represent how respondents feel about the efficiency of their research administration office. A majority of respondents, six of the eight, rated their research administration office as a 3 or 4 on a scale of one representing ‘not efficient’ and 5 representing ‘very efficient’. The other two respondents rated their research administration office structures lower, as a 1 and 2. In conclusion, this may be related to the reported lack of understanding around respondent’s roles and responsibilities. As those 2 respondents in the highest level positions reported the highest levels of efficiency and selected ‘yes’ as to the roles and responsibilities being defined, this likely highlights
a disconnect between how leadership positions view efficiency and roles and responsibilities and how those in lower level positions perceive them. Although this is not a statistical study and more analysis is needed in this area, there may be a correlation between whether a respondent reports that their roles and responsibilities are defined and the efficiency of their office. Based on the survey, it appears if an office wants to increase efficiency, they should better define staff roles and responsibilities.

Figure 13. Do you feel the Principal Investigators at your institution would say the structure of your Research Administration Office works well for them and the sponsored projects?

3.3.14 Principal Investigators

This survey question seeks to represent how respondents feel their institution’s principal investigators would rate the research administration office structure. The majority of the eight respondents chose a 3 or 4 on a scale of one being that the principal investigator feels the structure works for them ‘not at all’ and 5 being that the structure works for them ‘very well’. It appears that in general, respondents feel their institutions principal investigators likely find the office structure more efficient than they do.
3.3.15 Structure Choice

This follow-up survey question seeks to gain more information and clarification as to how the respondent’s institution research administration office structure was chosen. The eight responses to this question varied widely. There does not seem to be an established method for choosing a central office structure among academic institutions based on respondent descriptions. One respondent did report the use of a PI survey. This response aligns with the University of Colorado Boulder, which used a PI survey. The results of the survey was used to make changes to their central office structure and processes, some of which are discussed in Chapter 2 Literature Review, including the roles and responsibility matrix.

![Pie chart showing 87.5% Yes and 12.5% No](image)

Figure 14. Does your institution have Department Administrators who directly support Principal Investigators in the department?

3.3.16 Direct Support for Department Administrators

This survey question seeks to better understand the impact of department administrators on the research administration office structure. Respondents overwhelmingly reported
that they do have department administrators at their institution who directly support principal investigators in the department. The one outlier is the respondent from the institution with a cradle-to-grave office structure and whose research administrators are serving principal investigators directly. The eight responses to this question show that all institutions have department administrators supporting sponsored research at their academic institution. As discussed previously in this paper, the level of support a department provides in support of sponsored projects can often be tied to the IDC return model in place at their institution. At the University of Colorado Boulder, those departments that receive more awards and therefore receive more IDC, also have more department administrators in place to support sponsored projects. Previously in this paper, the example of institutes on campus was used. This can be a self-fulfilling prophecy issue, where those in receipt of more awards, get more IDC, and are therefore able to hire more staff to continue the seeking and management of more awards with higher IDC return. The central office, if one exists, can often be found filling in the staffing gaps for those campus departments without enough administrative support for sponsored projects. In conclusion, an examination of the IDC return process at an academic institution may result in better staffed departments, increased sponsored project support, and higher rates of PI satisfaction. However, more research is needed in this area to determine if a significant correlation exists.
Figure 15. How would you rate the communication between the central office Research Administrators and Principal Investigators at your institution?

3.3.17 Communication

This survey question seeks to draw a comparison between how the eight respondents reported that their institutions principal investigators felt the office structure worked for them and the degree of communication between central office research administrators and principal investigators. Respondents reported a higher rating for communication than for a current office structure that worked well for institutions principal investigators. This discrepancy between responses should be further explored to distinguish what is working in the area of communication that is not carrying over to the overall scores on the questions of efficiency and a well working structure.
Figure 16. Does the Research Administration Office staff work closely with Department Administrators?

3.3.18 Research Administration Office Staff & Department Administrators

This survey question seeks to represent how closely respondents perceive research administration staff and department administrators work together. Only one of seven respondents chose ‘no’ that research administration office staff and department administrators do no work closely. This is consistent with other survey responses with only one outlier, as it is likely this is our cradle-to-grave respondent.

The final survey question provided a space for the five of the eight respondents who answered to detail further information on their research administration office structure. There were a number of takeaways in the responses to this question:

- The ability for each function of the office to work independently, through defining of roles and responsibilities, leads to efficiency
- Success is driven from the top down and having “the right people in place to lead...makes all the difference”
Principal investigators often desire one point of contact, which is hard to achieve in a large central office structure that employs personnel in many positions for increased level of expertise and volume of workload.

A campus ‘shared service center’ is an office structure that still requires a research administration central office with personnel granted signature authority on behalf of the institution.

Chapter 4. Recommendations and Conclusion

4.1 Introduction

In preparation for this Capstone Project the Vice Chancellor of Research at the University of Colorado Boulder and the University of Colorado Boulder Grants Administration Manager were consulted. There is interest on the part of University of Colorado Boulder leadership to review the results of this survey for insight and applicability to the current structure and projected growth of the research administration central office. In recent years, the centralization of the research support offices and the implementation of an eRA system at the University of Colorado Boulder has resulted in rapid change and growing pains. In recognition of the need to remain competitive, the University has expanded its industry collaboration network, streamlined its contract negotiation processes, and established a friendlier environment for industry sponsors to work within University policy. These survey results will serve to provide the University of Colorado Boulder with data on other university office structures and the respondent’s perception of their success.

4.2 Recommendations
The recommendation of this project is that academic institutions conduct their own internal survey of central office staff, department administrators, and principal investigators to gain a better understanding of how staff and faculty feel about the research culture and central office structure at the present time in their institution. This will provide the decision makers, with their varying titles, a metric based starting point by which to gauge areas of concern. Once the original areas of concern are addressed, an institution can revisit the metrics upon implementation of an annual survey. One of the critical aspects of improving research administration at an institution is the need for all employees in research administration to know and understand their job functions and responsibilities. Job functions and responsibilities is a clearly delineated aspect of good practices and management, etc.

The survey results indicate the need for institutions to move towards centralizing their research administration work, to hire more experienced staff, to better define roles and responsibilities, to think about structuring their office in ‘teams’ to boost staff job satisfaction, and to bridge communication gaps between the central office staff and departments/PIs.

4.3 Conclusion

The survey results as a whole paint a picture of dissatisfaction with their research administration office structure by those working in departments. It is important that as research administration offices evolve to better meet national and institutional research needs, the role and satisfaction of the departmental research administrators are considered. A research administrative culture that
supports those in research positions across the institution is more likely to drive
success in research and staff/faculty satisfaction. In conclusion, research
administration central office structures are much like research itself. As the
American scientist Edward Deming once stated “Research shows that the climate
of an organization influences an individual’s contribution far more than the
individual himself.”29 A testament to the importance of the research infrastructure
at an academic institution.

https://www.brainyquote.com/quotes/w_edwards_deming_672641
Bibliography


Managing Externally Funded Sponsored Programs: A Guide to Effective
Relations. http://www.cogr.edu/COGR/files/ccLibraryFiles/Filename/0000
00000316/Effective%20Practices%20January%202016.pdf (Accessed
October 23, 2017).

Paffrath, D., Mosley, L., Sakumoto, G., & Taniguchi Pane, M. (n.d.).
Implementing Electronic Research Administration Systems – What Are
The Things That Matter?
https://orso.or.wsu.edu/r6ncura/2012ProgramMaterials/SPA_Implementin


Reducing Investigators’ Administrative Workload for Federally Funded Research.

Research & Publications. (n.d.). http://www.denverhealth.org/for-


https://www.colorado.edu/ocg/roles-responsibilities-matrix (Accessed
September 25, 2017).


Appendix 1: Original Survey Questions

1/17/2017

Questionnaire: An Analysis of Academic Research Administration Office Structures
Kaitlin Thornton's Capstone Project in Research Administration

Introduction

Hello! My name is Kaitlin Thornton. I am working on my Master's in Research Administration at Johns Hopkins University. I have created this questionnaire as part of my final capstone project. As a respondent, I will use your answers in my capstone project and I will ensure your responses do not identify you. I greatly appreciate the assistance and support you are providing me in the completion of this questionnaire. If you have any questions about the questionnaire contact my capstone project advisor, Dr. Marianne Woods at nwoods@jh.edu

I look forward to your responses.

Thank you!

1. What is your professional title?

2. What is your educational background?

3. How long have you worked in your current position?
   Mark only one oval.
   - Less than a year
   - 1 - 3 years
   - 4 - 6 years
   - More than 6 years

https://docs.google.com/forms/d/1_i7GTbq_gym0Wx1kX5SyBDEz2Lio_VTMhADv/fU/edit
4. Do you feel empowered to influence change in your current position?  
Mark only one oval.
☐ Yes  
☐ No

5. How many people does your Research Administration Office employ?  
Mark only one oval.
☐ 0 - 10  
☐ 11 - 20  
☐ 21 - 30  
☐ More than 30

6. How would you describe your Research Administration Office structure?  
Mark only one oval.
☐ Decentralized  
☐ Cradle to Grave  
☐ Teams  
☐ Other: __________________________

7. Do you feel the structure of your Research Administration Office is the right fit for your institution?  
Mark only one oval.
☐ Yes  
☐ No

8. If you answered yes to the previous question, please explain.

________________________________________

https://docs.google.com/forms/d/1__3TGT3q_jymOWrKc--S3-y_ELx3-o_ViVw4VvFUk/edit 2/5
9. Who at your institution makes decisions about the Research Administration Office Organization?
   Mark only one oval.
   Director
   Assistant VP/Chancellor
   Associate VP/Chancellor
   Vice President for Research
   Vice Chancellor for Research
   Provost

10. Do you feel the roles and responsibilities are sufficiently defined in your Research Administration Office?
    Mark only one oval.
    Yes
    No

11. Has there ever been a restructuring of your Research Administration Office in the past 10 years?
    Mark only one oval.
    Yes
    No

12. How long has your current Research Administration Office structure been in place?
    Mark only one oval.
    0 - 5
    6 - 11
    12 and over

https://docs.google.com/forms/d/15757870876567887616/edit
13. If a restructure, please describe.


14. Do you have a separate Sponsored Programs Accounting Office?
Mark only one oval.
☐ Yes
☐ No

15. How would you rate the efficiency of your Research Administration Office?
Mark only one oval.


Not efficient ☐ ☐ ☐ ☐ ☐ Very efficient

16. Do you feel the Principal Investigators at your institution would say the structure of your Research Administration Office works well for them and the sponsored projects?
Mark only one oval.


Not at all ☐ ☐ ☐ ☐ ☐ Very well

17. How was the structure of the current Research Administration Office chosen?
18. Does your institution have Department Administrators who directly support Principal Investigators in the department?  
Mark only one oval.
☐ Yes  
☐ No

19. How would you rate the communication between the central office Research Administrators and Principal Investigators at your institution?  
Mark only one oval.

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20. Does the Research Administration Office staff work closely with Department Administrators?  
Mark only one oval.
☐ Yes
☐ No

21. Would you like to share any information about the success of your Research Administration Office structure?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

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Google Forms

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Table 1. Principal Investigator Related Questions and Answers

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*Source: Questionnaire: An Analysis of Academic Research Administration Central Office Structures*
Table 2. Department Administrator Related Questions and Responses

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Source: Questionnaire: An Analysis of Academic Research Administration Central Office Structures
Biography

Kaitlin Thornton has been working in the field of research since her graduation from Missouri State University in 2010. She has an undergraduate degree in Anthropology and maintains a SOCRA CCRP certification. She has worked as a Clinical Research Coordinator and more recently as a Senior Grant Officer. Kaitlin lives with her family in Colorado and enjoys hiking, traveling, and spending time in both the Rocky and Ozark Mountains.