

**IMPACTS IN RESEARCH ADMINISTRATION FROM THE COVID-19 PANDEMIC
WITHIN THE U.S.**

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Abstract

The COVID-19 pandemic has caused significant issues and confusion within the Research Administration field and prevented research administrators within the U.S. from maintaining normal administrative activities and award management. As the pandemic continues to evolve unexpectedly, it is critically important for institutions and government agencies to understand the different impacts this epidemic has caused in Research Administration and to collaborate to seek best practices during this time. Specifically, this study investigated the various types of effects in an award lifecycle caused by the pandemic. Furthermore, by assessing useful research administrative processes, the study determined some best practices for research administrative personnel.

To examine the impacts in Research Administration from the pandemic, the author conducted an electronic survey distributed to participants in the related Research Administration field. Participants were asked to respond to a set of questionnaires that helped determine the research administrative impacts and levels of these impacts encountered during the pandemic; a list of practices was also included in the survey's final part. Responses were analyzed using a descriptive statistics method and illustrated by histograms and charts. The final research results reported relatively high percentages of research administrative impacts and confirmed the best practice during this time: offering virtual training and workshops to research administrative personnel.

These results suggest multiple areas in Research Administration are highly impacted by the COVID-19 pandemic. The best practice involves adequate guidance and training provided to related personnel in the field.

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Abbreviations

FOA	Funding Opportunity Announcement
GCA	Grant & Contract Accounting
IACUC	Institutional Animal Care and Use Committee
IRB	Institutional Review Board
NCURA	National Council of University Research Administrators
NIH	National Institutes of Health
NSF	National Science Foundation
OMB	Office and Management and Budget
OSP	Office of Sponsored Programs
PA	Program Announcement
PI	Principal Investigator
RFA	Request for Application
WHO	World Health Organization

Glossary

Award Lifecycle	A lifecycle of a funded award that includes stages and activities from the beginning of a research idea and proposal development to the sponsored project management and award termination.
COVID-19 Pandemic	A worldwide pandemic of the 2019 coronavirus caused by respiratory syndrome coronavirus 2 (SARS-Cov-2).
eRA Commons	An electronic interface allows access and sharing of grant information between NIH staff, federal funding agencies, grant applicants, and awardees.
NSF Fastlane	It is an online computer system for award information and panel peer review to be shared with the NSF and its awardees and applicants.
No-Cost Extension	A No-Cost Extension permits the extension of a sponsored project's end date without additional or supplemental funding.
Post-Award	A stage of an award lifecycle after a formal sponsored award is received, and the project is launched. This stage comprises various research administration activities, such as managing the grant, submitting reports, and completing the award closeout.
Pre-Award	The initial stage of an award lifecycle before the receipt of a formal sponsored award. This stage includes searching for funding opportunities, submitting proposals, and reviewing the award.
Research Administration	A profession that manages the overall administration of research activities and sponsored awards according to sponsor policies and regulations. Areas of such stewardship include budgetary, financial, compliance, and regulatory aspects.
Uniform Guidance	A formal governmental framework that is used to implement grant award management. It is an official set of policies and regulations that guides awardees on how to manage federal awards.

Chapter 1. Introduction

1.1 Background

Over the past few decades, Research Administration has progressed from a field that mainly focused on higher education award management to a profession that seeks to provide successful and effective administration in all aspects of research endeavors within academic, medical, and professional fields. As Research Administration continues to evolve, major funding agencies such as the Federal government frequently foster its development through new regulations and policies for research professionals and organizations to follow.

The COVID-19 pandemic was declared a Public Health Emergency of International Concern by the World Health Organization (WHO) in March 2020.¹ Within six months of the declaration, as of September 28, 2020, there have been more than 33 million confirmed cases in 235 countries and territories and over 1 million confirmed deaths worldwide (WHO, 2020). While the overall social, economic, and healthcare impacts caused by this pandemic have been substantial, this paper will focus on the impacts in the area of Research Administration.

Since the start of Research Administration in the early 1940s,² previous incidents have prevented research administrators from maintaining normal research activities and administrative processes. Incidents such as natural disasters and government shutdowns and suspensions have significantly affected the routine management and operation of sponsored awards. This paper

¹ World Health Organization. Coronavirus disease (COVID-19) pandemic. Last modified September 21, 2020. Accessed September 21, 2020. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.

² Zink, Holly. "History of Research Administration." Research Administration, Grantsmanship, and Project Management. Last modified December 9, 2019. <https://idogrants.org/2019/12/09/history-of-research-administration/#:~:text=Research%20Administration%20is%20the%20profession,professional%20and%20academic%20research%20endeavors.&text=The%20inceptio>.

will look into past events and unusual experiences that institutions and funding agencies have encountered and what guidance has been provided from organizational leadership and the Federal government during those periods.

Although impacts in Research Administration during the pandemic continue to change daily, mandatory COVID-19 protocols could remain in effect for more than twelve months in the foreseeable future. Exploring potential issues, assessing contingency plans and best practices, and forming practical guidance for administrative challenges and obstacles during this time is critically important.

1.2 Statement of the Problem

While a set of general authoritative regulations and guidelines have been developed and officially implemented by the Office of Management and Budget (OMB) in late 2014 – *The Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, generally known as the “Uniform Guidance” (e-CFR, 2020),³ there are very few studies on the effects to Research Administration during challenging times such as the COVID-19 pandemic and the level of its impacts. Due to the effects of the circumstance, standard guidelines for universities, research organizations, and research administrators may be limited, ineffectual, or not applicable.

In response to severe research impacts caused by the pandemic, universities and research institutes scramble to react expeditiously by setting interim research guidance and policies for the abnormality that heavily influences Research Administration.⁴ However, without

³ The Office of Management and Budget. OSR Guidance Regarding the Government Shutdown. Last modified June 28, 2020. Accessed June 28, 2020. https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl.

⁴ Flaherty, Colleen. “Extraordinary Measures.” INSIDE HIGHER ED. Last modified March 18, 2020. <https://www.insidehighered.com/news/2020/03/18/how-institutions-are-approaching-scientific-research-during-covid-19>.

recognizing the actual impacts and the degree of the effects, challenges remain to safeguard sponsored awards and sustain research continuity. As the coronavirus continues to spread throughout the entire continental U.S., this pandemic's recovery trend is currently unpredictable. Therefore, it is vital to establish long-term guidelines and best practices for the future of Research Administration.

1.3 Research Questions

Key questions that steer the direction of this paper include:

1. What are the impacts and issues related to the Research Administration sponsored award lifecycle in the unusual time of COVID-19 pandemic?
2. How do these impacts and issues affect the sponsored award lifecycle in Research Administration?
3. What are the existing Federal and institutional guidelines in response to Research Administration during the pandemic?
4. What are the best practices for Research Administration during this pandemic?

The paper will examine these questions and utilize various approaches to assess current research administrative practices' effectiveness during the pandemic and provide appropriate recommendations for research administrators moving forward.

1.4 Research Objectives

The purpose of this paper is to examine how Research Administration has been impacted due to the COVID-19 pandemic within the United States. The report will describe the components in a sponsored award's lifecycle, from pre-award proposal preparation to post-award administration and award closeout. This study will then explore the issues and impacts encountered by research administrators during the pandemic and each of the components of the

award lifecycle, and how federal agencies and research institutions respond. Data regarding the types of impact in an award lifecycle and the level of these impacts during the pandemic will be gathered and analyzed. Best practices will be identified that moderate the impact of the pandemic.

1.5 Significance

The lack of appropriate sponsored award management policies and procedures and streamlined guidance across research institutions and entities in unusual times could cause significant delays, confusion, and even operations and administration suspensions. Inevitably, such an impact could significantly affect the overall research enterprise. Universities and other research organizations must understand the level of these impacts to Research Administration caused by the pandemic, seek to develop a well-around responding plan, and incorporate such program into an award's lifecycle to mitigate operational losses and sustain research continuity.

This project's significance is to identify the impacts and issues that Research Administration in the U.S. faces during the COVID-19 pandemic and evaluate the overall effectiveness of current research administrative practices in this critical time.

1.6 Exclusions and Limitations

The scope of this project is limited to the impacts of the COVID-19 pandemic in Research Administration within the U.S. It does not address the effects of the epidemic outside of the U.S. or globally. Data collected from the study will be from research administrative personnel. Therefore, the views of senior leadership will not be directly addressed.

Chapter 2. Review of the Literature

2.1 Overview of Literature Review

To learn about the impacts of the COVID-19 pandemic in Research Administration, it is essential to understand critical components within the overall grant proposal and award management process, explore similar incidents and corresponding actions that had occurred in the past, uncover obvious impacts reported by research-administrative personnel, and review current approaches that have been practiced by research administrators during the pandemic. This chapter covers the review of existing literature relevant to 1) the sponsored award lifecycle, 2) research administration during unusual times, 3) reported issues and impacts from the COVID-19 pandemic, and 4) current plans and practices during the pandemic.

2.2 Sponsored Award Lifecycle

In general, sponsored award administration within institutions and research organizations is commonly structured as a complete award management cycle. From the initial stage of a project where the search of funding begins, also known as the "pre-award" stage, to receiving the official award notice and managing all aspects of the sponsorship to project closeout, the "post-award" stage, the sponsored award lifecycle includes activities involved in a research project. Learning the lifecycle of a sponsored award helps Principal Investigators (PI) and research administrators to understand how a sponsored award is formed, developed, managed, and closed.

As mentioned above, the award lifecycle comprises several activities of a sponsored project from the award receipt to project termination. While institutions may have different ways of defining the lifecycle, processes that go into the cycle activities are similar and identical. An R1⁵ institution by definition that is research-intensive such as the University of Washington,

⁵ R1: Doctoral Universities – with very high research activity.

defines its award lifecycle, *MyResearch Project Lifecycle*,⁶ with four simple and straightforward elements – Plan/Propose, Setup, Manage, Closeout. Other well-established higher education institutions like Harvard University⁷ and the University of Louisville⁸ define their award lifecycles in more detail.

In this paper, the sponsored award lifecycle will be defined as two stages with five related activities:

- Stage One: Pre-award Administration
 - Activity 1 – Developing research ideas and searching for funding
 - Activity 2 – Preparing and submitting the research proposal
- Stage Two: Post-award Administration
 - Activity 3 – Setting up and establishing an award
 - Activity 4 – Managing an award
 - Activity 5 – Closing out an award

Table one illustrates the five activities in each stage of the award lifecycle.

Table 1. The Five Activities in a Sponsored Award Lifecycle

<u>Stage One</u>	<u>Stage Two</u>
Activity 1 – Research Idea & Funding Source	Activity 3 – Award Received & Setup
Activity 2 – Proposal Preparation & Submission	Activity 4 – Award Management
	Activity 5 – Award Closeout

⁶ "MyResearch Project Lifecycle." University of Washington - Research. Last modified, 2020. <https://www.washington.edu/research/myresearch-lifecycle/>.

⁷ "The Award Lifecycle." Harvard University Financial Administration - Office of Sponsored Programs. Last modified, 2020. <https://osp.finance.harvard.edu/award-lifecycle#:~:text=Home-,The%20Award%20Lifecycle,or%20closeout%2C%20of%20an%20award.>

⁸ "The Award Lifecycle." University of Louisville - Office of Sponsored Programs Administration. Last modified, 2020. <https://louisville.edu/research/spa/lifecycle>.

2.2.1 Stage One: Pre-Award Administration

The pre-award stage of Research Administration is the starting of the award lifecycle. It constitutes any activities that facilitate the grant proposal preparation and submission.

Activity One: Developing Research Ideas and Searching for Funding. The award lifecycle's first activity is when the PI starts developing a research idea and hypothesis relevant and of interest to potential sponsors. Selecting an appropriate source of funding involves choosing a sponsor whose goals align with the particular research project. Once the research hypothesis has been formed and the funding source is selected, the award lifecycle enters the next activity.

Activity Two: Preparing and Submitting Research Proposal. In the second activity, the PI and their scientific team work together with the department pre-award administrator to develop the technical and administrative elements of the research proposal. Depending on the funding sponsor, the requirements of research proposals will vary. Sponsor instructions and proposal deadlines are usually indicated in the Program Announcement (PA), Funding Opportunity Announcement (FOA), or the Request for Application (RFA) to guide the overall proposal development. A typical NIH⁹ research proposal includes several components: the scope of work, budget preparation and justification, letters of intent from significant collaborators or contributors, biographical sketches (biosketches), and related appendices. Upon completing all required documents, the prepared proposal is submitted by the institutional Office of Sponsored Programs (OSP) through sponsor portals such as NIH eRA Commons¹⁰ and NSF Fastlane.¹¹

⁹ "Grants & Funding: How to Apply - Application Guide." NIH Central Resource for Grants and Funding Information. Last modified March 4, 2020. <https://grants.nih.gov/grants/how-to-apply-application-guide.html>.

¹⁰ "eRA Commons - Welcome to the Commons." A Program of the National Institutes of Health. Last modified September 16, 2020. <https://public.era.nih.gov/commons/public/login.do?TARGET=https%3A%2F%2Fpublic.era.nih.gov%3A443%2Fcommons%2FcommonsInit.do>.

¹¹ "Proposals, Awards, and Status." NSF Fastlane. Last modified September 16, 2020. <https://www.fastlane.nsf.gov/>.

2.2.2 Stage Two: Post-Award Administration

The post-award administration begins when the proposed research project is awarded. This stage involves setting up the award, conducting the research, monitoring, managing, and closing the project.

Activity Three: Setting Up and Establishing an Award. This part of the sponsored award lifecycle begins when the PI receives the research award and takes the necessary steps to set up the budget and launch the project. All compliance and regulatory requirements, such as the IRB¹² and IACUC¹³ approvals, must be confirmed and retained by the PI¹⁴ and scientific personnel for the project. Final arrangements for necessary resources, laboratory facilities, and research collaborations should be initiated and put ready in place with appropriate signatures from all parties, including sub-award/contracts, confidentiality statements, and data-use agreements. Moreover, during this time, OSP¹⁵ officials work closely with institutional Grant & Contract Accounting (GCA) officers to set up the budget based on sponsored award documents. Typically, a budget number is created as a unique identification of the research award, allowing budget usages to fulfill administrative purposes on the project (e.g. assigning payroll allocations, project-related procurement purchases).

Activity Four: Managing an Award. Upon meeting all regulatory requirements and establishing the research project and budget, activity four of the award lifecycle begins. This activity covers the entire duration of conducting the research work and administrative support

¹² "Institutional Review Boards Frequently Asked Questions." U.S. Food & Drug Administration: Guidance for Institutional Review Boards and Clinical Investigators. Last modified January, 1998. [https://www.fda.gov/regulatory-information/search-fda-guidance-documents/institutional-review-boards-frequently-asked-questions#:~:text=Under%20FDA%20regulations%2C%20an%20IRB,approval\)%2C%20or%20disa](https://www.fda.gov/regulatory-information/search-fda-guidance-documents/institutional-review-boards-frequently-asked-questions#:~:text=Under%20FDA%20regulations%2C%20an%20IRB,approval)%2C%20or%20disa).

¹³ "The IACUC - Institutional Animal Care and Use Committee." National Institutes of Health: Office of Laboratory Animal Welfare. Last modified May 9, 2018. <https://olaw.nih.gov/resources/tutorial/iacuc.htm>.

¹⁴ Principal Investigator

¹⁵ Office of Sponsored Programs

processes for the sponsored project until the award period ends. From developing research experiments, testing human/animal participants, performing data analysis to managing personnel HR/payroll matters, procuring necessary research supplies and equipment, and arranging conference travels, this award lifecycle activity includes all aspects of scientific and administrative functions to fulfill project objectives.

Activity Five: Closing Out an Award. The final activity in an award lifecycle is the closeout of a funded project when the award period ends and all proposed research data collection and analysis are completed. In this activity, all final technical/scientific activities and related administrative and budgetary transactions are required to submit to the sponsor by a given deadline. Requirements for submitting the final technical and financial reports to the sponsor must fulfill. If the research project includes one or more sub-awards/contracts, the PI and the department post-award administrator must ensure the sub-awards/contracts are ready to close. In addition to external sponsor closeout requirements, the PI may also need to submit internal reports to the institution for items related to equipment disposition, participant data, and record retention.

2.3 Research Administration During Unusual Times

During extraordinary times such as global pandemics, natural disasters, or government shutdowns, research institutions and organizations that rely heavily on federal support suffer greatly in funding gaps and operational disruptions.¹⁶

Government Shutdown. In October 2013, the U.S. government announced the decision to suspend operations indefinitely because Congress could not reach an agreement for the next fiscal year budget. Many nationwide research scientists were informed to close their laboratories

¹⁶ "Shutdown of the Federal Government: Causes, Processes, and Effects." Congressional Research Service Report - RL34680. Last modified December 10, 2018. <https://fas.org/sgp/crs/misc/RL34680.pdf>.

and offices, temporarily pause research activities, and remain home.¹⁷ Major Federal sponsor agencies such as the NIH¹⁸ and NSF¹⁹ put an urgent stop on all grant processing and postponed several critical research programs related to disease and illness studies. Furthermore, the inaccessibility of government websites, phone, and e-mail contacts left research administrators with an immense amount of questions and uncertainties on proposal submissions and the management of federal grants and contracts.²⁰

According to *Nature*, a weekly international science journal, several government agencies had to execute contingency plans for research-related activities and many employment layoffs during this period (Morello, 2013).²¹ Impacts to individual federal agencies from the shutdown include:

- **National Institutes of Health (NIH)** – more than 13,000 employees were placed on immediate furlough or leave; approximately 73% agency employment. Clinical trials and new research initiatives were put on hold with limited essential staff to maintain facility operations.
- **National Science Foundation (NSF)** – Nearly 99% of the employees (over 1970 staff members) were ordered to remain at home.
- **National Oceanic and Atmospheric Administration (NOAA)** – Over half of the NOAA scientists and officers stationed in various sites were informed to stay home, except for a small number of essential workers to support the National Weather Service.

¹⁷ Morello, Lauren. US government shuts down. Last modified October 1, 2013. Accessed June 28, 2020. <https://www.nature.com/news/us-government-shuts-down-1.13865>.

¹⁸ National Institutes of Health

¹⁹ National Science Foundation

²⁰ Morello, Lauren. US government shuts down.

²¹ Ibid.

- **Food and Drug Administration (FDA)** – The FDA retained roughly 55% of the staff from revenue generated by user fees from medication reviews.
- **Centers for Disease Control and Prevention (CDC)** – CDC interrupted tracking influenza cases and infectious disease monitoring.

Government operations suspension brought extreme suffering to scientists who had already experienced the struggle through previous federal budget cuts and caused severe disruptions to the entire research administration community to support and manage research activities.²²

Natural Disaster. During the summer of 2017, a tropical storm made landfall in the Caribbean Sea and traveled to the southern U.S. territory. The severe weather and high wind hit states like Louisiana, Alabama, and Texas. Later classified as a Category 4 hurricane,²³ it became one of the most massive hurricanes since Hurricane Katrina in 2005 – Hurricane Harvey²⁴ made its appearance on August 25, 2017. The extreme level of rains triggered extraordinary flood, causing destructive damages and disasters.

The NIH²⁵ published a notice for research award proposals in responding to natural disasters, indicating the agency’s commitment to institutions and researchers in aiding and providing flexibilities to ensure the continuity of NIH awarded projects. The NIH notice *NOT-OD-17-106* states, “When delays occur because the applicant or recipient organization is officially closed due to a natural disaster or other emergencies, the NIH will consider accepting applications late, on a case-by-case basis” (NIH, 2017).²⁶

²² Ibid.

²³ Category 4 (major) – Catastrophic damage will occur.

²⁴ "Major Hurricane Harvey - August 25-29, 2017." NATIONAL WEATHER SERVICE - NOAA. Last modified, 2017. https://www.weather.gov/crp/hurricane_harvey.

²⁵ National Institutes of Health

²⁶ "Reminder: NIH Natural Disaster Policy - Hurricane Harvey." National Institutes of Health. Last modified August 28, 2017. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-106.html>.

2.3.1 Contingency Plans and Practices During Previous Unusual Times

Government Shutdown. Few years after the 2013 incident, the U.S. government again entered a partial shutdown in 2018. In response to the matter, university institutional leadership assembled temporary contingency plans to ensure research awards continue to administer with minimum impacts.²⁷ The Office of Sponsored Research at the University of California, San Francisco (UCSF) announced its preliminary plan for sponsored award management during the 2018 government shutdown. The University continued with the status quo with ongoing active awards and sub-awards while eliminating new awards and proposal submissions to Federal sponsors (UCSF, 2018).²⁸

Similar to UCSF, the University of Maryland (UMD) also announced its guidance in responding to the 2018 government shutdown. UMD officials indicated, "no new grants or contracts are usually awarded during a shutdown" (UMD, 2018).²⁹ However, researchers and scientists could still submit new Federal award proposals knowing that they may not be reviewed until the sponsor agency's operations resume. Most projects that have already been awarded are likely to continue research activities; nonetheless, the university pointed out that it is unlikely the federal agencies will respond to grant and contract recipients for regular administrative support and services during this time. Additionally, any award extension, transfer, and re-budgeting requests (i.e. no-cost-extensions) will be unavailable as agencies will not review nor provide approvals until operations resume normal.

²⁷ "Penn State leadership assessing shutdown impact, developing contingency plans." Penn State News. Last modified January 16, 2019. <https://news.psu.edu/story/554670/2019/01/16/administration/penn-state-leadership-assessing-shutdown-impact-developing>.

²⁸ UCSF Office of Sponsored Research. OSR Guidance Regarding the Government Shutdown. Last modified January 22, 2018. Accessed June 28, 2020. <https://osr.ucsf.edu/content/osr-guidance-regarding-government-shutdown#>.

²⁹ "Federal Government Shutdown FAQs." University of Maryland - UMD RIGHT NOW. Last modified December 30, 2018. <https://umdrightnow.umd.edu/news/federal-government-shutdown-faqs-0>.

Natural Disaster. Federal sponsor agencies such as the NIH³⁰ and NSF³¹ have offered extramural responses in the case of natural disasters or other potential emergencies. On a case-by-case basis, the NIH allows for delayed proposal submissions from applicants whose institutions are closed due to unexpected natural disasters or other uncommon circumstances. No advance permission is required in these cases; however, the applicants must explain the reason for such delay in a cover letter with the application. Generally, during a national catastrophe, an issue of the "Guide Notice" (NIH, 2020)³² will be announced as appropriate to remind applicants of the deadline extending allowance. NIH's additional permissions during a natural disaster include: offer administrative supplements to existing awards; aid animal welfare matters; forfeit requirement for prior approvals; allow for extensions in funding support and reporting.

Correspondingly, the NSF has a deep concern for individuals and organizations that have been impacted by natural disasters. According to the agency's notice on Guidance for Natural Disasters³³, researchers who have been affected by unexpected natural disasters have the option to connect with the NSF Cognizant Program Office to discuss issues regarding proposal deadlines during these difficult times. Like NIH, the NSF will review the proposal deadline's extension request on a case-by-case basis. The agency also provides a unique e-mail portal for applicants to inquire about NSF award questions and issues during natural disasters.

Summary. As described in this section of the chapter, several unusual incidents have occurred in the past that impacted Research Administration. These incidents include the government shutdowns and suspensions as well as natural disasters. Researchers, institutional

³⁰ National Institutes of Health

³¹ National Science Foundation

³² "NIH Extramural Response to Natural Disasters and Other Emergencies." NIH Central Resource for Grants and Funding Information. Last modified March 31, 2020. <https://grants.nih.gov/policy/natural-disasters.htm>.

³³ "Guidance for Natural Disasters." NSF Responses to Natural Disasters. <https://www.nsf.gov/naturaldisasters/index.jsp>.

leaders, and government agencies worked together to provide conditioned flexibilities in proposal deadlines and reduce some levels of administrative burden to mitigate the disruptions to Research Administration from these unexpected events. The next section of this chapter will look into the issues reported from the COVID-19 pandemic and responding plans and practices during this time.

2.4 Reported Issues and Impacts Due to the COVID-19 Pandemic

On September 9, 2020, the U.S. House of Representatives conducted a hearing to discuss the devastating impact that COVID-19 has had on research and Research Administration within universities. The Interim Vice President for Economic Development and Innovation for the University of Illinois System, Dr. Joseph T. Walsh Jr., spoke to the committee members regarding the rapid transformation of research activities nationwide.³⁴ Such change could cause significant delayed or hindered operations in scientific activities and Research Administration. One of the pandemic's most immediate impacts is managing sponsored projects and funding arrangements for long-term studies.³⁵ Dr. Walsh Jr. pointed out, "All research that leads to societal impacts, such as the discovery of a new treatment for cancer or new methods in artificial intelligence, involves a series of steps. It requires funding over many years ... without supplemental support from the federal research sponsors, will break this continuum" (Walsh, 2020).³⁶

While a small portion of research operations remain intact during the COVID-19 pandemic, the overall productivity dropped undoubtedly.³⁷ Virtually, almost all field-based

³⁴ Walsh, Jr., Joseph T. "The Impact of the COVID-19 Crisis on University Research." U.S. House of Representatives Committee Repository. Last modified September 9, 2020. <https://docs.house.gov/meetings/SY/SY15/20200909/110978/HHRG-116-SY15-Wstate-WalshJ-20200909.pdf>.

³⁵ Walsh, Jr., Joseph T. The Impact of the COVID-19 Crisis on University Research.

³⁶ Ibid.

³⁷ Ibid.

research and activities required for on-site laboratory equipment were temporarily shut down in the spring of 2020. Social, behavioral, and health science research timelines were disrupted tremendously with no clear guidelines on how to appropriately handle the aftermath of navigating sponsored award management, federal grant and contract processing, and extension of funding and reporting.³⁸ Beyond the confusion for the best next steps, the Research Administration community has experienced severe financial strains and administrative burdens. According to the report, *The Impact of the COVID-19 Crisis on University Research*, these impacts include:³⁹

- Increase in massive remote access requests and additional information technology (IT) services for available research operations.
- The adjustment in workforce resources to handle changes and development for new processes.
- Rising needs to re-budget to accommodate core research facilities' continuous maintenance such as supercomputing labs, Magnetic Resonance Imaging (MRI) centers, and animal research facilities.

Furthermore, as research scientists are expected to meet proposed milestones and submit research progress within the timespan, it could be challenging to fulfill such a goal because of potential new delays and research obstacles due to the pandemic. Consequently, in some cases, funding could be exhausted before completing the proposed work.

The sudden changes and delays in submitting sponsored awards and managing award activities happened rapidly to research administrators in institutions. As of March 2020, administrators around the nation were tasked with handling such changes as canceling travel

³⁸ Ibid.

³⁹ Ibid.

plans, working through refunds, arranging unexpected research costs, and setting up telework for staff. Central executive officials and department administrators struggled to ensure business operations and sponsored award management can continue with minimal guidance and resources.⁴⁰

2.5 Current Plans and Practices During the Pandemic

Carrying out emergency readiness and effective research recovery measures such as identifying essential personnel, developing a contingency plan for research units and administrators in proposal preparation and award management, and providing effective communication channels are vitally crucial for universities, research organizations, and government agencies during the COVID-19 pandemic. To ensure feasible research activities and sponsored award administration can resume as soon and safely as possible, institutions and federal sponsors have developed their own sets of guidelines and restrictions in preparation for an integral contingency plan.

Yale University. Within the COVID-19 Contingency Planning Committees, Yale University established the Research Continuity Committee⁴¹ to provide consultation and advice to research-administrative personnel and scientists in various research areas, including studies involve clinical trials and practices, humanities and social sciences, engineering sciences, and natural sciences. The Committee offers practical recommendations, strategic plans, and appropriate logistical guidance to its campus community.

⁴⁰ "Contingency Plan Guiding Principles." Missouri State University. Last modified August 14, 2020. <https://www.missouristate.edu/Coronavirus/contingency-plan-guiding-principles.htm>.

⁴¹ "COVID-19 Contingency Planning Committees." Yale University - COVID-19 Information. Last modified April 15, 2020. <https://covid19.yale.edu/community-messages/covid-19-contingency-planning-committees>.

Guidelines provided by the Committee include assessing the current situation, advising on how to provide a safe and secure research environment for animals⁴² and human subjects,⁴³ updating resources to promote sponsored award continuity,⁴⁴ and announcing contingency planning of research management from the Provost's office.⁴⁵ Yale University announced the start of the *Phase 1 Research Reactivation Plan*.⁴⁶ The Phase 1 Plan has begun in June 2020, with highly restricted access to overall campus research and business operations. At this time, the institution's reactivation plans for Phase 2 & 3 have yet to be available.

University of Washington (UW). The UW's Human Subjects Division and OSP⁴⁷ work together to develop and implement an operational continuity plan for award processing and business operations. The institution's Emergency Management team created the Business, Administration & Research Continuity (BARC)⁴⁸ program to support campus-wide continuity of operations (COOP) planning for major operation disruptions during the COVID-19 pandemic.

In addition, the University's Office of Research organized a list of resources such as guidelines in "Mitigating Impacts to Research Activities Due to COVID-19,"⁴⁹ "COVID-19 Impacts to Outgoing Subawards,"⁵⁰ and "Guidance for Returning to In-Person Research"⁵¹ to

⁴² "Animal Research." It's Your Yale. Last modified, 2020. <https://your.yale.edu/research-support/animal-research>.

⁴³ "Human Subjects Research - Guidance (FAS)." Research at Yale. Last modified March 18, 2020. <https://research.yale.edu/human-subjects-research-guidance-fas>.

⁴⁴ "Research Ramp-Up-Sponsored Award FAQs." Yale Environmental Health & Safety. Last modified, 2020. <https://ehs.yale.edu/covid-19-sponsored-award>.

⁴⁵ "Provost Announcement - Campus Contingency Planning." Research at Yale. Last modified May, 2020. <https://research.yale.edu/provost-announcement-campus-contingency-planning>.

⁴⁶ "Phase 1 Research Reactivation." Research at Yale. Last modified, 2020. <https://research.yale.edu/phase-1-research-reactivation>.

⁴⁷ Office of Sponsored Programs

⁴⁸ "Business, academic & research continuity (BARC)." Home UW Emergency Management. Last modified, 2020. <https://www.washington.edu/uwem/resiliency/barc/>.

⁴⁹ "Mitigating Impacts to Research Activities Due to COVID-19." UW Research Announcements. Last modified October 5, 2020. <https://www.washington.edu/research/announcements/mitigating-impacts-to-research-activities-due-to-covid-19/>.

⁵⁰ "Impacts to Proposals with Outgoing Subawards." UW Research Announcements. Last modified April 8, 2020. <https://www.washington.edu/research/announcements/c19-outgoing-subaward-impacts/>.

⁵¹ "Guidance for Returning to In-Person Research." UW Research Announcements. Last modified August 17, 2020. <https://www.washington.edu/research/or/guidance-for-returning-to-in-person-research/>.

identify requirements and responsibilities for researchers and administrators to follow. Furthermore, checklists are also available under the University's COVID Links and Resources⁵² webpage. Currently, the UW is only permitting essential research and operations to be conducted on campus. Most, if not all, administrative research activities can only proceed remotely. Moreover, all units' research administrators are required to submit a Return to Work In-Person Plan that is suitable for the department.

National Institutes of Health (NIH). Under the pandemic's extraordinary impact, the NIH created "Information for NIH Applicants and Recipients of NIH Funding⁵³" web page to answer all related questions for policy and compliance changes. To better assist the research community during this time, the agency has published a series of recent NIH updates.

One of the earliest released updates include the Notice *NOT-OD-20-086* – "Flexibilities Available to Applicants and Recipients of Federal Financial Assistance Affected by COVID-19"⁵⁴ on March 12, 2020; this notice provides short-term flexibilities in administration, audit specification, and fund management. Another update is the OMB Memorandum for "Extension of Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by COVID-19 due to Loss of Operations,"⁵⁵ which was released on June 18, 2020. This memorandum provides time-limited allowability for charging salary and project costs and extending audit submission and reporting. Finally, the NIH releases its Notice *NOT-OD-20-122*

⁵² "UW COVID-19 LINKS AND RESOURCES." University of Washington, Office of Research. Last modified May 22, 2020. <https://www.washington.edu/research/announcements/thank-you-research-community/>.

⁵³ "Coronavirus Disease 2019 (COVID-19): Information for NIH Applicants and Recipients of NIH Funding." NIH Central Resource for Grants and Funding Information. Last modified September 15, 2020. <https://grants.nih.gov/policy/natural-disasters/corona-virus.htm>.

⁵⁴ "Flexibilities Available to Applicants and Recipients of Federal Financial Assistance Affected by COVID-19." NIH Central Resource for Grants and Funding Information. Last modified March 12, 2020. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-086.html>.

⁵⁵ "OMB Memorandum M-20-26." NIH Central Resource for Grants and Funding Information. Last modified June 18, 2020. <https://grants.nih.gov/policy/natural-disasters/corona-virus/nih-omb-memo.htm>.

“Guidance for Applicants Preparing Applications for the Fall 2020 Due Dates During the COVID-19 Pandemic”⁵⁶ on July 8, 2020, to assist applicants on the continuation of biomedical research proposals.

National Science Foundation (NSF). As one of the largest federal award sponsors, the NSF also provides a list of notices to its applicants and awardees for information on particular conditions during the COVID-19 pandemic. Like the NIH, an NSF FAQ webpage is also available and archived to provide the most current updates. Questions related to proposal deadline extensions, the management of existing NSF awards, future travel plans, etc., are presented on the agency’s website.

On March 4, 2020, the NSF released the document, *NSF 20-053* “FAQs About the Coronavirus Disease 2019 (COVID-19), for NSF Proposers and Awardees.”⁵⁷ This release contains a list of questions associated with award proposal and management that NSF awardees may have. Since then, the agency has continued to update and revise such notice as related impacts caused by the pandemic evolve; the latest version of the FAQ document from the NSF was dated May 19, 2020.⁵⁸

Furthermore, the agency continues to extend several program solicitation deadlines to its applicants. As of October 28, 2020, the NSF published a revised table of existing deadline dates on its agency website, with information available on Pub ID, Title, Original Deadline Date, Submission Type, and New Deadline Date included.⁵⁹

⁵⁶ "Guidance for Applicants Preparing Applications for the Fall 2020 Due Dates During the COVID-19 Pandemic." NIH Central Resource for Grants and Funding Information. Last modified July 8, 2020. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-122.html>.

⁵⁷ "Frequently Asked Questions (FAQs) About the Coronavirus Disease 2019 (COVID-19) for National Science Foundation (NSF) Proposers and Awardees." National Science Foundation. Last modified March 4, 2020. <https://www.nsf.gov/pubs/2020/nsf20053/nsf20053.pdf>.

⁵⁸ Last modified May 19, 2020. https://www.nsf.gov/bfa/dias/policy/covid19/covid19faqs_proposerandawardee.pdf.

⁵⁹ "Impact on Existing Deadline Dates." National Science Foundation. Last modified October 28, 2020. https://www.nsf.gov/bfa/dias/policy/covid19/covid19_deadlines.pdf.

Summary. From government shutdowns and unexpected natural disasters to the current COVID-19 global pandemic, we have seen government agencies and institutions try various plans to respond to emergencies. As described in this chapter, these plans include providing flexibilities in funding arrangement and award management, initiate preliminary contingency plans, and adopting necessary adjustments to accommodate administrative activities in Research Administration.

Federal agencies like the NIH and NSF have continuously provided updates to offer researchers and administrators appropriate flexibilities throughout the pandemic. Universities and research units have also worked tirelessly to develop contingency plans such as holding regular briefings, establishing critical task force teams and committees, and coordinating with sponsors on award management guidelines during this time. In the following chapters, we will look into the impacts in Research Administration from the COVID-19 pandemic and related best practices.

Chapter 3. Problem Statement

This chapter discusses the sources identified to understand the impacts in Research Administration from the COVID-19 pandemic.

Given the pandemic's current circumstances, where human-to-human transmission of the novel coronavirus is confirmed to be highly contagious and can cause respiratory discomfort and damages to the human body, most scientific activities and overall research administration have been highly restricted and limited to essential-base and remote-only. In some cases, research projects and award management are temporarily halted with indefinite timelines to restart. While standard operation procedures for research programs are no longer suitable for this unusual time, research continuity and administration remain essential. As the current situation and unpredictability are likely to stay for an extended period into the future, the need to understand such impacts to the research administrative community and seek best practices is highly critical and necessary.

As indicated previously, the lack of a complete set of streamlined best practices from the federal sponsors and institutions during unusual times, such as the pandemic, has caused series of delays and confusion in the different stages and activities of the award lifecycle.

Chapter 4. Methodology

4.1 Methodology Overview

Chapter Four describes the method used in conducting data collections and analysis and how it was structured and designed to meet the objective of learning the impacts to overall Research Administration in the U.S. from the COVID-19 pandemic and the related best practices during this time.

Upon identifying the problem statement, a set of research survey questionnaires was developed as the primary research tool to help shape this study's research direction. Using quantitative and qualitative methods to form the survey questions, the author sought to learn the types of impact in Research Administration, the level of these impacts, and potential best practices for research administrative personnel during the COVID-19 pandemic.

Appropriate approvals from the project advisor/mentor and the JHU⁶⁰ Homewood IRB⁶¹ have been reviewed and obtained for the study; this project was declared as Exempt research. Data analysis based on the survey feedback was performed to identify and compare the range of impacts in Research Administration. Final results and findings from the analysis will be further discussed and concluded in later chapters. A copy of the survey questions and IRB approval letter is included in the Appendices.

4.2 Discussion of Survey Design and Data Analysis

The survey questionnaires were developed using the web-based application, “Google Forms.” Participants of the study were among research administrative personnel from institutions in the U.S., most of them were also members of the NCURA,⁶² as the survey was

⁶⁰ Johns Hopkins University

⁶¹ Institutional Review Board

⁶² National Council of University Administrators

disseminated through its community platform, *Collaborate NCURA*.⁶³ A description outlining the purpose of this study was provided. The participation of the survey was voluntary and anonymous, with confidentiality protection to the participants.

The survey was disseminated to the participants on July 25, 2020, and available through August 12, 2020. Responses were recorded through Google Forms directly, and the collected data from these responses was exported to a separate Microsoft Excel spreadsheet for further analysis.

A “descriptive statistics” method was implemented in the initial step of data analysis. Histograms and charts were created based on the survey results of each question; the comparisons to various responses were shown in percentages. Additional charts were used in the final analysis to demonstrate different impacts and ultimately conclude the research results’ best practice.

4.3 Discussion of Survey Questionnaire

Surrounded by the core focus of different stages and activities in an award lifecycle, the survey questionnaires were designed to understand four main areas – *Demographic of the Survey Participants, Levels of Impact in Research Administration, Impacts to Areas and Activities in the Award Lifecycle, and the Best Practice*. The survey was also designed for several questionnaires to be prompted by responses to specific questions. The questionnaires' response properties include Yes/No questions, multiple choices, checkboxes, linear scale ratings, and multiple-choice grids.

Survey Questions One Through Four. Consist of sixteen survey questionnaires, Question 1 through 4 aimed to establish the “Demographic of the Survey Participants.” Results

⁶³ "NCURA." Collaborate NCURA. Last modified, 2020. <https://collaborate.ncura.edu/home>.

from questions identified the participants' relevant experiences in Research Administration within the U.S., their current job titles, and the years of experiences they have in the field.

Survey Questions Five and Six. These two questions looked for responses that indicate the "Levels of Impact in Research Administration." They were designed to understand whether the COVID-19 pandemic has impacted the participants' work or not. If so, the level of overall impacts they have experienced on a linear scale rating.

Survey Questions Seven Through Fifteen. Responses from Question 7 through 15 are the primary data collection area of this study. They provided information on impacts in the Pre- and Post-award stages of an award lifecycle during the COVID-19 pandemic. Focusing on the impacts in the activities of the two award lifecycle stages, Question 7 through 11 gathered data on the level at which each Pre-award activity is impacted. In contrast, Questions 12 to 15 looked at the level of impacts within Post-award activities.

Survey Question Sixteen. Responses to the final survey question led directly to the research results and conclusion of this project. Question Sixteen offered five organizational best practices for the participants to rate their helpfulness to Research Administration during the pandemic. Based on the collected responses, this project will conclude with the best practice accordingly.

Table 2 summarizes the survey questionnaires in four main areas.

Table 2. Overview of the Sixteen Survey Questionnaires

Questionnaire	Main Area	Sample Survey Question
Questions 1-4	Demographic of the Survey Participants	“How long have you been working in Research Administration within the United States?”
Questions 5-6	Levels of Impact in Research Administration	“Has the COVID-19 Pandemic impacted your office/work in any way?”
Questions 7-15	Impacts to Areas and Activities in the Award Lifecycle	<p>“To your knowledge, has the COVID-19 Pandemic impacted <i>Proposal Development</i> in your office?”</p> <p>“To your knowledge, has the COVID-19 Pandemic impacted <i>Award/Budget Management</i> in your office?”</p>
Question 16	Best Practice	“Please rate <i>How Helpful</i> the below organizational actions would best assist your role in Research Administration during the COVID-19 Pandemic?”

Chapter 5. Project Results and Discussion

This chapter reviews the data collected from the survey questionnaires and analyzes each group of the questions. Summaries of the impacts on activities in the award lifecycle and best practices are also discussed in the chapter.

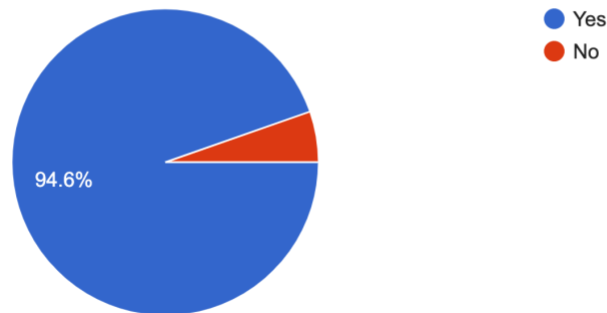
5.1 Data Analysis – Descriptive Statistics

5.1.1 Demographic of the Survey Participants

Question 1 of the survey provides information on the participants' work status. Nearly 95% of the participants indicated that they are currently working in the field of Research Administration in the United States (U.S.).

Figure 1 – Survey Results from Question 1

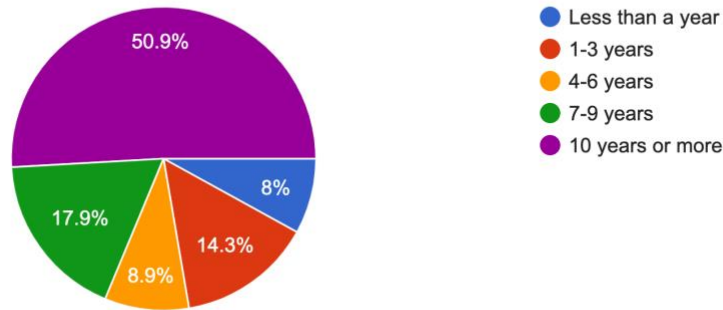
1. Are you currently working in the field of Research Administration within the United States?
112 responses



Data collected from Question 2 shows that over 50% of the participants have more than ten years of work experience in Research Administration in the U.S. Nearly 18% have seven to nine years of experience; 8.9% are in the profession between four to six years; roughly 22% of the participants have less than three years of experience in Research Administration in the U.S.

Figure 2 – Survey Results from Question 2

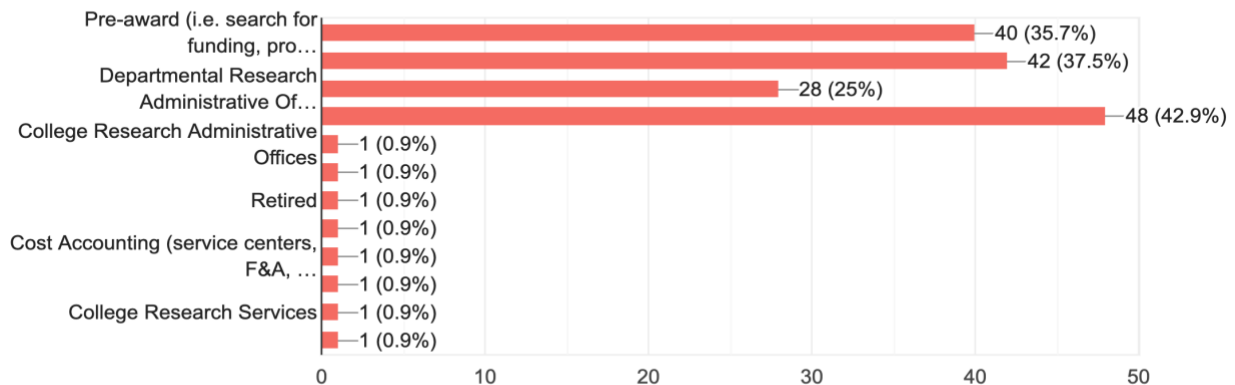
2. How long have you been working in Research Administration within the United States?
112 responses



Results from Question 3 indicate the three main research administrative offices the survey participants currently work at – 1) *institutional research support offices*, including the Human Resources, Travel and Procurement Services; 2) *post-award units* like GCA⁶⁴ and Compliance Office; 3) pre-award divisions such as OSP.⁶⁵

Figure 3 – Survey Results from Question 3

3. Which area of Research Administration are you currently in?
112 responses

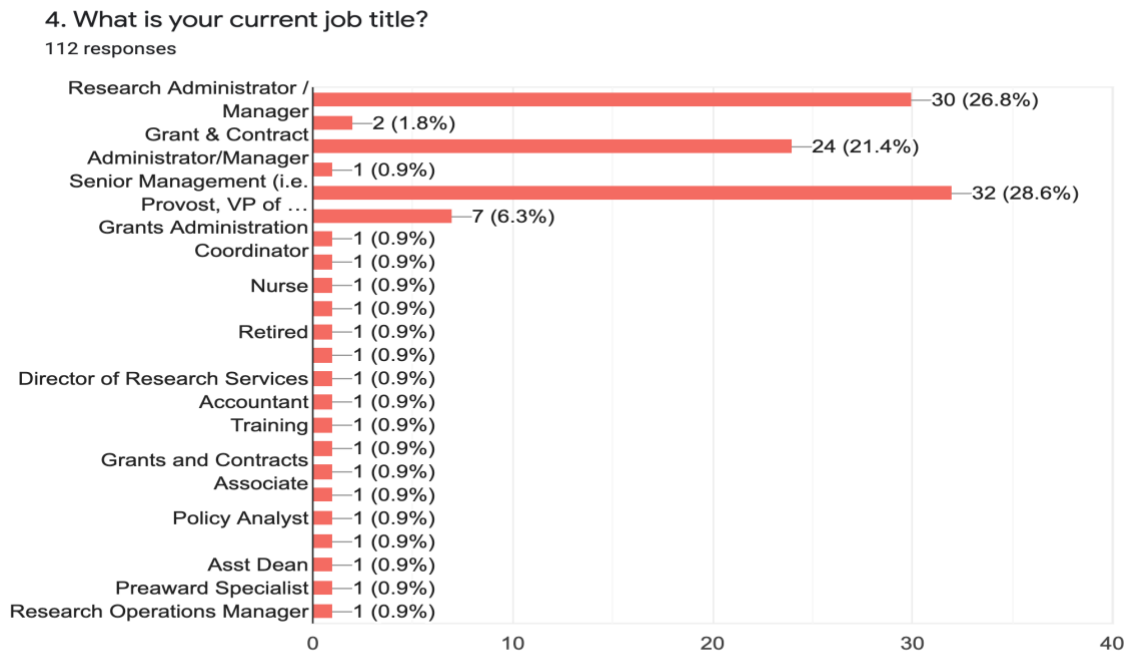


⁶⁴ Grant and Contract Accounting

⁶⁵ Office of Sponsored Programs

Data collected from Question 4 indicates that 28.6% of the participants hold job titles in the senior management team (i.e., Provost, Associate/Assistant Director), the highest population group in the survey. There are 26.8% of the participants in mid-management positions such as Research Administrators and Managers, and 21.4% work specifically as Grant and Contract Administrators who handle pre- and post-award transactions. The remaining 23.2% of the survey populations represent various job titles, including Accountants, Budget and Policy Analysts, and Training Specialists.

Figure 4 – Survey Results from Question 4

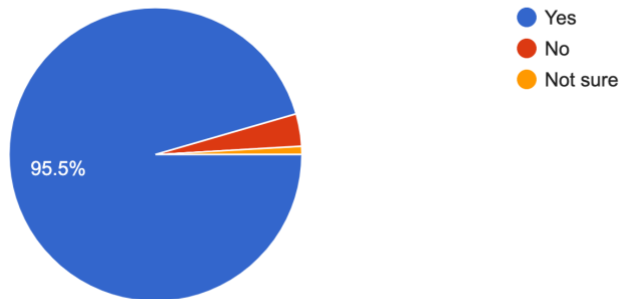


5.1.2 Levels of Impact in Research Administration

In Question 5, the survey participants were asked if the COVID-19 pandemic has impacted their work. The collected data shows that 95.5% of the participants responded “Yes” to the impact; less than 5% said there was no impact or was unsure of any impact.

Figure 5 – Survey Results from Question 5

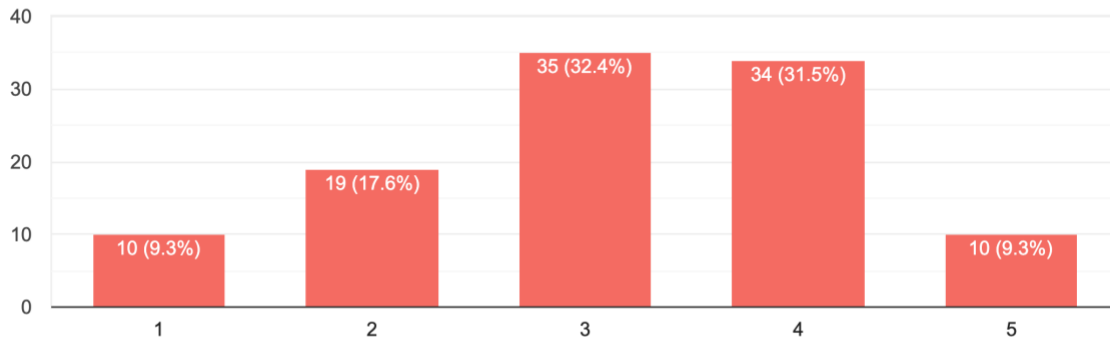
5. Has the COVID-19 Pandemic impacted your office / work in any way?
112 responses



Survey Question 6 asks the participants to rate the overall research administrative impacts they have encountered during the COVID-19 pandemic. Data suggests 32.4% of the responses show medium impacts while 31.5% of the participants have experienced greater than medium impacts. Less than 27% of the participants indicated lesser and minimal effects, and over 9% said the overall research administrative impacts from the pandemic are maximum.

Figure 6 – Survey Results from Question 6

6. On a scale from 1 to 5, with 1 being minimal and 5 being maximum, how would you rate the OVERALL impact on RESEARCH ADMINISTRATION in your office / work due to COVID-19?
108 responses



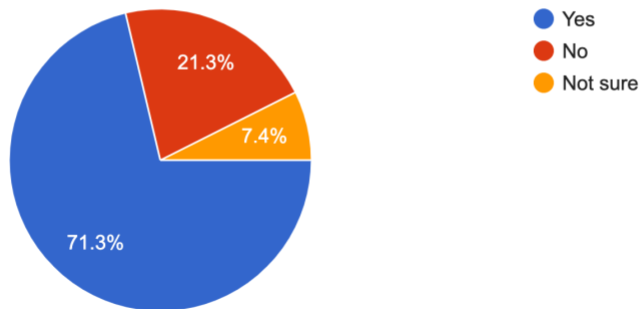
5.1.3 Impacts to Areas and Activities in the Award Lifecycle

Question 7 of the survey explicitly focused on the pre-award administration impacts that the participants encountered during the pandemic. Data shows that over 71% of the participants answered “Yes” to the impacts in pre-award administration, whereas 21.3% of the responses show no impacts, and 7.4% of the participants are unsure of any pre-award administration impacts from the pandemic.

Figure 7 – Survey Results from Question 7

7. To your knowledge, has the COVID-19 Pandemic impacted "PRE-AWARD" administration in your office?

108 responses

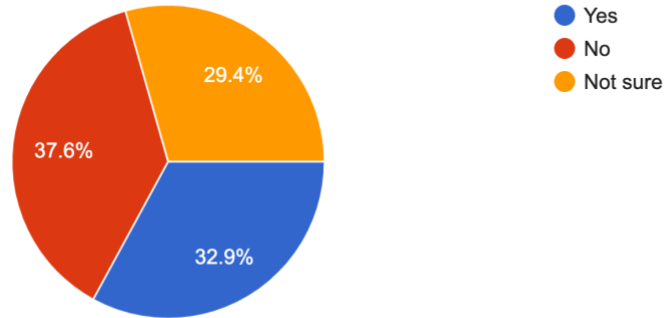


Survey Questions 8 – 11 ask about activities in the pre-award stage and whether there are related impacts to each activity from the COVID-19 pandemic or not. Out of 85 survey responses, results from Question 8 show over 37% of the participants believe there has been no impact in the “Search for Funding” during the pre-award stage. Nearly 33% of the participants indicated there had been impacts, and 29.4% of the participants are unsure of the impacts.

Figure 8 – Survey Results from Question 8

8. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted the "SEARCH FOR FUNDING" in your office?

85 responses

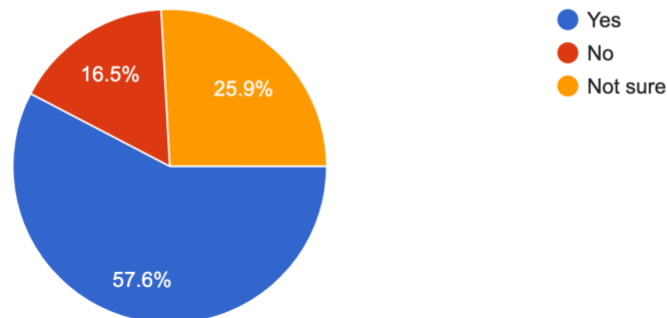


Data collected from Question 9 reflects 57.6% of the participants believe the COVID-19 pandemic has impacted the "Proposal Development" activity in the pre-award stage. While 16.5% of the survey populations answered "No," nearly 26% are unsure of the impacts.

Figure 9 – Survey Results from Question 9

9. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "PROPOSAL DEVELOPMENTS" in your office?

85 responses

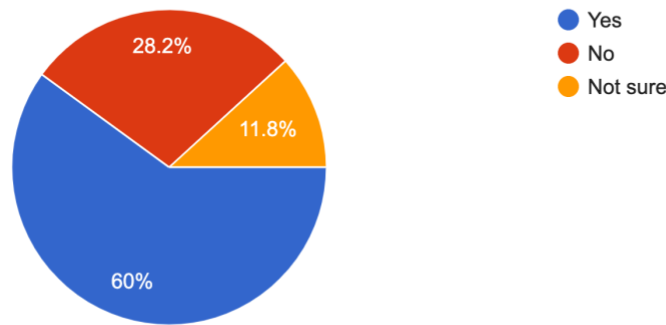


Question 10 of the survey asks if the participants have encountered any impacts in the “Proposal Submission” activity of the pre-award stage. Approximately 60% of the participants indicated that the COVID-19 pandemic does impact the submissions of proposals in their office, 28.2% of the survey populations answered “No,” and 11.8% are unsure of the impacts.

Figure 10 – Survey Results from Question 10

10. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "PROPOSAL SUBMISSIONS" in your office?

85 responses



In Question 11, when asked if the COVID-19 pandemic has impacted “IRB⁶⁶/IACUC⁶⁷ Submissions” to the pre-award administration, a higher percentage of survey participants indicated they are unsure of the impacts. Over 67% of the responses reflect no knowledge of whether IRB/IACUC submissions have been affected by the pandemic, 15.3% of the participants answered “Yes” to the question, and 17.6% responded no impacts.

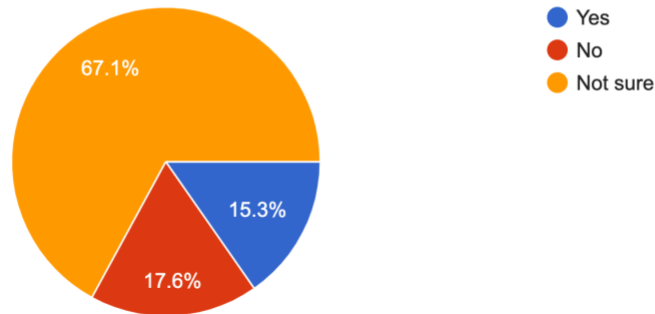
⁶⁶ Institutional Review Board

⁶⁷ Institutional Animal Care and Use Committee

Figure 11 – Survey Results from Question 11

11. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "IRB / IACUC SUBMISSIONS" in your office?

85 responses

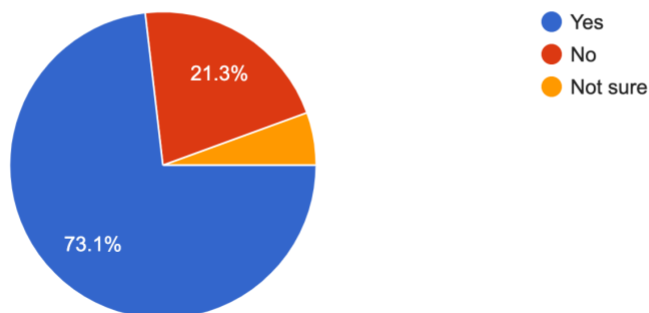


Question 12 of the survey focused on the post-award administration impacts that the participants encountered during the pandemic. Out of 108 responses, 73.1% of the participants answered “Yes” to the post-award administration’s impacts from the pandemic, whereas 21.3% of the participants indicated no impacts, and the remaining 5.6% of participants are unsure.

Figure 12 – Survey Results from Question 12

12. To your knowledge, has the COVID-19 Pandemic impacted "POST-AWARD" administration in your office?

108 responses

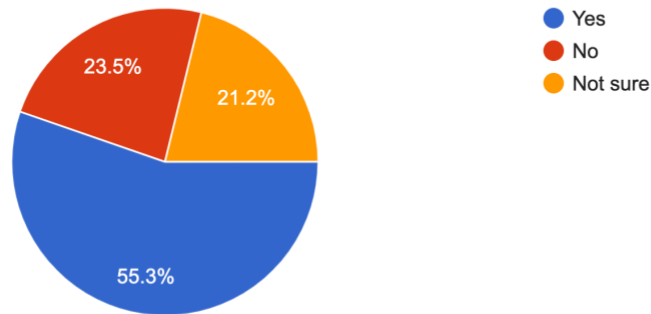


Survey Question 13 – 15 of the survey explicitly looked into post-award activities and the related impacts from the COVID-19 pandemic. Results from Question 13 show 55.3% of the participants believe the pandemic has impacted the “Budget Setup and Receipt of Award” during the post-award stage. While 23.5% of the participants said there had been no impacts, 21.2% are unsure.

Figure 13 – Survey Results from Question 13

13. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "TIME OF AWARD / BUDGET SETUP" in your office? (i.e. receiving award, budget # setup, Just-In-Time, etc.)

85 responses

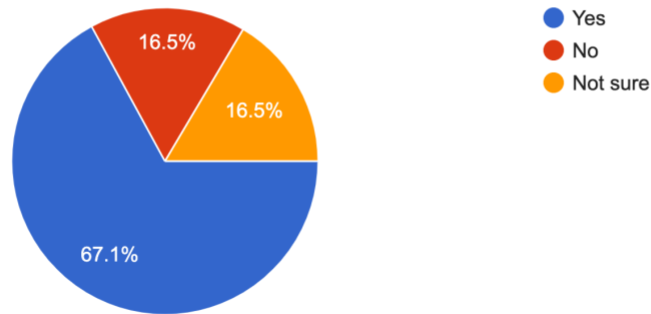


Data collected from Question 14 shows over 67% of the participants believe the COVID-19 pandemic has impacted the “Award and Budget Management” activity in the post-award stage. At 16.5% of the survey populations, participants indicated no COVID-19 related impacts to award management, and at the same percentile, 16.5% are unsure of such an impact.

Figure 14 – Survey Results from Question 14

14. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "AWARD / BUDGET MANAGEMENT" in your office? (i.e. procurement, invoicing, reporting, reconciliation, internal controls, etc.)

85 responses

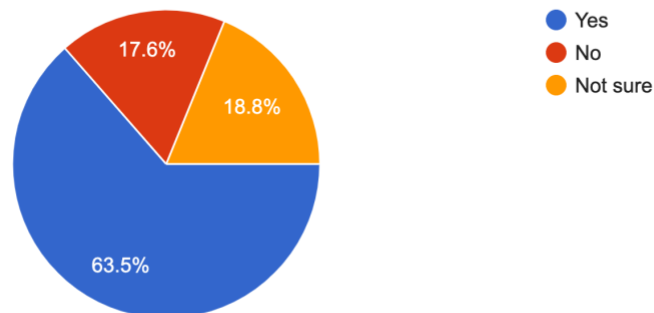


In Question 15, survey participants were asked if the COVID-19 pandemic has impacted the “Extension and Closeout of the Budget/Award” activity in the post-award stage. About 63.5% believe that the pandemic has affected the post-award activity, while roughly 18% said no impacts, and nearly 19% of the participants indicated they are unsure of the impact.

Figure 15 – Survey Results from Question 15

15. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "BUDGET EXTENSION / CLOSEOUT" in your office? (i.e. award no-cost-extension, end of award closeout, final reporting, etc.)

85 responses



5.1.4 Best Practice

Question 16 of the survey asks the participants to rate the helpfulness each of the five listed organizational actions were to them during the COVID-19 pandemic. Results of the survey show:

- I. Providing “Guidelines for Research Administration.”
 - The majority of the participants find this action most helpful.
- II. Offering “Virtual training and workshops.”
 - The majority of the participants find this action somewhat helpful.
- III. Including “Weekly organizational updates and newsletters.”
 - The majority of the participants find this action somewhat helpful.
- IV. Holding “Virtual social events.”
 - The majority of the participants find this action somewhat helpful.
- V. Providing “Available Q&A live chat.”
 - The majority of the participants find this action somewhat helpful.

Figure 16 – Survey Results from Question 16

16. Please rate HOW HELPFUL the below organizational actions would best assist your role in Research Administration during the COVID-19 Pandemic?



5.2 Discussion of Data Results

5.2.1 Demographic of the Survey Participants

The data results from Survey Questions 1 through 4 show the participants' overall demographic findings in this study. Nearly 95% of the research participants have recent experiences in the field of Research Administration. Over half of them have been in the profession for over a decade. The majority of these participants work in offices that directly relate to Research Administration support and involvement of the stages and activities in an award lifecycle. Table 3 summarizes the demographic data from the survey.

Table 3 – Summary of Demographic Data from the Survey

Demographic of Participants	Survey Results
Currently in Research Administration in the U.S.	<ul style="list-style-type: none">• 94.6% of the survey participants
Over 10 years working in Research Administration in the U.S.	<ul style="list-style-type: none">• 50.9% of the survey participants
Main research administrative offices the survey participants work at	<ul style="list-style-type: none">• Institutional support offices• Post-award offices• Pre-award offices
Current job titles held by the survey participants	<ul style="list-style-type: none">• 28.6% - Senior management position titles (i.e. Provost, Directors)• 26.8% - Mid-management position titles (i.e. Administrators, Managers)• 21.4% - Grant and Contract Specialists• 23.2% - Other business operation titles (i.e. Accountants, Business Analysts)

5.2.2 Levels of Impact in Research Administration

Questions 5 and 6’s survey results reflect nearly 96% of the participants have experienced impacts in research administrative work and offices from the COVID-19 pandemic. While a small amount of the participants indicate that the epidemic has a lower level of impact on their work, over 73% of participants believe medium to high levels of impact has occurred to their work during this time. Table 4 summarizes the key findings for various levels of impact in Research Administration.

Table 4 – Summary of the Levels of Impact in Research Administration

Impacts to Research Administration	Key Findings
Indication of participants’ offices and work <u>have been</u> impacted by the COVID-19 pandemic	<ul style="list-style-type: none">• 95.5% of the survey participants
The levels of impact to Research Administration indicated by the survey participants	<ul style="list-style-type: none">• 40.8% - High• 32.4% - Medium• 26.9% - Low

5.2.3 Impacts to Areas and Activities in the Award Lifecycle

According to the analyzed data from Survey Question 7 to 15, over 70% of the participants indicate there are impacts in both Pre- and Post-award stages in the research administration award lifecycle.

In the Pre-award stage, participants consider the impacts to be low in areas of “Searching for Sponsored Funding” and “Submissions of IRB⁶⁸ and IACUC”⁶⁹, at 32.9% and 15.3%

⁶⁸ Institutional Review Board

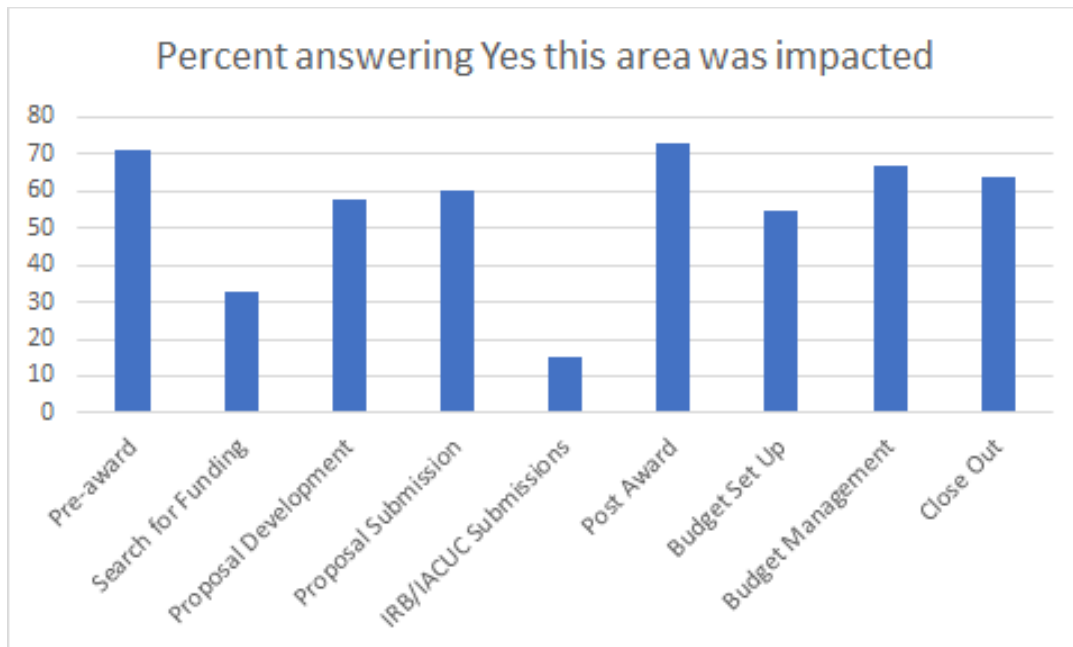
⁶⁹ Institutional Animal Care and Use Committee

respectively; contrarily, the impacts to activities of “Proposal Development” and “Proposal Submission” have shown to be higher to participants, at 57.6% and 60% respectively.

On the other hand, data results suggest the COVID-19 pandemic has impacted the award lifecycle activities in the Post-award stage significantly. Over 55% of the participants claim impacts in “Budget Set-Up;” more than 67% indicate impacts in the overall “Budget Management;” 63.5% of the survey population confirm impacts during “Award Closeout.”

Figure 17 illustrates the results of areas and activities impacted in an award lifecycle.

Figure 17 – Percentage of Participants stating YES to Areas Impacted in an Award Lifecycle

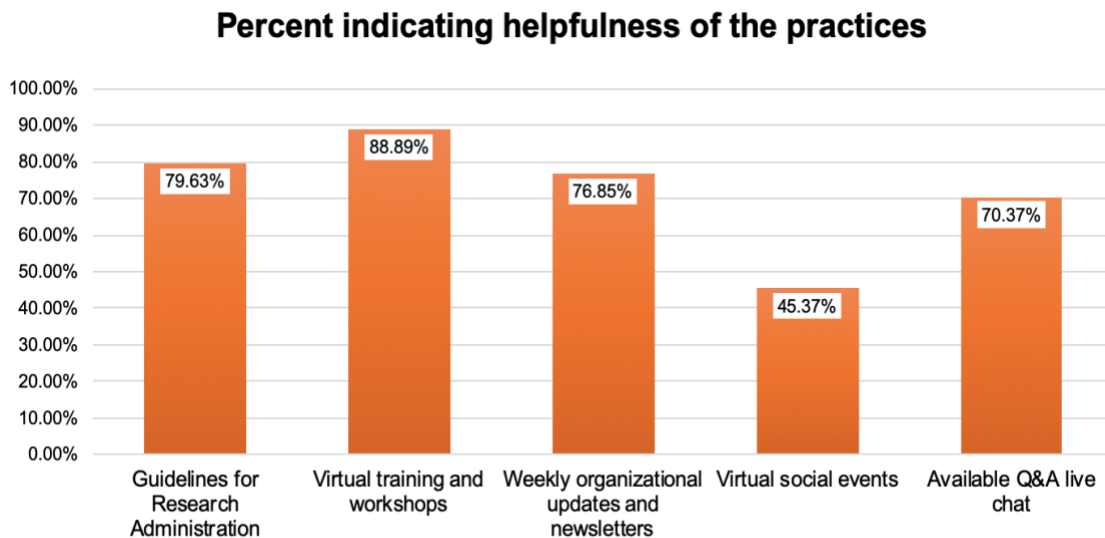


5.2.4 Best Practice

The survey’s final question asks participants from the Research Administration field to rate how helpful the five practices are to them in facing research administrative impacts during the COVID-19 pandemic. The survey results reflect the least beneficial approach is to attend “Virtual Social Events,” only 45.37% of the participants think it could be helpful. Between 70% to 80% of the participants believe that providing “Guidelines for Research Administration,” offering “Weekly Organizational Updates and Newsletters,” and joining “Available Q&A Live Chat” are helpful and can be considered acceptable practices.

Finally, the collected data results confirm that nearly 90% of the participants agree that the ultimate best practice during this time is to attend opportunities and discussions in “Virtual Training and Workshops” that are related to activities in an award lifecycle and research administrative procedures. Figure 18 demonstrates the percentage of how helpful the participants think each of the five practices is.

Figure 18 – Percentage of Participants indicating Helpfulness of Practices



Chapter 6. Conclusion

As the COVID-19 pandemic continues to affect the entire research enterprise and Research Administration community within the U.S., research institutions and government agencies strive to maintain reasonable flexibilities in administrative operations and procedures. While implications and issues related to Research Administration remain high during the pandemic, this research study provides insights into the types of impacts, the degree of each impact, and the best practice that would help research administrators in this current state.

Throughout this project, data collected illustrates that over 70% of the overall Research Administration community has reported experiencing impacts in an award lifecycle's various activities. Areas like *Proposal Development* and *Submission* in the Pre-award stage and *Budget Set-Up*, *Award Management*, and *Closeout* in the Post-award stage showed the highest percentages of impact, at over 50-60%. Understandably so, these areas require the most attention from research administrators when performing stewardship to an award.

According to the discussion of research results, many of the current procedures had provided different levels of assistance to research administrators within the U.S. during this time. While some methods have less of an effect on research administrators, several practices have shown great helpfulness. At nearly 90% effectiveness, offering "Virtual Training and Workshops" to research administrative personnel is rated as the ultimate best practice. Other highly rated practices include: providing Guidelines for Research Administration, offering Weekly Organizational Updates and Newsletters, and Available Q&A Live Chats.

The research results emphasized the Research Administration community's need to be provided with appropriate guidelines and engage in effective communications and interactions. This study confirmed that the COVID-19 pandemic had caused different types of implications to

the overall Research Administration community. While some best practices were found through this study, further research should be undertaken to identify and refine additional best practices.

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Appendix 1: Survey Questionnaires

7/10/2020

Impacts in Research Administration From the COVID-19 Pandemic

Impacts in Research Administration From the COVID-19 Pandemic

The below survey has been developed to help understand how COVID-19 Pandemic has impacted the overall administration of research activities within the United States.

This survey will take less than 10 minutes to complete. By completing the survey, you are consenting to be in this research study. Your participation is voluntary and you can stop at any time.

Please note: This survey is being conducted in partial fulfillment of my Master of Science Degree at the Johns Hopkins University. Your response to the questionnaire is anonymous. Final results may be published but no personal information will be collected or associated with the study.

Thank you for your participation!

* Required

Research Administration

1. Are you currently working in the field of Research Administration within the United States? *

Mark only one oval.

Yes

No

2. 2. How long have you been working in Research Administration within the United States? *

Mark only one oval.

- Less than a year
- 1-3 years
- 4-6 years
- 7-9 years
- 10 years or more

3. 3. Which area of Research Administration are you currently in? *

Check all that apply.

- Pre-award (i.e. search for funding, proposal development & submission, IRB/IACUC preparation, etc.)
- Post-award (i.e. award management, budget extension & closeout, etc.)
- Departmental Research Administrative Offices (i.e. fiscal, HR/payroll, procurement, compliance, etc.)
- Institutional Research Support (i.e. central OSP / GCA offices, central business offices, etc.)
- Other: _____

4. 4. What is your current job title? *

Check all that apply.

- Research Administrator / Manager
- Research Coordinator / Lab Manager
- Grant & Contract Administrator/Manager
- Budget / Financial / Compliance Analyst
- Senior Management (i.e. Provost, VP of Research, Associate/Assistant Director, etc.)
- Other Administrative Support (i.e. fiscal specialist, program operation specialist, etc.)
- Other: _____

5. 5. Has the COVID-19 Pandemic impacted your office / work in any way? *

Mark only one oval.

- Yes *Skip to question 6*
- No
- Not sure *Skip to question 6*

Award Impacts in Research Administration From COVID-19

6. 6. On a scale from 1 to 5, with 1 being minimal and 5 being maximum, how would you rate the OVERALL impact on RESEARCH ADMINISTRATION in your office / work due to COVID-19? *

Mark only one oval.

	1	2	3	4	5	
Minimal / Little to Zero	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Maximum / Large

7. 7. To your knowledge, has the COVID-19 Pandemic impacted "PRE-AWARD" administration in your office? *

Mark only one oval.

- Yes *Skip to question 8*
- No *Skip to question 12*
- Not sure *Skip to question 8*

Award Impacts in Research Administration From COVID-19

8. 8. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted the "SEARCH FOR FUNDING" in your office? *

Mark only one oval.

- Yes
 No
 Not sure

9. 9. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "PROPOSAL DEVELOPMENTS" in your office? *

Mark only one oval.

- Yes
 No
 Not sure

10. 10. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "PROPOSAL SUBMISSIONS" in your office? *

Mark only one oval.

- Yes
 No
 Not sure

11. 11. (Pre-Award) To your knowledge, has the COVID-19 Pandemic impacted "IRB / IACUC SUBMISSIONS" in your office? *

Mark only one oval.

- Yes
 No
 Not sure

Award Impacts in Research Administration From COVID-19

12. 12. To your knowledge, has the COVID-19 Pandemic impacted "POST-AWARD" administration in your office? *

Mark only one oval.

- Yes
 No *Skip to question 16*
 Not sure

Award Impacts in Research Administration From COVID-19

13. 13. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "TIME OF AWARD / BUDGET SETUP" in your office? (i.e. receiving award, budget # setup, Just-In-Time, etc.) *

Mark only one oval.

- Yes
 No
 Not sure

14. 14. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "AWARD / BUDGET MANAGEMENT" in your office? (i.e. procurement, invoicing, interim reporting, reconciliation, internal controls, etc.) *

Mark only one oval.

- Yes
 No
 Not sure

15. 15. (Post-Award) To your knowledge, has the COVID-19 Pandemic impacted "BUDGET EXTENSION / CLOSEOUT" in your office? (i.e. award no-cost-extension, supplement & renewal, end of award closeout, final reporting, etc.) *

Mark only one oval.

- Yes
 No
 Not sure

Organizational Actions in Research Administration

16. Please rate HOW HELPFUL the below organizational actions would best assist your role in Research Administration during the COVID-19 Pandemic? *

Mark only one oval per row.

	Most helpful	Somewhat helpful	Neutral	Least helpful	Not helpful at all
Guidelines for Research Administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Virtual trainings and workshops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weekly organizational updates and newsletters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Virtual social events (i.e. coffee hour)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Available Q&A live chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Google Forms

Appendix 2: Johns Hopkins University Institutional Review Board Approval Letter

7/24/2020

<https://ehirb.jhu.edu/eHIRB/sd/Doc/0/64HGJNMUTIP4FAU75DBQR6JS6A/fromString.html>



Homewood Institutional Review Board

3400 N. Charles Street
Wyman Park Building, Suite N468
Baltimore MD 21218-2685
410-516-6580
<http://homewoodirb.jhu.edu/>

Michael McCloskey, PhD
IRB Chair

Date: July 23, 2020

PI Name: Jeffrey Kantor

Study #: HIRB00011334

Study Name: Impacts in Research Administration from the COVID-19 Pandemic within the U.S.

Date of Review: 7/22/2020

Date of Acknowledgement: 7/22/2020

Expiration Date: 7/22/2021

The above referenced study has been *acknowledged*.

Review Type:	Exempt
Funding Agency:	Not funded
Grant or Contract Number:	
International Sites:	No
Maximum number of participants:	120
Vulnerable populations:	None
Consent process:	
Assent Process:	

The Board determined that this research meets the criteria for submission of a Progress Report. The Progress Report must be submitted at least 6 weeks prior to the expiration date shown above on this

<https://ehirb.jhu.edu/eHIRB/sd/Doc/0/64HGJNMUTIP4FAU75DBQR6JS6A/fromString.html>

1/2

notice. If the Progress Report is not submitted prior to the expiration date all ongoing research activities must stop immediately, including data analysis. Before any research activity can resume, you must submit the Progress Report.

No changes may be made to the protocol or the consent form without the approval of the Board.

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:

Recruiting Materials:
Script to Research Participants

Study Team Members:
Ching-Yuan Huang

APPROVAL IS GRANTED UNDER THE TERMS OF **FWA00005834** FEDERAL-WIDE ASSURANCE OF COMPLIANCE WITH DHHS REGULATIONS FOR PROTECTION OF HUMAN RESEARCH SUBJECTS

Curriculum Vitae

CHING-YUAN HUANG

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EDUCATION

Johns Hopkins University **December 2020**

Master of Science in Research Administration

Thesis Title: Impacts in Research Administration from the COVID-19 Pandemic

Washington State University **December 2010**

Bachelor of Arts in Business Administration – Major in Accounting & Information Systems

PROFESSIONAL EXPERIENCES

Research Administrator **May 2018 – Current**

University of Washington **Seattle, WA**

Responsible for unit budgetary affairs – including coordinating grant & contract proposal preparation and submission, administering financial planning, monitoring, and forecasting. Provide strategic planning and execution, and act as liaison with the central HR offices.

Financial Analyst **September 2014 – April 2018**

University of Washington **Seattle, WA**

Managed sponsored projects and all aspects of unit finances and budget forecasts. Develop budget models to guide short-term and long-term financial planning across the institute. Advise Co-Directors on feasibility of new initiatives by conducting financial analysis.

Budget/Fiscal Analyst Lead, BFA **January 2013 – September 2014**

University of Washington **Seattle, WA**

Managed sponsored projects including grant and contract renewals, supplements and extensions, and sub-contracts management. Developed monthly revenue and expenditure reports. Performed monthly budget reconciliations.

Accountant **October 2011 – January 2013**

Diocese of Olympia **Seattle, WA**

Managed all federal and state grants & contracts and private sponsored projects. Oversaw revenues and expenditures across the organization. Prepared and maintained year-end accruals, fixed assets, and inventory control reports. Prepared 941 quarterly tax return submission, and year-end W-2, W-3 & 1099 forms.

MEMBERSHIPS & CERTIFICATIONS

Member – National Council of University Research Administrators **May 2019 – Present**

Member – Society of Research Administrators International **May 2019 – Present**

CITI Program – Responsible Conduct of Research for Administrators **February 2018**

CITI Program – Good Clinical Practice **February 2018**

University of Washington Fiscal Management Certificate **June 2015**