HOW TO ESTABLISH A SUPPORTIVE RESEARCH ADMINISTRATION ECOSYSTEM FOR REMOTE WORK DURING AND POST COVID-19

by
Jose Bendeck

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Abstract

The emergence of the novel coronavirus (SARS-CoV-2) has been the catalyst for another change agent in the research enterprise. This virus has forced most research administrators to shift to working from home. This forced flexibility in research administration work has presented both challenges and opportunities. The author's capstone project investigates the requirements of working from home (WFH) for research administrators. This research is accomplished by evaluating survey data, global studies on remote work, journal articles, and the author's personal experiences transitioning to remote work. The results of this project delineate best practices for establishing a supportive research administration ecosystem during and post COVID-19.

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Glossary

Council on Governmental Relations (COGR)- an association of affiliated medical centers, independent research institutes, and research universities

Diversity, Equity, and Inclusion (DEI)- is a concept that all people can thrive personally and professionally regardless of differences in race, gender, religion, sexual orientation, ethnicity, nationality, socioeconomic status, language, (dis)ability, age, or religious commitment

eRA Commons-an electronic system for the paperless transmission of extramural funding applications and administrative data

Forced flexibility- transitioning from a discretionary flexible work policy to a mandatory requirement

Grants.gov- online portal that encompasses twenty-six federal agencies providing access to 900 grant programs for state and local governments, nonprofits, academia, and other organizations

National Council of University Research Administrators (NCURA)-professional membership organization that advances the work of research administration

National Institute of Health (NIH)-federal agency that funds basic science and medical research in the United States

National Science Foundation (NSF)-federal agency that funds scientific research

Office of Science Research and Development (OSRD)-this office established basic management agreements between sponsoring agencies and research laboratories

Remote working- work from home (WFH), telework, telecommuting, hybrid work, flexwork are all forms of flexible working that includes the ability and requirement to work away from the usual office environment, at home, or while mobile

Research Administrator (RA)

Society of Research Administrators International (SRAI) is a professional membership organization providing education and professional development in research administration

Chapter 1. Introduction

1.1. Background

Early federal governmental funding policy did not support basic science research, instead endorsed specific projects or endeavors in agriculture (Kulakowski & Chronister, 2006). These endeavors included establishing the Smithsonian Institute (1846); passing the Morrill Act (1861), which provided each state land to found agricultural and mechanical colleges; and creating the National Academy of Science (1863). In 1884, the Allison Commission was formed to investigate the allocation of federal science funding, but this was a fruitless effort (Kulakowski & Chronister, 2006). Due to this fragmented nature of federal science funding for 40 years, by the "1930s universities were the undisputed leaders in conducting basic research" (Kulakowski & Chronister, 2006, p.11).

In May 1940, Vannevar Bush requested that federal resources be allocated for wartime scientific research efforts. President Franklin D. Roosevelt agreed, and in June 1941, the Office of Science Research and Development was created (Kulakowski & Chronister, 2006). This office established basic management agreements between sponsoring agencies and research laboratories. Due to the success of the federally funded research endeavors during WWII, President Roosevelt wanted to continue these efforts during peacetime. He enlisted Bush to assist him and in 1945, Bush, the head of the Office of Scientific Research and Development (OSRD), wrote a report entitled "Science, the Endless Frontier" in response to his request. This report influenced

the formation of policy to invest in research and train new researchers. The approach to such policy was solely focused on scientific need and merit, not geographical or partisan influences (Kulakowski & Chronister, 2006).

As a result, Bush and OSRD helped pioneer the modern-day peer-reviewed and merit-based scheme that awards contracts and grants to research enterprises (Kulakowski & Chronister, 2006). Additionally, in 1945, the Committee on Medical Services was placed under the Public Health Service's (PHS) division, the National Institute of Health (NIH) (Kulakowski & Chronister, 2006). This change was the beginning of the modern NIH. Five years later, the National Science Foundation (NSF) was created. These two entities are now the largest funders of scientific research in the United States. In 2021, the NIH received $42.9 billion and the NSF $8.5 billion for scientific research (Remmel, 2021).

The next change agent for the research enterprise was the passage of the Bayh–Dole Act of 1980, previously known as the Patent and Trademark Act Amendment. "This act afforded universities, nonprofit research institutions, and small businesses the ability to own, patent, and commercialize inventions funded at their institutions by federal government research awards" (Kulakowski & Chronister, 2006, p. 44). This act accelerated institutional investment in the research enterprise, which has resulted in exponential growth in the field of research administration. As the volume of basic science proposals submitted and funded has steadily increased, the research administration workforce has shifted. from predominantly white men to mostly white women (NCURA1959).

Throughout this shift, most of the administrative burden has transferred from scientists to research administrators.

Another change agent to the research enterprise was the advent of the internet. This invention and the Federal Financial Assistance Improvement Act of 1999 ushered in a new electronic research administration frontier (Kulakowski & Chronister, 2006). Similarly, in 2001, the NIH created Commons, (https://public.era.nih.gov/)[1], an electronic system for the paperless transmission of extramural funding applications and administrative data (Kulakowski & Chronister, 2006). Subsequently, in 2003, the website https://www.grants.gov/ [2] was established, encompassing twenty-six federal agencies providing access to 900 grant programs for state and local governments, nonprofits, academia, and other organizations (Kulakowski & Chronister, 2006, p. 304). These two electronic (eRA) entities in conjunction with early adopter institutions facilitated the transition from paper to electronic submissions and administrative management.

Moreover, software assisting in system-to-system federal proposal submissions (S2S) has become essential at many institutions. Additionally, other assistive research administration systems have been developed and implemented for pre-award and post-award management, technology transfer, IRB administration, effort reporting, and financial conflicts of interest. These technologies have helped automate and streamline research administration.

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[1] https://public.era.nih.gov/
[2] https://www.grants.gov/

Recently, the emergence of the novel coronavirus (SARS-CoV-2) has been the catalyst for another change agent in the research enterprise. This virus has forced most research administrators to shift to remote work for safety purposes after being classified as nonessential workers by institutional leadership. By investigating further, necessary attributes may be identified and implemented for a successful and transformative transition to research administration remote work.

1.2. Statement of the Problem

Twenty months ago, institutions had to ramp down the research enterprise to help stop the spread of COVID-19. As a result, many institutional leaders mandated that most research enterprise employees transition to remote work. Due to this mandate, researchers swiftly abandoned cell lines, culled animal colonies, paused most clinical trials, and ceased almost every research activity deemed nonessential. Only essential activities, such as research on COVID-19, clinical trials that would harm participants if they ended, institutionally approved activities that protected living organisms, and infrastructure were permitted. Furthermore, researchers who utilized wet labs had difficulty transiting to remote work during this period (Sohrabi et al., 2021). Additionally, Sohrabi et al. (2021) surveyed researchers in April 2020 and found that 25% of life scientists have lost anywhere between one to six months of work during the ramp down.

After establishing safety protocols, institutions could ramp up by implementing restricted access to research buildings and laboratories, staggered shift scheduling and enhanced cleaning protocols (Council on Governmental Relations [COGR], 2020). Such protocols included cleaning between shifts, mask-wearing policies, and weekly COVID testing. Beyond these efforts, social distancing based on personnel density forced researchers to conduct much of their daily activities in remote capacities. According to COGR (2020), during this pandemic normal the research enterprise will encounter unavoidable inefficiencies.

During the ramp down period, most research administrators were sent home to work remotely which continued after the ramp up phase. As a result, remote work became a forced scenario, so Franken et al. (2021) coined the term forced flexibility. In this context, it this phrase means transitioning from a "discretionary flexible work policy to a mandatory requirement" (Franken et al., 2021, p.1). Throughout this time, many research administrators have quickly adapted to remote work with little precedent or clear institutional guidance. Occasional site visits have become necessary for some research administrators for the continuity of the research enterprise's obligations.

In this time, remote work has become intertwined with the pandemic normal at most research institutions. However, remote work challenges must be addressed before remote work can be viewed as a viable alternative to an in-person office environment. First, institutions must thoroughly assess how remote work will impact the research enterprise and its employees. This assessment

should encompass a thorough review of IT infrastructure, job scope, performance metrics, and other support needs. A properly executed analysis followed by implementation should facilitate a smooth transition to remote work during and after COVID at early adopter institutions.

1.3. Project Question

Currently, numerous institutions are developing various types of remote work policies for during and post COVID. The research questions addressed in this capstone are the following-which approach is best suited for a particular research institution, and how should their policy be decided? Furthermore, what supportive ecosystems should institutions provide to remote work employees for successful continuity during and post COVID?

1.4. Project Objectives

The objective of this capstone project is to formulate best practices for establishing supportive ecosystems for remote work. This is accomplished by assessing the available survey data, global literature on remote work, journal articles, and other published works on the necessary infrastructure for successful remote work. This in turn enables informed decisions on information technology requirements, performance metrics, productivity, hiring practices, and effective communication. Additionally, leveraging these best practices would enable

continuous engagement and retention for current and future research administrators.

1.5. Significance

Different approaches to recruiting and hiring practices will be required for the research enterprise to supplement its aging white female workforce, as the average age of a research administrator is 46 (NCURA1959, 2021, 22:34). Compared with the "working-age population in the United States, white RAs are overrepresented, while Hispanics and African Americans are underrepresented and Asians are slightly underrepresented" (Caban et al., 2020, p. 34).

Institutions that develop robust remote work policies during and post covid-19 could attract a diverse, experienced workforce from anywhere in the world to fill consistently vacant research administration jobs. Additionally, remote work flexibility offers hiring managers the potential to tap into a larger pool of diverse college graduates seeking their first jobs. Moreover, the seasoned Research Administrators near or at retirement age may continue to work part-time from the comfort of their homes. Remote work allows these employees to maintain productivity but with a modified schedule.

Furthermore, the shift to remote work may allow institutions and managers to reassess job scopes, processes, and policies. These changes may enable potential redesigns of performance metrics and workflows. All these changes may be necessary for a solid support ecosystem to maximize efficiency and productivity. Institutions that develop and embrace robust remote work policies

and a supporting ecosystem during and post COVID may gain a competitive

advantage.

1.6. Exclusions and Limitations

One of the limitations of the remote work surveys was that the data

extracted were only from members of Simmons University, Colorado University,

Society of Research Administrators International (SRAI), and National Council of

University Research Administrators (NCURA). Although the NCURA survey is

concise, some questions could have been more robust. For example, there were

only two options for remote work: fully remote locally or fully remote anywhere.

There is not an option for a hybrid model.

Additionally, the institutional remote work policies available online came

from publicly searchable documents on institutional websites. These policies

were also pre-COVID because post-COVID policies remain in development. This

limitation also exists at the author's home institution, Tufts University. Currently,

Tufts does not have a formal remote work policy. Therefore, one of the objectives

of this project is for the author to formulate a remote work policy that could apply

to his department.

Moreover, data on employee retention or resignation is not readily

available. Such information would help one assess whether institutions with

remote work policies have attracted more new hires than those without such

policies. Thus, remote work will require further examination when more data is

available. One challenge in this research will be how to collect data on whether a remote work policy is a contributing factor in the recruitment of new hires. If not properly analyzed, this potential shift may prove problematic for less-funded research institutions already struggling to hire and retain talented research administrators. Additionally, existing data on supportive ecosystems at research institutions with remote work policies is limited.

Chapter 2. Literature Review

2.1. Overview of literature review

Literature

The beginning of the pandemic was challenging for many research institutions. The early stages of the pandemic forced institutions to close than ramp up for essential employees. This in turn necessitated that all nonessential employees work from home until thorough safety guidelines were developed and released. This shift meant that employees would need to attempt to emulate their work environments at home. The Tufts Medical School Department of Neuroscience had prepared for this contingency as the author had already established a remote work infrastructure. This system consisted of a laptop exclusively for home usage, network drives through a virtual private network, and a home printer. This remote infrastructure was required to mitigate New England snow days and potential employee sickness. Both types of disturbances could interfere with proposals submitted or timely research management. The proper name for this type of plan is a business continuity plan. An article entitled "Case Study: How Gallaudet University's Office of Sponsored Programs and Research Services Implemented Their Business Continuity Plan during COVID-19" by Houston and Foster (2021) discusses such a plan.

According to a National Bureau of Economic Research working paper, "between February and May 2020, over one-third of the labor force transitioned to remote work. This data is reflective of about half of the American workers

working from home. Most of these remote work jobs are in information work such as management, professional and related occupations" (Brynjolfsson et al., 2020, p. 3). Therefore, the transition from in-person to fully remote work should not have been challenging for some employees. This should have been especially true for certain research institutions and industries that had been early adopters of work-from-home measures—for example, Johns Hopkins University, Duke University, and sizeable clinical research companies. The latter companies have allowed certain employees to work remotely, including "project managers, data managers, safety managers, line managers, clinical research associates (CRAs), clinical trial assistants, and other similar positions" (Sachdeva et al., 2021, para. 4). Sachdeva et al., 2021 focused on how the health and productivity of CRAs during pandemic necessitated by remote work by applying "known research involving remote work to the CRA position" (Sachdeva et al., 2021, para. 4).

However, institutions and companies with defined remote work policies and procedures could not anticipate the magnitude of the stressors that the pandemic would cause. These stressors have included worries about catching COVID-19, job insecurities, care provisions for children and elders, compromised shared living arrangements, and family members who require additional support. These stress factors, along with inadequate supporting resources, complicated the transition to remote work for many. For example, a study conducted in Australia by Franken et al. (2021) utilized the conservation of resources theory to assess employee well-being and productivity. Additional identified challenges in the same study included "technologies, work-life balance, physical workspace,

workload and productivity, and team relationships during the transition to remote work" (Franken et al., 2021, p 18).

In a similar vein, Park et al. (2021) studied the importance of the psychological well-being of e-workers. This study reviewed other conceptual and empirical studies to ascertain the challenges encountered by these workers. As a result, the researchers found a need for human resource practitioners to provide support and development opportunities to e-workers. In receiving such support, an employee can build a positive relationship with their organization (Park et al., 2021). "When employees have a preferred working environment and the necessary support to satisfy their basic needs, they can fully engage in the work" (Bakker & Demerouti, 2007, p. 314). Additionally, the development of inclusive organizational culture and policies is necessary to meet the needs of the vulnerable members of organizations, like minorities (ethnic, social-economic status); single parents; and disabled employees (Park et al., 2021).

Beyond these works, a study by Kicheva (2021) surveyed employees in Bulgarian companies using an anonymous questionnaire. The resulting journal article by Kicheva (2021) outlined the opportunities and challenges of remote work in Bulgaria between March–April of 2020. This study found that the most important benefit for many workers was the elimination of their commutes. Other benefits cited were flexible hours, an improved work-life balance, and safety from the virus. Furthermore, many globally forced transitions to remote work resulted in Zoom's daily active user base growing by 67% in March 2020. Furthermore, the "number of daily active users of Microsoft Teams grew from 20 million in

November 2019 to 44 million in March 2020" (Leonardi, 2021, as cited in Kicheva, 2021, p. 145). This underlines the importance of such tools for remote work.

Another reviewed article was "Brave New World of Virtual Organization: Creating a Distributed Environment for Research Administration" (Killoren & Eyerly, 1997). This article describes the transition from a centralized to a decentralized research administration enterprise by leveraging a virtual environment. Additionally, this analysis evaluates the factors that contribute to decisions on the type of infrastructure necessary to support research faculty. In less challenging times, the University of Pittsburg's Department of Psychiatry conducted a similar assessment. The school wanted to eliminate an environment where administrators expected million-dollar overages and write-offs of hundreds of thousands of dollars (Leyland et al., 2020). Because outgoing federal submissions were high and demanding, this environment necessitated modeling an infrastructure after a central institutional office (Leyland et al., 2020).

On this note, Leyland et al. (2020) described how they enacted this new model to improve leadership capacities, define roles, and gain a better perspective on content knowledge. This process was accomplished by having team leaders meet biweekly to disseminate new policies and procedures (Leyland et al., 2020). They also troubleshot issues and implemented best practices. "This high level of communication has been effective in disseminating critical information and driving process improvement" (Leyland et al., 2020, p.

46). This journal article also provided a valuable graph of research administration operations for this team.

"Evaluating Research Administration: Methods and Utility" in the Journal of Research Administration is an article that describes the metrics that could be appropriate in a research administration office. This paper discusses the "benefits of developing and implementing metrics for research administration offices include defining and monitoring business processes and their impact" (Marina et al., 2015, p. 95). Applying metrics to research administration allows an institution to evaluate areas that need improvement or enhancement through additional resources. Additionally, executing these improvements may result in a competitive advantage over peer institutions (Marina et al., 2015).

Once metrics and productivity can be measured, incorporating these attributes in current performance evaluations and recruitment efforts is necessary. In 2018, Kerridge and Scott conducted an international survey called "Research Administration as a Profession" (RAAAP). They identified behaviors, fundamental skills, and attitudes common among successful research management and administration (RMA) leaders (Kerridge & Scott, 2018).

Remote work policies

To thoroughly evaluate remote work policies, the policies need to be posted and available online on the institution's website. One challenge in this process is that although many institutions have been at the forefront of devising and implementing remote work policies since before COVID-19, they are still

refining these policies for the current environment. The remote work policies

reviewed in this study are from Johns Hopkins University, Duke University,

Harvard University, MIT, Boston University, and Tufts University. However, Tufts

does not yet have a clearly defined remote work policy. Thus, this project's

objective is to incorporate best practices at the author's current work environment

to successfully transition his team to continuous remote work.

Surveys on remote work

There are remote work surveys available online from the NCURA website. One

survey is the Changing work environment during the pandemic by NCURA

Electronic Research Administration (ERA). Another survey was developed and

released by an NCURA Task Force in July 2022. These surveys express varying

degrees of opinion and information on remote work for research administrators.

2.2. Details of review

Below are the areas reviewed for the creation of a supportive ecosystem for

remote work.

IT Infrastructure

Various articles and tutorials have been posted on institutional websites

regarding the necessary IT infrastructure for successful remote work, including

hardware and software. Essential software includes assistive research

administration software to interface with federal funders like grants.gov, NIH

eCommons, Proposal Central, Fastlane, and other portals. In addition, there are various types of institution-specific software. Finally, there are also popular remote work support and productivity applications like Zoom, Microsoft Teams, Slack, Jabber, AdobeSign, Google Documents, Box, DropBox, and Jabber.

Productivity, Well-Being, and Remote Work

When conducting the current research, no studies or journal articles were available on research administration and productivity during the transition to remote work. However, literature from other industries has assessed the connection between productivity during remote work and support systems provided by employers. Additionally, these sources all reference similar correlations between having appropriate resources available and facilitating productive support systems during remote work.

Performance metrics

Performance metrics are more critical now than they were before COVID-19. According to studies, transparency for growth potential and assigned metrics are necessary for employee well-being. In same vein, certain literature explains how to apply performance metrics during non-COVID times in research administration.

Effective Communication

There have been many challenges to effective communication during the pandemic. For instance, many pre-pandemic means of effective communication had to transition to video conferencing and other media. Several studies on remote work have noted the necessity of leveraging these new methods as tools for better real-time communication and collaboration. Additionally, the pandemic has created an environment where cell phones have become standard business communication tools.

2.3. Applicability of Literature Review

It is important to note that remote work in research administration needs further investigation as it evolves from its current state of forced flexibility. Numerous studies have been conducted on the well-being and productivity of remote workers in different industries during the pandemic. The common results among these studies have been applicable to research administrators facilitating remote work during the pandemic.

Other referenced literature on performance metrics, productivity, and communication have appeared in journals of research administration, such as NCURA's Research Management Review-Journal and the SRAI Journal of Research Administration. Additional articles have been published online on research administration infrastructure, performance metrics, productivity,

effective communication, hiring, retention, and professional development support

best practices.

Chapter 3. Need(s) Assessment

3.1. Need(s) Assessment

Remote work in research administration was initially a forced situation due to the pandemic. In the rush to facilitate this change, the necessary attributes for successful remote work were not at the forefront of institutional minds, as many expected the changes to be temporary. However, 20 months into remote work, a supportive ecosystem must be created and implemented for long-term sustainability. Therefore, delineating the opportunities and challenges of remote work would produce prudent decisions.

3.1.1 Assessment of Need

This project will delineate best practices for long-term remote work as an option within a necessary, supportive ecosystem during and after COVID-19. This supportive ecosystem enables remote work to act as a potentially transformative change agent in the research enterprise.

3.2. Metrics

The previously released survey data metrics are analyzed to ascertain the types of research institutions, employees, and associated views on remote work. Additionally, this analysis reveals areas that may need implementation or improvement for successful remote work during and post COVID. Beyond this, metrics from different industries categorize the support systems utilized by productive and engaged employees.

3.3 Sources

N/A

3.4. Committees

N/A

3.4.1. The role the committee played.

N/A

4.1 Project Description

4.1 Project Elements

To begin, this project analyzes published surveys on remote work for

research administrators. The first published survey on this subject matter

included members of NCURA with additional data from Simmons University and

Colorado University. The survey combined that data, and the results were

published. Subsequently, NCURA sent a survey to its 7,500 members in July

2021. These surveys gauge the participants' remote work scenarios, opinions on

the current state, and the future of remote work in research administration.

The second element of the project involves assessing the infrastructure

requirements for remote work. For instance, hardware should include an

institution-issued laptop, a printer and scanner (possibly combined), and a high-

speed router. Another critical item is Duo authentication for network drive access

and software access. For the author, this access is necessary because the

network drive houses all the pre- and post-award documents for managing the

life cycle of a research award. This security feature is also crucial in safeguarding

data.

Moreover, Duo authentication permits institutional software access. For

example, Tufts has 14 internal software systems to manage the life cycle of

research awards. However, institutions have different assistive research

administration software applications, so this element is specific for the author but

modifiable for other environments. Furthermore, other external research

administration software platforms are critical for interfacing with federal funders electronically. For example, such platforms include system-to-system proposal submission via grants.gov to the NIH and other federal funders. Additionally, the NIH has a research administration software platform called eRA Commons (electronic research administration). This platform enables federal staff grant applicants and grantees to access and share administrative information. Other federal funders have similar platforms, such as NASA's NSPIRES (Solicitation and Proposal Integrated Review and Evaluation System); the National Science Foundation's Fastlane; and ProposalCentral, a portal to foundations and associations that provide extramural grant support.

Furthermore, this element helps determine which team member needs assistive technology training and establishes backup support for workflow adjustments, emergencies, and vacancies. Another correlating review identifies typical software applications necessary for remote work. The most important of these applications is Zoom, which has become the preferred choice of most research institutions. Other necessary productivity tools include Dropbox, the Box, Microsoft Teams, Slack, Google Docs, and Adobe Sign. These are collaborating tools utilized across teams, departments, units, and schools.

The next element is assessing job descriptions of team members. The purpose of this element is to identify areas for cross-training, employee development, and engagement. Making this data available enables the creation of metrics for achievable milestones to promote a qualified employee. Many studies have correlated that transparency in the employee's defined roles with

responsibilities results in well-being. Beyond this, analyzing this type of data enhances a manager's ability to create fluid responsibilities to aid in the engagement of employees. This type of continuous engagement is another significant challenge for remote work.

The last element is evaluating remote work policies at selected research institutions in the United States. The research institutions selected were Johns Hopkins University, Duke University, Massachusetts Institute of Technology, Boston University, Harvard University, and Tufts University. An online search identified the availability of remote work policies on the institute's webpage. Unfortunately, Tufts University does not have a published remote work policy. Therefore, the author chose the latter three universities in the list above to analyze Boston area universities' remote work policies to develop a post-COVID remote work policy for the author's home department.

All the above elements are necessary to establish a supportive research administration ecosystem during and post COVID. Additionally, effectively communicating these elements to a team is critical for fostering well-being and productivity. Finally, the author will create a template for outlining job responsibilities (Leyland et al., 2020) and a checklist of the necessary equipment for a supportive ecosystem that others can utilize.

Chapter 5. Methodology

5.1. Methodology Overview

The remote work option for research administrators is new, but the concept of remote work is not. Before the industrial revolution, most work was done at home. A shift after the industrial revolution created the modern-day office and commute. In 1973, Jack Nilles, a NASA engineer, coined the term "telecommuting" and IBM was the first company to adapt to having most of its workforce work remotely (Butler, n.d.). After the advent of the internet, telecommuting rapidly increased in popularity, especially among technology companies. "Remote working, often referred to as telework or telecommuting, is a prominent form of flexible working that includes the ability and requirement to work away from the usual office environment, at home, or while mobile" (Barsness et al., 2005, as cited in Franken et al., 2021, p. 3). However, remote work for research administrators should be further evaluated by investigating the survey data released by NCURA. In addition, there is research in remote work in other industries that is applicable to research administrators.

5.2. Project Design and Discussion

This project is designed utilizing surveys from NCURA on remote work, global literature on remote work, and the author's personal experiences in remote work at a decentralized department at Tufts University School of Medicine. Additional resources provided historical background, applicable assessments for

research administration remote work, and recommendations to shape the future direction of this field.

5.3. Discussion of Questionnaire

In February 2021, NCURA Electronic Research Administration distributed a survey to gauge the impact of remote work on research administrators. The survey asked questions regarding types of research administration offices, requirements for productivity, burnout, mental health issues due to drastic changes in daily routines since the pandemic, and non-monetary methods of recognition. The other part of this survey included concerns about adaptation and employment safety during the pandemic. Finally, another section listed the pros and cons of working remotely (NCURA, ERA survey, n.d.).

Similarly, NCURA released a survey in July 2021 to its 7,500 NCURA members. The initial questions in this survey included requesting one's position title, position location within the institution, and research administration specialty. Another section requested data on institution type, institutional setting, and geography (NCURA, n.d.). The remote work questionnaire portion is divided into sections by headcount and percentages of employees working remotely; institutional region by headcount and percentages; and institutional region, meaning public versus private or nonprofit (NCURA, n.d.).

The "ability to work remotely" section of the survey requested pre-COVID data and current and post-COVID plans. Additionally, the responses were sorted by percentages of respondents in one type of research administration role

(leadership, director, manager, staff). The survey divided the data into fully remote from the local area, defined as 100% remote from a local area in proximity to the institution. Furthermore, the definition of fully remote from anywhere describes remote work as 100% offsite from another part of a state, country, or region (NCURA, n.d.). Next, the survey sorts the data by position type (staff, manager, director, leadership), with the results divided into percentages and headcounts. Headcounts and percentages are displayed this section data by identified research administration areas like lifecycle and pre- and post-award research administration (NCURA, n.d.).

Moreover, the impact of telework on employee well-being and satisfaction also started as a percentage of respondents answering the survey question. Next, the participants were sorted by position type (staff, manager, director, leadership), divided into percentages and headcounts. This view displays data by research administration areas like lifecycle and pre- and post-award (NCURA, n.d.). Moreover, the survey contained three sections with questions regarding resources during the pandemic. The first question involved the availability of equipment for remote work, the second question referenced office supplies, and the last question involved the monthly stipend or reimbursement for the internet. All three sections classified the responses by institution type (government, private-for-profit, private-not-for-profit, and public) (NCURA, n.d.). The data sets provide information that helps ascertain views on remote work during and after the pandemic is over.

Chapter 6. Project Results and Discussion

6.1. Project Results

In February 2021, NCURA Electronic Research Administration distributed a survey to gauge how the pandemic has impacted research administrators during this period of remote work. "The majority of the respondents were from pre-and post-award central administration offices from public or state institutions (56%), private universities (29%), and other types of research entities (15%)" (NCURA, ERA survey, para. 5).

Table 1-ERA Survey Question

The first survey question-
I could increase my productivity by working remotely if my institution provided-
60% responded that productivity was not impacted by remote work if access to a stable shared drive and reliable internet was present.
Others cited issues that impacted productivity were-
Additional information technology tools, laptops & monitors
Access to remote workspace other than my home that I could use as needed
Lack of software that facilitates remote work efficiency
Training to maximize remote work
Flexible work schedule
Access to my leader and/or team

Based on this data from ten months into remote work research administration, many employees lacked the necessary technological infrastructure for productivity and efficiency. Other adverse findings in the survey included burnout and damaged mental health; decreased hiring, onboarding, and training of new hires; inconvenient work schedules; childcare issues; and other unspecified troubles. Additionally, an employer's means of gratitude for drastic changes to

research administrator's daily routines were a written thank-you note; additional time off; or small rewards, gift cards, or giveaways (NCURA, ERA survey, n.d.). However, most respondents (73.33%) cited schedule flexibility and the option to work at home as benefits of remote work (NCURA, ERA survey, n.d.).

In July 2021, NCURA surveyed its 7,500 members on remote work and flexible work options before and during the pandemic. Topics included the availability of resources, expectations, and attitudes regarding remote work. A total of 1,619 people responded to the survey, comprising 1,540 salaried administrative or professional staff and 63 hourly administrative or professional staff (NCURA, n.d.). Most respondents worked for private or public urban institutions. The survey revealed that before COVID-19, remote work options for any level research administrator were limited. However, during the pandemic, that number had substantially increased according to most respondents (NCURA, n.d.).

Nevertheless, the percentage of respondents who could work completely remote and locally during the pandemic was about 25% of those in leadership roles, 20% of directors, 18% of managers, and 20% of staff (NCURA, n.d.). By modifying the question to include only those able to do fully remote work from anywhere, the number of respondents decreased in all categories (NCURA, n.d.). The survey indicated that more senior leadership and directors had that option. Additionally, NCURA solicited the survey in July 2021, when many institutions may have been shifting to in-person work. Those plans have changed at the time of this report, so those numbers may not reflect current scenarios

(NCURA, n.d.). The next question involved a desire for flexibility, with 57.7% of respondents indicating that they would be willing to change employers or jobs for greater flexibility. This percentage was almost identical across leadership, directors, managers, and staff. The question after that concerned the availability of employer-provided resources or equipment (laptops, monitors, printers, docking stations, and furniture (NCURA, n.d.). Even so, 20 months into the pandemic, a notable number of private, public, and government employees responded that they did not have these resources.

Franken et al. (2021) conducted a study in Australia at the beginning of COVID-19. These researchers had employees from the resources sector keep daily diaries during the pandemic. Franken et al. (2021) utilized the conservation of resources theory to observe employee well-being and production processes. Although these Australian employees worked in the resources sector, research administrators had faced the same challenges. For example, some research administrators surveyed earlier in the year had experienced a lack of resources. For instance, these administrators needed technological devices, access to alternative remote work environments other than their homes, access to leaders or managers, software to facilitate remote work efficiency, and training to maximize remote productivity. These deficiencies are losses in the context of the conservation of resources theory by Hobfoll (1989). Additionally, the NCURA survey revealed employees experiencing a lack of equipment (laptops, monitors, printers, docking stations, furniture). In this vein, Franken et al. (2021) wrote that they had illustrated that accessing and "using key resources impacts future

resource gains, subsequently influencing well-being and productivity" (p. 17).

These results are applicable to what the surveyed research administrators faced

with losses associated with remote work, which will cause future resource loss

(Hobfoll,1989).

It is important to note that 57.7% of NCURA respondents said they would

consider changing institutions or jobs to secure improved work flexibility. The

possibility of mobility for research administrators has never been greater, as

roughly 20% of institutions are offering 100% remote work locally, with a smaller

percentage offering remote work from anywhere. According to a YouTube

NCURA lecture, "Research Administration and Data: What the Data Says About

Us," 60% of respondents to a survey stated they could perform all their research

administration job responsibilities remotely.

Furthermore, evaluating job descriptions is the first step in determining the

viability of remote work for a position. The author's evaluation incorporated

breaking down each team members job description into categories (Leyland et

al., 2020). Below are charts (Table 2: Pre-Award and Table 3: Post-Award) that

illustrate these roles in the author's home department.

Table 2 Pre-Award Responsibilities					
Pre-Award (Grant Proposal Development)	**Department Manager**	**Senior Research Admin**	**Research Coordinator**	**Staff Assistant**	**Program Admin**
Funding Opportunity Announcement Review	X	X			
Review of Sponsor and Institutional Guidelines	X	X			
Detailed Budget Development	X	X			
Budget Justification	X	X			
Document Review and Upload	X	X			
System to System Submission	X	X			
NIH JIT Requests	X	X			

Table 3 Post-Award Responsibilities					
Post-Award (Grant Management)	**Department Manager**	**Senior Research Admin**	**Research Coordinator**	**Staff Assistant**	**Program Admin**
New Award Activation	X	X			
Human Resources (Hire new Staff for projects)	X			X	X
Foreign Scholar Visas	X				X
Procurement (Purchase Card Expenses, Create Purchase Orders, Internal Purchasing Portal)	X	X	X	X	X
Payment for Goods and Services	X	X	X	X	X
Review of Grant Expenditures	X	X	X	X	X
Reconcile Grant Expenses	X	X	X		
Grant Budget Management	X	X	X		
Monthly Meeting with Principal Investigator	X	X			
Progress Reports	X	X			
Effort Reporting and Labor Distributions	X	X			X
Award Close Out	X	X			
Human Resources (Separation of Staff Post Projects)	X	X			

Making these responsibilities fluid means they can be assigned to facilitate

career progression and reallocated to enhance workflow (Leyland et al., 2020).

6.2. Project Results 2

Boston University has been implementing a hybrid model for remote work. According to an article in the school newspaper, qualified nonfaculty BU staff must apply for remote work for up to two days (BU Today, 2021). Approval is contingent on type of work, compliance with mandated vaccination, and other variables (BU Today, 2021). This new policy has shifted the previous BU remote work model considerably. BU Today clarifies the associated requirements for consideration for remote work. Each previously eligible remote worker must complete an online approval form that is then sent to their manager and then to the appropriate dean or vice president. A request for remote work outside of Massachusetts requires additional approval from the vice present of human resources. However, the needs of the university will always take precedence over the individual employee, although there is an appeals process for denied requests for remote work (BU Today, 2021). Boston University will not reimburse employees for home office expenses like personal computers, internet, phone, home computer, or furniture (BU Today, 2021). Furthermore, remote work arrangements must comply with physical space, data security, technological needs, and the university's data protection standards. Other special requirements have been established for schools, colleges, and departments (BU Today, 2021).

Before COVID-19, the Massachusetts of Institute of Technology referred to flexible work as any schedule different from a department, lab, or center's (DLC) standard operating hours or any work location outside the DLC's usual physical location. "Alternative schedules may include flextime, [a] compressed

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workweek, or job sharing; alternate work locations may be hybrid (partially onsite and partially remote) or fully remote (rare or no onsite work)" (Massachusetts Institute of Technology [MIT], n.d., para 1). The same policy is being implemented post COVID-19 and is more expansive than BU's because it embraces remote work variations.

As was the case at BU, the transition from a forced scenario to a permanent remote work option during the pandemic is a process for everyone. The first step in the process involves work decisions and design (MIT, n.d.). This section establishes the various work models with their associated expectations, processes, and guiding principles for departments, labs, and centers. Additionally, this section summarizes the work models-on-site, hybrid, and remote (MIT, n.d.). Beyond this, these paragraphs provide different viewpoints on employee remote work variations (MIT, n.d.).

Section 2, Work Planning Protocols, concerns meeting with managers to discuss plans for remote work (MIT, n.d.). Employees are encouraged to follow the recommended work planning steps. The steps are delineated, and planning templates are available (MIT, n.d.). For example, Step 1 is to prepare for conversations, Step 2 is to conduct conversations, Step 3 is to complete the team member work plan, and Step 4 is when a manager submits the teamwork plan to leadership (MIT, n.d.). There is no formal approval process in this series of steps, but someone other than the direct supervisor must also approve the flexible work arrangement. Additionally, outside leadership or working groups may request this data on a need-to-know basis (MIT, n.d.).

Moreover, Section 3 addresses the technological needs for remote work, outlining MIT's infrastructure. The latter could include elements such as a computer (with standard software), a keyboard and mouse, cables, or a headset (phone or computer) (MIT, n.d.). Additional resources are provided at the unit's discretion when required for the role. Such resources include a printer, an extra monitor, a docking station, a whiteboard, or noise-canceling headphones (MIT, n.d.) Like BU, MIT does not reimburse home Internet connections, cell phone upgrades or costs, increased utility expenses, or air conditioners (MIT, n.d.).

In the same way, Harvard University's flexwork policy resembles MIT's. This plan provides options, procedures, and required documentation for flexwork approval. "Schools, departments, and units should decide which flexwork frameworks will best serve their local business needs and are the best fit for the nature of their work, while also addressing University goals of sustainability; diversity, belonging and inclusion; and employee well-being" (Harvard University, n.d., para. 5). Additionally, all three of the institutions discussed here have similar approval processes. However, BU differs from the other two because it requires formal individual remote work approval from a dean or vice president. On the other hand, MIT requires a teamwork plan approval from someone other than the manager, such as a department chair or an administrative official. Lastly, Harvard's policy requires only managerial approval (Harvard University, n.d.).

Beyond this, Harvard is the only institution that only mentions employee well-being on their remote work policy website, acknowledging that COVID-19 has contributed to the school's evolving flex work policy and that adjustments

may be needed later. Likewise, Harvard advises documenting finalized flex work arrangements. Documentation provides transparency for all parties and leaves space for further revisions, which an employee or supervisor may initiate. Furthermore, institutional needs are prioritized at all three institutions.

6.3. Project Results 3

However, it may not be feasible for all research administrators and research teams to enjoy remote work simultaneously. For example, the author's team has four members, and they do not all work remotely. The staff assistant has been in the office since the ramp up. She transitioned from a research technician position to part-time staff assistant to full-time assistant nine months ago. Thus, her daily in-person attendance has made it possible for the author to manage the neuroscience department remotely. The fully operational 80-person basic science department logistics necessitate this type of attendance and on-campus support. Overall, the needs of the department will always be the priority, as is the case for the other institutions previously reviewed.

Furthermore, the senior research administrator is fully remote by choice, creating a work–life balance for this RA to manage recent life events like childbirth and family illness. The department program administrator is also fully remote. She moved in with her in-laws after getting married during the pandemic, and she will be on campus once a week until she decides her next move. Additionally, the author has been on a modified schedule (11 a.m.–7 p.m.) hybrid model, including two days on campus, Tuesday, and Thursday, since August 2021. During the days in the office, the author emphasizes scheduling business

meetings with the faculty. These meetings afford the author valuable facetime with the faculty to discuss their research portfolio and create a sense of normalcy for both parties.

These hybrid models will continue indefinitely with weekly Monday team zoom meetings, emails, Slack communications, phone calls, and text messages. Because the author's remote subordinates are local, he will require a monthly in-person business lunch in the spring of 2022. Additionally, delineating the expectations for timely communication and task execution is part of these weekly conversations. On this subject, Leyland et al. (2020) noted that effective communication in disseminating critical information drives process improvement. However, establishing communication boundaries within regular business hours is essential in creating a work–life balance. Department faculty and other department members should also adhere to these boundaries. Many remote workers face challenges in ending their workday, and blurred boundaries result in burnout and stress, as several studies and surveys have determined (Franken et al., 2021; Park et al., 2021; Sachdeva et al., 2021).

Moreover, the author will adopt formalizing and documenting these remote work arrangements for his team member's performance review in May 2022. In basing these remote work models on trust and communication, the author expects that the work will be accomplished in timely, measurable increments. In this process, the emphasis is not on the hours necessary to complete the task. There is a myth that an employee who works more hours each week works harder than one who works the standard hours, a comparison that necessitates

the measuring of outputs. If the two employees in question had the same measurable outputs, the person working more hours might need time management training. Even so, if the employee working the standard hours is error-prone and has less than stellar measurable outputs, expectations should be discussed and reevaluated. By completing assigned tasks and accomplishing required outputs, this employee would meet expectations. To exceed expectations, the employee would need to accomplish more than the standard number of outputs delineated in the performance plan and effectively execute other tasks assigned by their supervisor. Additionally, this performance plan could include other measurable metrics outside the assigned job responsibilities. Communication and discussions regarding this subject are ongoing and documented for reference during periodic reviews. However, the author prefers reviews to occur organically, not at forced intervals, such as once a year. That is, the more transparent the process is, the more engaged and productive the employee will be.

6.4. Project Results 4

As noted in the previous section, there has been an open position on the author's team since July 2021. Utilizing the chart discussed in the methodology section earlier, he has made the job responsibilities fluid and measurable. For the time being, the author is transferring a portion of these responsibilities to each team member. Thus, he has communicated the new expectations to each team member for this period. Additionally, the author's supervisor, the department chair, has devised a scheme to compensate each team member for their

extraordinary efforts during this vacancy. Research administration leadership should regularly acknowledge such extraordinary efforts to keep the research enterprise functioning, especially during extended vacancies.

The open research administration coordinator position on the author's team resulted from the great resignation. The latter is an informal label for the widespread trend of workers leaving their jobs during the COVID-19 pandemic. In this case, the coordinator resigned to pursue her musical passion in Florida and to be closer to her family. The author offered her remote work, but she politely declined. This type of scenario is now prevalent in the current employment landscape, so there are now more open positions than employees seeking employment. Unfortunately, there isn't any data on available research administration positions across the United States. One search on a higher education jobs website yielded 1,395 jobs using the term "research administration." Furthermore, there may be additional open research administrative positions that were not advertised on the website.

An open position crisis has been slowly evolving during the pandemic which is further complicated by the issue of having an older, predominantly white workforce in research administration. Thus, this problem must be addressed internally within institutions. Offering remote work can alleviate some of this pressure, as discussed later in the recommendations section. Another necessary component to slow this crisis involves reevaluating current research administration salaries. This process has been ongoing, with senior research administrators receiving increased compensation due to market equity analyses

done at the author's home institution. In conjunction with other basic science department managers and department chairs, the author and his colleagues have requested a market equity increase and possible title changes for themselves. This proposal, addressed to Human Resources and the Dean's Office, includes a job analysis table like the one the author created in this capstone project. Additionally, the proposal includes the author's measurable outputs, such as the total number of department proposals submitted, the number of department proposals awarded and metrics, like the number of research awards managed.

6.5. Project Results 5

Another benefit of having a defined policy for remote work with a supportive ecosystem is securing a competitive edge in a challenging hiring environment. Surveys have indicated that work flexibility is a coveted attribute among all demographics. Additionally, remote work produces a more robust candidate pool. In turn, access to a larger global candidate pool will provide opportunities to supplement the aging, white RA workforce. Similarly, remote work provides opportunities to increase diversity equity, and inclusion (DEI), as the research administration workforce does not reflect U.S. demographics.

Moreover, marginalized groups, such as people with disabilities, care providers, and retirees, also embrace the flexibility of remote work. The elimination of commuting to work is a substantial new perk for these groups. For instance, this change gives older workers protection from COVID-19, as this demographic is considered a high-risk group for COVID complications and death.

In addition, disabled employees benefit from remote work by eliminating challenges from commuting and using public restrooms. During remote work, employees enjoy the comfort of their homes, which suit their needs. Moreover, studies have inferred that zoom eliminates potential awkwardness a person might feel during in-person meetings because Zoom focuses only on the face, not the entire body.

Furthermore, remote workers can accomplish numerous research administration responsibilities at night or on weekends. The 9-5 schedule requirements may no longer be necessary with assistive technologies and network access through virtual networks. Specifically, this flexibility could appeal to potential candidates in caregiver roles, retirees seeking part-time employment, full time students, and others that would normally have barriers to employment in research administration.

Chapter 7. Recommendations and Discussion

7.1. Introduction

In this study, the survey data proved that research administrators have embraced remote work. However, the surveys also identified existing challenges hindering job satisfaction. In the meantime, many institutions are still strategizing and developing best practices for the long term. In this section, the author offers recommendations for implementing a supportive research administration ecosystem for successful remote work during and after the COVID-19 pandemic.

7.2. Recommendations for Tufts University School of Medicine and other institutions interested in establishing a supportive research administration ecosystem during and post COVID-19

7.2.1. Recommendation 1: Tufts University School of Medicine and other institutions interested in establishing a supportive research administration ecosystem during and post COVID-19 should engage their employees in the process of remote work approval. By engaging their employees, institutions can help empower employees in this decision-making process. The latter entails utilizing templates to assign job responsibilities, expected outputs, and performance metrics. As studies have proven, providing transparency and involvement in processes that impact them will result in a higher employee engagement level.

Furthermore, TUSM and other institutions should make the remote work approval process easy to navigate and amend it as necessary. For

example, fillable forms that can be routed and tracked during the approval process are necessary to provide ease of use to all parties. Beyond this, an appeals process must be implemented to evaluate denials.

7.2.2. Recommendation 2: TUSM and other institutions should assess remote work infrastructure needs using a checklist of required items. (Such infrastructure includes institution-issued laptops or PCs, printers or scanners, and associated software. Partnering with the institutional office of information technology could streamline the securing of necessary equipment. If possible, provide administrator privileges to the computer end-user to update software, troubleshoot simple issues, and add productivity software applications. Additionally, certain collaboration and productivity applications streamline workflow, such as Zoom, Microsoft Teams, Slack, Google Docs, the Box, DropBox, and Adobe Sign. For instance, Adobe Sign has improved workflows and processes by enabling documents to be routed and signed electronically. This workflow redefinition is a type of process improvement discussed by Killoren and Eyerly (1997).

7.2.3. Recommendation 3: TUSM and other institutions should provide all remote employees with ongoing training and development opportunities. Online internal and external training resources from NCURA, SRAI, and federal sponsors have eliminated previous entry barriers to training and development. As a result, the challenges of

attending in-person conferences due to financial, physical, or personal reasons no longer exist for research administrators.

Park et al. (2021) noted that continuous employee engagement is necessary for employees' well-being and achieving performance milestones. If there is no training program available at an institution, then team leaders and members should investigate creating one. For example, during the ramp down experienced early in the pandemic, the author instituted team member presentations on each member's mastery of necessary software utilized in their role. These presentations created an environment of continuous learning and refining skill sets.

7.2.4. Recommendation 4: As noted earlier documenting the chosen remote work plan will facilitate productivity by establishing goals, plans, identifying performance metrics, and deliverables. This entails effective communication by managers which is essential for the continuity of successful remote work. Thus, any performance issues should need addressing immediately. Conversely, outstanding performances or exceptional service should be acknowledged and rewarded. Documentation of these performance metrics aids professional development and continuous improvement.

7.2.5 Recommendation 5: In their white paper, COGR referenced future inefficiencies due to COVID-19. The author's home department has experienced delays in research labs' fulfilling grant aims, federal sponsors' awarding grants late, computer inventory's not being available, and other

assorted issues related to compromised supply chains and staff shortages. To address these deficiencies, the author recommends a proactive approach. One solution would be to have departmental inventory control of computer hardware. In the same vein, one can avoid future delays by creating an inventory control list of the computers that will need replacing due to age or future staff hires. Maintaining an accurate list facilitates proactive computer purchasing. Additionally, this process enables the continuity of remote work options utilizing Tufts-owned computers.

Lab equipment is another critical research enterprise component that is experiencing supply chain compromises due to COVID-19. Currently, frequent shortages and delays in shipping are common at the author's home institution. As a result, the author is advocating the Medical School Budget Center to allow early spending on a new junior faculty hire's start up account. By creating such an account against this junior faculty member's start-up package, the necessary equipment could be purchased early in 2022. Thus, the new hire's research lab could be fully functional by the start date of July 2022. Failure to have the proper research infrastructure could compromise federal grant application as one of the components for a successful NIH or NSF application is the principal investigator's research environment. Additionally, a fully equipped lab is part of the necessary research infrastructure for a successful faculty member.

Chapter 8. Conclusion

The author focused this capstone project on investigating the necessary elements to create a supportive ecosystem for the continuity of remote work during and after the pandemic. These elements are now defined and transparent and will constantly evolve to align with institutional and employee goals. As noted in this earlier, there are numerous benefits to remote work that research administrators enjoy. For instance, many have cited increased productivity, better engagement, an enhanced work–life balance, and health improvements. These health improvements include increased physical activity, healthier meal choices, less stress from commutes, and even weight loss for some. Beyond benefitting employees, remote work also helps employers by facilitating less employee absences, sickness, turnover, and performance issues. Furthermore, remote work means fewer commuters on the road which benefits the environment.

In conclusion, throughout the exponential growth of the research enterprise, well-led institutions have been at the forefront of change. These organizations have leveraged early federal funding to establish thriving research institutions, created robust tech transfer offices to maximize IP, and implemented research administration software to increase efficiency. The early adopters of these systems are now delineating the future of research administration remote work by establishing policies and procedures that may create supportive ecosystems. Additionally, these supportive remote work ecosystems may enhance work environments, so DEI flourishes. Conversely, institutions that underestimate the mass appeal and equity of remote work could face a long-term

competitive disadvantage. Finally, evidence from studies of other industries and

the data from surveys have proven that research administration employees

demand and can thrive remotely with the proper supportive ecosystem.

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APPENDIX 1

Tufts
UNIVERSITY

SCHOOL OF MEDICINE

Department of Neuroscience

Date:

Employee Name, Title, ID#-

Dear Name:

This letter is to provide approval of our recent conversation regarding your work arrangement. Based on our discussion, your role will be categorized as:

(Manager: select one section, and delete the other)

> **Remote-First:** Team member is 100% remote and telecommutes during all scheduled work shifts.
> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~**OR**~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
>
> **Hybrid:** Staff member's regular schedule is between 1-4 days telecommuting per week, offsite (not located on Tufts -owned or leased property). Hybrid staff has access to dedicated office space, or shared office space when onsite, as approved by management.

As discussed, we will have periodic check ins and review this work arrangement to ensure that it is meeting our departmental needs. This is agreement provides you with work alternatives that meet your personal and professional needs and improve work-life balance.

Please do not hesitate to contact me should you have any questions.

Sincerely,

Manager's Name
Attachments:
Addendum B: TUSM Inventory Checklist
       (Duke University, n.d https://remotework.duke.edu/forms-resources)

Remote Workspace Equipment Inventory

TUSM telecommuters should review and update the remote workspace equipment inventory
at least annually and submit to their supervisor. All equipment supplied by TUSM must be
returned to TUSM when the remote work agreement or the staff member's employment ends.

Equipment Supplied by TUSM	Description and Identifying OIT Serial#
☐ Computer	
☐ Computer Peripherals (specify, if any):	
☐ Printer	
☐ Staff member may pick up consumable office supplies (paper, pens, staples, paper clips, folders, etc.) from:	
☐ Other:	

I acknowledge receipt of and responsibility for the equipment listed above.

_____   _____   _____
Staff Member's Name   **Staff Member's Signature**   **Date Completed**

 Approved.

_____   _____   _____
Supervisor's Name   **Supervisor's Signature**   **Date Completed**

(Duke University, n.d https://remotework.duke.edu/forms-resources)

APPENDIX 2

APPENDIX 3

Biography

The author was born in Honduras, Central America. He could not speak or write English when he migrated to the United States at the age of five. He later attended Skidmore College in Saratoga Springs, New York, and graduated with a Bachelor of Science in government with aspirations of a career in law. However, after witnessing the inequalities of the legal system firsthand, he decided to explore other prospects. Thus, he has worked in research administration for over 16 years, leading a team dedicated to pre- and post-award research administration at Tufts University School of Medical School in Boston, MA.