A Needs Based Assessment to Determine how to Enhance On-boarding Modules for Tenured Research Faculty

A Capstone Paper Submitted to the
Krieger School of Arts and Sciences
Advanced Academic Programs
in Fulfillment of the Degree of
Master of Science in Research Administration

by

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ABSTRACT

The purpose of the research study is to determine if the currently available onboarding modules for new faculty hires and the ongoing training for faculty is sufficient for understanding the internal process of Sponsored Research at Georgia Institute of Technology. This study is being conducted for a Capstone Project Final for Lea Brooks at Johns Hopkins University, Baltimore, MD. The information collected will be utilized to improve the resources available to faculty seeking sponsored funding at Georgia Institute of Technology.
ACKNOWLEDGMENTS

“I have seen something else under the sun: The race is not to the swift or the battle to the strong, nor does food come to the wise or wealth to the brilliant or favor to the learned; but time and chance happen to them all.” Ecclesiastes 9:11

Acknowledging the journey was not being run or led by others, but it was my story done under circumstances some in my control and others not. I am the proud mother of three amazing young people, the wife of my high school sweetheart for more than thirty years. As husband and wife, Steven and I made a commitment that our family would take priority over all things and that he would be our primary provider/protector and I would be the primary caregiver of our children. It was a charge that came with many sacrifices some seen and others completely unpredictable. I have had the privilege of landing in a career that I would not have chosen, but it chose me. Working in higher education for more than twenty-five years in several roles, mostly focused on student development and training, assisting students with maturation beyond undergraduate education. Visiting college campuses across the country with students presented gave me the opportunity to experience possibilities through the lenses of the students. Often wondering if there could have been a different path forward for me. Witnessing for the students, seeing through the eyes the light bulb of possibility going off in their heads and watching in admiration as they carefully chose their path forward.

I have not regretted one moment of being a wife, a mom, and a caregiver to my family. The reality of watching my now young adults transition into their own lives and watching my husband’s career be ultra successful forced me to look at myself through a different set of lenses. A career change eight years ago opened a new set of possibilities. My experiences through the lens of others became reality for myself. These last two years in graduate school have been filled with countless opportunities of inspiration. The program has been helpful in navigating my role in research administration and has fostered a wider network of partnerships globally from both peers in the program as well as making connections with faculty.

A special thank you to Dr. Marianne Woods who saw a need in the profession and made the efforts to not only create a strong program but do so at the #1 research institution in the country. The faculty and staff of the Krieger School of Arts and Sciences in the Advanced Programs Division at Johns Hopkins University provided an exceptional support system throughout the process. From registration to financial aid, to each course of enrollment, the
support was done in excellence. Dr. Woods vision to include amazing faculty in the program who were not only gatekeepers in the world of research administration, but also change agents working to provide useful resources through several collaborations such as NCURA, SRAI, NORDP as a few examples, the network extends beyond the organizations where professionals build meaningful lasting careers. Dr. Woods influence in Research Administration over the last fifty plus years will be etched in the history books.

The community of colleagues and peers at Georgia Tech who also provided a tremendous amount of encouragement. Cindy Hope, Vice President of Research who encouraged me to seek the master’s degree. Cindy’s unwavering support has given me assurance on the days where the fluidity of the work became overwhelming, she encouraged me to keep pressing forward. My manager at the time of starting the program Chris D’Urbano, was always encouraging and taking time to check on my progress. The management team, consisting of Lakita Brooks, and Vanness Daniels who both have been supportive of my career at Georgia Tech. Other influential colleagues who encouraged me along the way, Stacey Oliver Johnson, Tom Capitano, Scott Niles, Lola Foye, Kadian Leslie, Monte Harmon, Rondereo Sidney and Naranja Davis. Each of these individuals offered words of encouragement, checked on my progress and believed in me when I doubted it was worth it or if I was too old to do this at this junction of life. A special shout out to Tanta Myles, Associate Vice President of Research Integrity who served as my Mentor and lead advisory committee member, and Deanna Hendrickson, Director of Education and Outreach Training at Georgia Tech. Both ladies became the glue to keep it together especially at the end where I thought I might not make it. I am humbled by the outpour of support from colleagues.

Last, but certainly not least, none of this would have been possible without the unwavering support and love of my family, and inner circle of friends who witnessed from the front line the ups and downs of navigating the program, work, and life simultaneously. It wasn’t always easy, but my husband Steven, constantly reassured me, that I could do it. My two young adults at home Joshua and Amira both students; Josh in undergrad and Amira completing graduate school and starting professional school. Our home was filled with uplifters and encouragement for each of us. My older daughter Maya, who said mom you are doing it! My one and only biological sister who made sure to call me daily to ask how work was going and how was I progressing on this paper. She always said, you got this! My high school besties
Talana and Sabrina, who I share with daily, who kept the encouraging text coming, never allowing me to think I could not get this done. My father-in-love who said, “daughter-in-law you are in my prayers daily, God has you”.

My friends, Sonya Walston, and Nicole Lundy Johnson who made sure I was on track by encouraging me that the end was near. Every call, text, prayer, and gift received was done with love and assurance that I deserved to be in this moment. By God’s grace I did it!
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AE</td>
<td>Aerospace Engineering</td>
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<tr>
<td>BME</td>
<td>Biomedical Engineering</td>
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<tr>
<td>ChBE</td>
<td>Chemical and Biomolecular Engineering</td>
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<tr>
<td>CEE</td>
<td>Civil and Environmental Engineering</td>
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<tr>
<td>COE</td>
<td>College of Engineering</td>
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<td>ECE</td>
<td>Electrical and Computer Engineering</td>
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<tr>
<td>GIT</td>
<td>Georgia Institute of Technology</td>
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<tr>
<td>GTRC</td>
<td>Georgia Tech Research Corporation</td>
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<tr>
<td>GT</td>
<td>Georgia Tech</td>
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<tr>
<td>IACUC</td>
<td>The Institutional Animal Care and Use Committee</td>
</tr>
<tr>
<td>IRB</td>
<td>Internal Review Board</td>
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<tr>
<td>IYSE</td>
<td>Industrial and Systems Engineering</td>
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<tr>
<td>ME</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>MSE</td>
<td>Materials Science and Engineering</td>
</tr>
<tr>
<td>NCURA</td>
<td>National Council of University Research Administrators</td>
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<tr>
<td>NORDP</td>
<td>National Organization of Research Development Professionals</td>
</tr>
<tr>
<td>OSP</td>
<td>Office of Sponsored Research</td>
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<tr>
<td>RA</td>
<td>Research Administration</td>
</tr>
<tr>
<td>R &amp; D</td>
<td>Research &amp; Development</td>
</tr>
<tr>
<td>SSP</td>
<td>System Security Plan</td>
</tr>
<tr>
<td>SRAI</td>
<td>Society of Research Administrations International</td>
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<tr>
<td>STEM</td>
<td>Science, Technology, Engineering and Mathematics</td>
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Introduction

Chapter 1.

1.1. Background.

Sponsored Research has grown significantly throughout history, driven by the curiosity of faculty researchers who are intrigued by the possibilities of the unknown. While there has and history will tell the story, there will continue to be evolutions in science, there must also be accountability. Nothing done in the name of science can or should be done so without following rules, regulations, and compliance to ensure it is being done so with prudence, benevolence, and justice. Amidst this growth, there is the importance of protecting the integrity of the Research has remained paramount. Lawmakers, scientists, and societal expectations of doing good for the betterment of the world globally aren't lost on the individuals who are the guiding forces responsible for policy. Scripps and Ritter, science journalism had a site the noble purpose of research as: "To discover the truth about all sorts of things of human concern, and to report it truthfully and in a language comprehensible to those whose welfare is involved." ("Origins" 2021).

The curiosity of the unknown has been integral to figuring out the how, what, who, and when is asked and an answer is waiting to be explored. Scientists have a question that seeks an answer, which has become years of work searching out improvements, cures, and better ways of operations. These curiosities have led to medical breakthroughs, new highway developments, defense protections globally, and more. These curiosities have also not been without numerous flaws, which over time led to laws, regulations, and policy changes to ensure that Research was not done at a determinate to human subjects, animal subjects, or societal harm. How science evolved over the decades has led to sponsored research support and funding to answer the questions of the unknowns for institutions of higher education and other organizations benefitting from sponsored funding.

Georgia Institute of Technology, located in Atlanta, GA, has been a beacon of technological advancement since its founding in 1885. Initially a trade school, it has evolved over 50 years to become one of the leading institutions for the advancement of technology transformation. Georgia Tech's commitment to excellence is evident in its recruitment of the best and brightest scholars from across the world, offering them opportunities to pursue studies at the
undergraduate, graduate, and doctoral levels of education and post-doctoral fellowships to kickstart their careers. Recruiting the best of the scholar pool also means employing top-tier faculty in the respective disciplines. The environment at Georgia Tech provides new faculty hires a path as a tenure track research faculty, research scientist, lecture and other categories of faculty status that does have the same level of expectations or requirements for employment, but nonetheless the best and the brightest globally who are change agents in their respective disciplines.

The tenure track process is historically known as the ultimate accomplishment in faculty achievement for faculty at institutions across the country. The process may involve internal processes that differ from institution to institution but the general principal of faculty securing ranking status is the goal for “advancing individual careers” (Bloch et al, 2014). The achievement not only is beneficial to the individual faculty, but it also separates institutions in rankings based on their level of sponsored funding, which gives university recognition and prestige (Yaun et al, 2020). Securing sponsored funding through multiple outlets whether it is federal, industrial support, foundational support or non-profit, funding yields publication and achieving recognition and status in designated discipline of study.

1.2 Statement of the Problem

The problem is addressing whether the current resources available at Georgia Tech are adequate to support faculty seeking sponsored funding and the management of awards once received beyond the technical aspect of completion. This includes adhering to both internal and agency/organization specific regulations that govern the contractual obligations of the agreement. The question is the availability of resources such as onboarding training and ongoing training for new hires to properly navigate the Office of Sponsored Programs specifically related to the management of sponsored funding. New Faculty hires on the tenure track face challenges in navigating the tenure track process with the pressure of the requirements to engage in research, teaching, and service. The path from Assistant Professor to Associate Professor to Full Professor requires proof of engagement in the designated categories, which are put together in a professional dossier for a committee review and determination for the next level of promotion. Moving up the promotion ladder is the ultimate security and prestige a faculty hopes to accomplish equally as valued as becoming a recognized expert in their designated discipline.
Though onboarding modules are available, it is unclear if the information provided is sufficient for faculty to navigate the Sponsored Research process. It is also unclear if it is more awareness and the way in which the information is disseminated that needs to be addressed.

In a discussion with the Director of Research Education and Outreach, Deanna Hendrickson, whom I sought for guidance and input on this project, we discussed the available content in the current modules accessible to all faculty and staff responsible for pre- and post-award sponsored funding. Deanna also shared the numerous advances underway to enhance the module content and provide new modules to include the rapid changes across federal agencies. The goal of the Research Education and Outreach Training team is to keep the materials up to date and be ready to make the necessary adjustments, as changes in agency policy often occur faster than the team can make the changes and disseminate to faculty and staff. Deanna shared the number of complaints received from faculty and unit personnel on the accessibility of resources to support the agency requirements and internal processes that must be followed. Dissemination of information is key only one aspect of sharing the available resources. As Deanna mentioned there also must be engagement from faculty who need the assistance. Efforts to improve the Office of Sponsored research webpage has been transformative in the five years Deanna has been at GT. However, faculty utilization of the available resources is not as active as it should be for the level of sponsored funding received at GT.

The Education and Outreach Directorate offers a series of training courses including a tiered level certification. The series includes a Basic, Intermediate and Advanced level courses and requirements for completion of each level are outlined on the campus website Internal Certification Programs | Office of Sponsored Programs (gatech.edu 2021). Each set of course offerings build on the previous series and includes the full award life cycle. While the course schedule and available series of information ongoing, including hosting roundtable discussions, coffee, and convo, where efforts are made to actively engage faculty and staff. Efforts have also been sent using surveys to engage the university environment on input for necessary changes. Per the training team, the response rate is below 20% on campus-wide, and there are often no responses. It makes it difficult for the Education and Outreach team to make improvements that align with campus needs. However, the team has done an excellent job of accommodating individual calls for assistance.
1.3. Project Question

The needs assessment survey results will provide the leadership at GT and the training team with input that will assist them in assessing how to enhance the modules and potentially develop new modules that offer improved instructions and guidelines for navigating the Office of Sponsored Research. Ideally, the response rate will support the need for enhancements and or change. The sponsored research portfolio at Georgia Tech continues to grow at a rapid pace, but the supporting staff available to do the work does not align with the fluidity of the requirements seen from the agencies. Also, of note is the rapid increase of industry partnership which bring on the complexity of a wide range of contract terms that are often not adaptable for university fundamental research. Numerous changes from federal agencies require faculty to be much more involved in the administrative responsibilities of the awards received. Often seen as administrative burdens, faculty are often not aware of the importance of award compliance. Universities are faced with the daunting challenges that come from these administrative burdens with not enough time to properly inform faculty and other unit support of the changes. Training materials need to be updated and readily available when requirement shift quickly. Faculty and unit support need resources that are up to date and accurate to properly follow mandates of award compliance. When the shift in requirements occurs the Training and Development team have the responsibility to disseminate the information to the general population. Although tenure track faculty have an expectation to seek sponsored funding, the composition of their labs may include graduate level students who are working to complete doctoral thesis reliant on the research, which adds additional layers of compliance that must be adhered to, as well as post-doctoral researchers who are actively seeking opportunities for a future in academia. There are layers of individuals involved in the research efforts, requiring proper access to tools and resources to ensure accountability. This extends to the finance component as well as reporting requirements and expectations set forth in the terms and conditions of agreements.

1.2. Project Objectives.

1) Provide evidence for the need to enhance modules to be better focus on how new hires navigate sponsored funding.
2) Provide evidence for the need for ongoing development, changes, and updates to modules to keep up with the requirements of federal regulations, non-profit requirements, and improvements on industry sponsored partnerships for compliance.

3) Determine if enhancement is not needed, what other resources may be helpful to new faculty hires.

4) Determine if dissemination of information to all faculty and staff who support research should be a focus area

1.3 Significance

Georgia Institute of Technology is a billion-dollar research entity that has had a significant impact on the Georgia economy contributing more than $4.5 Billion into the state’s economy in fiscal year 2022(GATECH 2023). This contribution extends to jobs, both full and part-time and as shared by GT President Ángel Cabrera, “*institutions of higher education add value through top tier talent and economic development that drives the state forward.*” The research continues to grow as well as the rapid changes in government laws, and agency compliance. As the growth broadens it is important for faculty to have the adequate support and resources needed to continue seeking, receiving, and managing the administrative requirements of sponsored funding. Faculty often see agency requirements as administrative burdens, but it is important for the institution to impress upon the faculty because compliance is important. Faculty are required to seek sponsored funding at GT as a part of their tenure review for promotion. Success in seeking sponsored funding requires the infrastructure at the institution to support proper training, resources in terms of support staff as well as the ongoing updates of tools that keep faculty and research administrators up to date on the adherence of those requirements. This correlates to faculty retention and ensuring faculty can thrive in their new setting. There is a more heighten sense of urgency for junior faculty who may not have the experience of seeking research funding as well as new faculty who transition to GT at any stage of their career as new hire.
1.6. Exclusions and Limitations.

The scope of the project is to provide evidence-based responses with direct input from faculty who are impacted the greatest by the request of compliance. It is not enough to simply focus on the technical research. Faculty are required to be involved in the administrative requirements of receiving funding whether it is federal, nonprofit, foundation or industry support. Award accountability to ensure the funding received is allowable, allocable, and reasonable to the project efforts inclusive of managing in subawards that are awarded on the prime award. The lead PI is responsible for the cradle to crave compliance associated with managing their funded research. Increases in federal regulations have forced universities to include additional internal compliance reviews to ensure management of awards meet all the requirements of the awarding agency. This project narrows the pool of targeted faculty to faculty in the College of Engineering, which is an approximate pool of 400 tenured faculty. In a few instances faculty may hold dual appointments in more than one school, which made it difficult to distinguish which faculty received the survey more than once. The list serve format did not allow the manipulation of the listserv. The individual names of faculty were not provided by the College of Engineering. Each school provided the listserv link for the school, which did not include the names of individual faculty. The goal is to get the responses and make the distinction between based on the responses.
Chapter 2: Literature Review

2.1. Overview of literature review.

A few articles were available to support the framework of the needs assessment, but none directly supported the question posed on the need for enhancement on training modules used by faculty seeking sponsored funding and how to manage the award requirements through the life cycle of the period of performance. Indirectly, the articles found supported the background and foundation of what perhaps over time manifested into miscommunication, unawareness of the roles and responsibilities by the faculty and by the research administrators who support faculty. Drawing a correlation between the roles and responsibilities and understanding that the full life cycle of pre-and post-award requires the synchronization of all parties involved to facilitate the desired outcomes. Research Administrators are as important to the science as the faculty with the idea and the students who work on the project. In general, faculty seeking sponsored funding are doing fundamental research, with the intent for publication often the work of graduate students seeking the graduate level degree. The work to be done is multi-layered and at times nuanced, but each area plays a significant role in the outcomes. Reviewing the literature provided additional insight into the challenges many universities faculty face with understanding the administrative requirements of grant management. It is not enough to only become an expert in the technical writing, successful grant management requires faculty to be engaged in the administrative requirements, as well as understanding agency regulations. In one of the supporting articles, entitled “Research Administration as a Living System”, by Dr. Sharon Cole at the Nevada Cancer Institute, she explains boarding her dissertation research into a more comprehensive study to explore the ecosystem of Research Administration. In the article, she discusses how she the expanded her research study into the “The Delphi Study” exploring the gaps in communication and understanding of responsibilities between research administrators and faculty. In her study she outlines the concept of a living system where research administrators and faculty realize the importance of each other’s roles in the grant development process. Potentially, there may be a need to bridge the gap between the roles and responsibilities of the faculty, support units and central support. This may provide clarification on the roles and responsibilities of each individual and what defines those roles and responsibilities. In reviewing the training materials available at Georgia Tech and asking the Director of Education Outreach
for Sponsored Research there is a disconnect between unit administrators who take the training and development courses with regularity versus faculty regardless of appointment level.

2.2. Details of review

Reviewing supporting articles showed consistency that Research Administration has grown at a rapid pace because research is growing at a rapid pace. MIT, University of San Diego, and Georgia Tech just as a small sample size have set an expectation that PI’s are experiencing challenges with the internal and external, the expectation of PIs to improve the internal processes of operations for compliance. Reviewing the articles specific to faculty tenure process and the challenges new faculty face with trying to establish themselves in their academic institutions. Faculty are expected to meet requirements in three specific categories to move forward in the tenure process. The literature supported the need for better communication, dissemination of the information to faculty and research administrations on campus.

In 2007, the University of Michigan, Office of the Vice President of Research published an article entitled, “Giving and Getting Career Advice: A Guide for Junior and Senior Research Faculty”. The article highlighted the importance of providing junior faculty with the resources to be successful in the tenure process of promotion. which included the appropriate level of resources to adequately apply for sponsored funding and manage the requirement of the funding once received. The chapter on “Common issues for junior and senior research faculty regarding career advising,” was of particular interest because it directly correlated to the needs assessment that faculty feel overwhelmed.

2.3. Applicability of Literature Review

The literature review did not directly answer the question, but it does give supporting insight into the challenges many institutions face as shifts in agency requirements and the universities’ ability to provide the training in real-time, impacted faculty and RA ability to shift quickly to meet the demands where the turn-around time simply doesn’t seem to be possible. There appears to be a gap in understanding the roles and responsibilities between faculty and research administrators who support.
Chapter 3. Need(s) Assessment.

3.1. Need(s) Assessment.

The need was determined by the increase in faculty questions I received over the last three years as a Contracting Officer. Perhaps there is a correlation between the pandemic and short-staffed issues of available individuals in Research Administration, as well as accessibility of resources or understanding of RA. Sources for determining the need of the project are the faculty who seek out funding.

3.1.1 Assessment of Need.

Development of modules would take time and several rounds to properly complete. Given the time constraints of the program, a needs-based assessment seemed more feasible to determine what if any changes needed to be done to the currently used training modules, or if there is a lack of knowing how to access the available resources. The needs assessment was determined based on the numerous inquiries from faculty researchers who were not clear on the institutional procedures for award compliance. As well as the rapid changes in federal requirements for compliance.

3.2. Metrics.

Calculated metrics were not used to establish the need for the survey questions. There were no metrics used to determine how to proceed with making recommendations to improve the onboarding tools as well as the training resources available. The goal was to use the survey results to determine what areas are currently working and what areas need improvement or enhancement. The survey went out three times with no responses from faculty in the COE. The initial two times the survey was sent it was blocked through from reaching faculty and going into SPAM. Efforts to get assistance through the Research Education and Outreach Team, along with the EVPR to find ways to get responses. According to the EVPR office survey participation overall at Georgia Tech yields below level responses and often result in multiple attempts to send out surveys with a less than 20% response rate campus wide.
3.3 Sources.

I initially decided this would be a potentially good project in response to a junior faculty member new to GT in the School of Mechanical Engineering (ME) who asked for my assistance in locating resources that new faculty hires should receive in the on-boarding process specifically on how to navigate the Office of Sponsored Research. I directed him to the training modules available online and he said he had reviewed the materials and did not feel the modules captured how to navigate the Office of Sponsored Research adequately. He wanted to know once an award is established what is the roles and responsibilities of the PI and what level of support should he expect throughout the life of his award. The full cradle to grave process as it related to internal project management. As the Principal Investigator he knew his role related to the research and technical reporting but was not clear on what his role in managing the award. Should he be intimately engaged in the financial compliance of the award, subaward management, internal post award finance requirements. My response to his questions and concerns was the PI is fully responsible for all aspects of the award but that he should have the adequate supporting team to help him navigate due dates, formats, and what office was responsible for officially signing off on the requirements. He felt the administrative burden of award management should be designated individuals beyond the PI. I partially agreed, but also explained to him the number of additional factors in his ability to do the research. He would need a supporting team to order his supplies, which may require his review. He would be responsible for approving purchases in workday that aligned with his request for supplies, travel, and any other financial responsibility. He would be responsible for managing the terms and conditions of the award that required PI acknowledgment and adherence, which spanned from IRB to IACUC, RCR, Data Management, Export Control, System Security Plans and more. All these “admin burdens” required responses from the PI, which ultimately required involvement. I reviewed the available modules and determined while the information seemed up to date and sufficient perhaps there was a need for further dissemination beyond waiting for faculty to sign up for the onboarding courses and ongoing training available. Faculty seem to express concern when it directly impacts them at a given moment, but what is this question was asked of me more than three years ago and over the last three years I continue to receive inquiry on how to navigate the Office of Sponsored Programs. What I have observed is most faculty are not familiar with the terminology Research Administration thus not understanding the full scope of
what the roles and responsibilities are of the Office of Sponsored Programs specific to Research Administration.

3.4. Committee.

At the beginning of the project, I sent emails to a selected group of individuals to asked them to be a part of my advisory committee for my Capstone Project. I was strategic in asking a group of individuals who could play key roles throughout the process. I also took into consideration the time constraints individuals with heavy workloads might have in committing time to do group meetings or zoom calls collectively. My team was structured with individuals from the Office of Sponsored Research at Georgia Institute of Technology (GIT) my current place of employment. I sent an email to each person to request their participation and provided them with the foundation of my project idea. I explained the time commitments needed as well as the level of input I would need along the way. I created a six-person advisory committee which includes an Executive Advisor, and three committee members. Tanta Myles, Associate Vice President for Research Integrity Assurance at GIT, who also serves as the Chair for Region III NCURA, as well as an instructor in the Johns Hopkins Master of Research Administration program. Tanta brought a wealth of experience from different perspectives and has been integral factor in how my project developed. She was resourceful in assisting me with completing the IRB process at JHU and asked her Director of the IRB team Melanie Clark to review my materials before I submitted to ensure I met the requirements of both JHU and GT. Our check-ins were filled with the encouragement I needed to get through the project understanding the requirements of the program as well as my responsibilities as a Georgia Tech Contracting Officer. Deanna Hendrickson, Director of Research Education and Outreach for the Office of Sponsored Programs. Deanna was a key person to include on the committee. She has been the driving force to Outreach and Development for OSP. She along with her team of six have changed the landscape including the tools and resources available to faculty.

Ashley Smith, Division Manager, Federal Contracting for Academic Unit Government & Not-For-Profit Contracting for Academic Units was selected as my advisor. I report directly to Ashley and understood the value added she would bring to my committee as well as the support of allowing me to complete this project while managing my workload. Lakita Brooks, Division Manager Supporting Computing, Design, Business and Other Units was selected a collaborator
on the project. I specifically asked Lakita to review my questionnaire to make sure the questions I was asking aligned with the comments and concerns received from faculty about the Office of Sponsored Programs processes. Lakita has more than 30 years’ experience in Research Administration and has seen the field evolve into one of complexity and multiple layers. Vanessa Daniels, Division Manager Supporting Sciences and Liberal Arts was also selected as a collaborator on the project to assist in reviewing my materials as they were being developed. Lola Foye, Senior Grants Administrator in the School of Materials Science and Engineering. Lola has direct interaction with both the faculty researchers and the team in OSP. She provided a wealth of support in understanding the gaps between institutional compliance requirements of the Office of Sponsored Research and faculty understanding of what is required.

3.4.1. The role the committee played in your project.

The Advisory Committee played a pivotal role in how my ideas shaped into the final project outcome. Although I had an idea and a design in mind as to what I wanted to accomplish, it was important to have the insight and viewpoint of individuals who work in the field and understand the dynamics of Research Administration, as well as faculty relationships. Everyone I asked has several years’ experience working in Research Administration, specifically in Higher Education. The committee’s role was instrumental in how I developed my project and changes that were needed based on their feedback became essential to the outcome. After three attempts to send the survey to the targeted schools in the College of Engineering, I was not receiving any responses which became concerning. Tanta Myles, my committee lead encouraged me to keep writing the paper and working toward the end goal of completion. I continued to be concerned with the lack of responses which I learned through the Director of Training and Outreach that response rates to survey’s campus wide were often yielded low numbers or no response at all. This is an area of concern, that may require further review by the leadership at Georgia Tech. It is not reasonable for faculty to express concerns about operations not working properly, but when seeking out their direct input to improve the services, low response, or no response at all to questions for improvement, does not improve the operations.

Deanna and her team have played a pivotal role in making enhancement to the tools available for faculty and research administrators across campus. A new hire onboarding module is available to all hires to assist in navigating the systems at Georgia Tech as well as providing
training opportunities in proposal development and management. Deanna works closely with the Executive Vice President’s Office (EVPR) during the hiring process of all new tenured faculty to ensure they have access to the tools needed to seek sponsored funding. This includes a period of transition where faculty can submit proposals prior to their official start date. Under Deanna’s guidance new modules have been created based on direct input from faculty who have participated in training. An end of course survey is available, but the feedback has been minimal. Faculty complaints on the availability of resources and awareness do not align with the efforts of the Research Education and Outreach & Strategic Support Directorate.
Chapter 4: Recommendations and Conclusion

Introduction

Efforts to enhance the quality of training tools used at GT, will require a shift in how faculty accountability for participating in onboarding training is accessed. Although faculty face numerous requirements for accountability to department chairs, to division leads and to the Dean of their respective discipline, there needs to be policy changes to ensure faculty are adhering to the requirements of managing their sponsored funding. New tenured faculty hires at GT receive start-up funding as a part of their hiring package. A measure of standard similar to corporate sector when giving a sign-on bonus. At GT the start-up packages are generally designed to assist faculty in offsetting cost associated with starting up their labs. There is equipment coverage as well as the ability to cost-share funding on a proposal submission all covered by the Executive Vice President’s office. As a part of holding faculty accountable for managing the internal processes designed to ensure that Georgia Tech follows the cost accounting standards that govern federal and sponsored research dollars, faculty should have a mandatory requirement to complete on-boarding training for continued use of those funds. Training should be a requirement to ensure that new hires understand the full landscape of the institution and how to properly seek assistance from the appropriate units on campus that provide support. There also needs to be requirements for ongoing training when changes in federal requirements shift forcing the university to make changes in processes to follow the government requirements. While the requirements for non-profit organization are less stringent the opposite is true for industry partnerships that are often complicated negotiations.

It would also be beneficial to allow the Educational Outreach and Training team to hold round table discussions in the units where participation is a requirement by the School Chair and the College Dean. It is not sufficient for the Education Outreach and Training team to hear the concerns expressed that faculty do not have access to the resources, the training team makes the necessary adjustments, but either low or no participation from faculty in the available courses. The Director of Education Outreach and Training and taken extensive measures to enhance the materials based on feedback she receives, via email, word of mouth or concerns she hears from unit staff who are sharing the views of the faculty they support. Deanna and her team move quickly to respond to areas of concern and work tirelessly to make the adjustments in the materials. Faculty need to know the importance of submitting the requirement reports on-time.
and what it means when the institution has several delinquent reports to one agency. This is a breach of contract where terms and conditions outline the expectations of the award, which include reporting. This may require the Educational and Training team to hold two sessions per month on one unit to capture the participants, but getting the feedback from the need and usefulness of the material would provide the training team with the measurable. There is also the opportunity to address the disconnect by faculty who are not engaged in training and development courses offered. There always seems to be more to do than time to do it. It would be beneficial to try to gage what additional factors are causing the disengagement, yet the expectation that it still needs to get done. Are there competing priorities, lack of awareness about the training's relevance, or perceived importance of the relevance of why training is available and why individuals who utilized these systems must actively find time to complete the trainings. What appears to be an administrative time-consuming burden, may end up being a much easier task if individuals completed the trainings.

Conclusion

Efforts to get faculty to respond to the survey did not go as planned. The survey was sent three times with no success in increasing the response rate. The initial send went into faculty spam. The second attempt was sent with a disclaimer and the third send was done by each College. The response rate did not increase. Attempts to get faculty to respond did not yield the expected outcomes, but was consistent with the overall response rate at GT. No incentive was offered to faculty to participate in the survey. The overall response rate at GT to any survey sent yields minimal participation. Currently, campus wide survey response according to the Executive Vice President of Research at GT is roughly 20% or less. The Director of Research and Education Outreach agreed that there are challenges with survey response rate. according to Research Administration has a wide range of changes that shift quickly based on agency requirements. Federal agencies make efforts to be in alignment in areas that they can do so, but there are nuances that prevent them from all being the exact same. The rules of governance included in 2 CFR 200, FAR, DFARS, NIST, NASA and other specific requirements provide the blueprint to how and why organizations who receive federal funding must adhere to in order to not be in default of any agency requirements. These requirements also extend to conducting
research with integrity and in monitoring conflicts of interest that can arise from relationships external of Georgia Tech.


Appendix 1: Johns Hopkins University Institutional Review Board Approval
March 8, 2024
Lea Brooks
Email: lea.brooks@osp.gatech.edu

Dear Lea:

The Institutional Review Board (IRB) has carefully considered your proposal. In cases where Georgia Tech faculty, staff, or students are conducting human subjects research at Georgia Tech strictly as students at another institution, they must obtain IRB approval from the institution where they have enrolled. The Georgia Tech IRB will not review the study as we are not engaged.

If you have any questions concerning this project or human subject activity regulations, don't hesitate to get in touch with me at 404.387.2509.

Sincerely,

Melanie J. Clark, CIP
Director of Georgia Tech’s Human Research Protection Program
Office of Research Integrity Assurance
Georgia Institute of Technology
Appendix 3: Email to Survey Participants

Dear Georgia Tech, Tenured Faculty.

My name is Lea Brooks, and I am a Contracting Officer in the Office of Sponsored Research at Georgia Institute of Technology. I am in my final semester of graduate studies at Johns Hopkins University where my final Capstone projects is entitled, “A Needs Based Assessment to Determine How to Enhance On-Boarding and Training Modules for Tenure Track Research Faculty Seeking Sponsored Funding.”

The purpose of the research study is to find ways to enhance the training modules for new faculty hires and provide up to date useful information for all faculty who seek, receive, and need to manage their awards. This study is being conducts for a Capstone Project Final for Lea Brooks, at Johns Hopkins University, Baltimore, MD. The information collected will be utilized to improve the resources available to faculty at Georgia Institute of Technology seeking sponsored funding support and award management tools and resources only. Responses to the questions, in no way affect employment at Georgia Institute of Technology.

The survey should not take more than 5-7 minutes to complete, and you will not be asked to include your name as a part of responding. Your participation in the survey is greatly appreciated.

Kind Regards,

Lea Brooks
Candidate for Master of Research Administration
Johns Hopkins University
Spring 2024 completion
Lbrooks46@jhu.edu
Capstone Title: A Needs Based Assessment to Determine How to Enhance On-boarding and Training Modules for Tenure Track Research Faculty Seeking Sponsored Funding.

Consent for Research Participation Research Study Title: [Capstone Title]:

A Needs Based Assessment to Determine How to Enhance On-boarding and Training Modules for Tenure Track Research Faculty Seeking Sponsored Funding. Researcher(s):
Lea Brooks, [Johns Hopkins University/Dr. Saiqa Anne Qureshi, Johns Hopkins University, Baltimore, MD.

The purpose of the research study is finding ways to enhance the training modules for new faculty hires and provide up to date information for all faculty. This study is being conducted for a Capstone Project Final for Lea Brooks at Johns Hopkins University, Baltimore, MD. The information collected will be utilized to improve the resources available to faculty seeking sponsored funding at Georgia Institute of Technology. Responses to the questions in no way affect your employment at Georgia Institute of Technology.

The survey includes questions about years’ experience with receiving sponsored funding and whether the current support is sufficient. Responding to the survey should take you about [5-10 minutes] to complete. You can skip questions that you do not want to answer. Your participation is greatly appreciated to ensure improvements to the available resources include the input of those impacted directly.
Drone Daleny Building (Office of Sponsored Research) Georgia Institute of Technology. Atlanta skyline view

1. What is your professorship title?

Mark only one oval.

☐ Assistant Professor
☐ Associate Professor
☐ Full Professor
☐ Professor Emeritus
☐ Retired but Working
2. How many years of experience do you in awarded sponsored funding?

Mark only one oval.

☐ less than 1 year
☐ 1-5 years
☐ 5-10 years
☐ 10-15 years
☐ more than 15 years

3. Do you believe the Office of Sponsored Research provides sufficient resources on applying for sponsored research funding?

Mark only one oval.

☐ Yes
☐ No
☐ Maybe

4. Do you believe the Office of Sponsored Research provides sufficient resources to manage your research project once it is awarded?

Mark only one oval.

☐ Yes
☐ No
☐ Maybe
5. Do you believe the Office of Sponsored Research provides sufficient communication of the process for setting up an award the Central Management System?

*Mark only one oval.*

☐ Yes
☐ No
☐ Maybe

6. Do you believe faculty would benefit from ongoing training opportunities from the Office of Sponsored Research?

*Mark only one oval.*

☐ Yes
☐ No
☐ Maybe

7. Do you believe you have sufficient understanding of the roles and responsibilities associated with the internal process of sponsored funding at GIT?

*Mark only one oval.*

☐ yes
☐ No
☐ Maybe
8. As a faculty member, would you participate in sessions on how to seek new funding sources if available?

*Mark only one oval.*

- Yes
- No
- Maybe

9. Do you believe new faculty hires would benefit from onboarding training that includes agency specific information on applying for sponsored research support?

*Mark only one oval.*

- Yes
- No
- Maybe

10. What type of information would you like to see added to the training modules that would be most beneficial to you as a faculty seeking sponsored funding??

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

This content is neither created nor endorsed by Google.
The award Lifecycles moves through six basic stages of development at Georgia Tech and while this chart and the steps in the process are all available online with easy access to the information. Often the response from Georgia Tech Faculty and newly hired unit Grants Administrations who have not taken the onboarding training would not automatically know this tool is available. Similarly, to the award lifecycle process (Gatech 2023)
Figure 2: Module Development Enhancement designed to improve the functionality of systems. Training is made available throughout the process to all users to prepare for the go live day. (Gatech 2023)

Where are we now?

Kick-off was on February 2024. OSP in collaboration with GTRI and OIT is now working the following plan:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Comments</th>
<th>Target Go-Live</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Subagreement Module</td>
<td>The existing CIS subagreement module is 20+ years old. We need to do a technology upgrade and add features functions to bring this system into the 21st century</td>
<td>January 2025</td>
</tr>
<tr>
<td>Business Process Improvements</td>
<td>The team is looking across all business processes around Contract Management to enhance efficiency</td>
<td>June 2025</td>
</tr>
<tr>
<td>Enhance eRouting with CIS functionality</td>
<td>Retire CIS and move all functionality into modules of eRouting</td>
<td>June 2025</td>
</tr>
<tr>
<td>Teaming Agreements</td>
<td>Adding functionality to both eRouting and OSP’s Contract Management System to initiate and track teaming agreements that will then allow for seamless transition into formal proposals within both systems.</td>
<td>June 2025</td>
</tr>
</tbody>
</table>
Lea Brooks Biography

Lea Brooks is currently a Research Associate II/Contracting Officer at Georgia Institute of Technology, located in Atlanta, GA. She started her career in Research Administration a little less than 8 years ago and has enjoyed roles at the unit office and now as a member of the College of Engineering team for the Office of Sponsored Research. Lea holds a Bachelor of Science in Psychology and is earning her Masters in Research Administration from Johns Hopkins University, May 2024. She is a proud member of Delta Sigma Theta Sorority, Inc., and Circle Lets, Inc. She is also the proud mother of three young adult children (Maya, Amira & Joshua) a fur boxer Ali. Lea resides in Atlanta, GA with her husband Steven Brooks.