

**ONBOARDING NEW RESEARCH STAFF THROUGH ASYNCHRONOUS
LEARNING**

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Abstract

Onboarding processes have become standard best practice across organizations and businesses when it comes to training new employees. These processes have proven to be one of the most important factors that employers can implement at an early stage of employment to ensure employees understand their new role and how they fit within the organization. Establishing an effective onboarding process can increase employee productivity and can also help the new employee build confidence to start supporting their new team at a faster rate. Organizations have been utilizing onboarding processes for new employees for decades. Most recently, organizations have recognized the need to modify their onboarding processes to include new methods for training and orientating new research staff, such as asynchronous learning tools. These new methods can include building a repository to make these tools accessible to employees. As such, this Capstone Project describes the need for asynchronous onboarding sessions, why this is important, and the design and development of new onboarding processes that can be utilized by organizations in need of updating their onboarding process.

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Abbreviations

EVD	Ebola Virus Disease
NSF	National Science Foundation
NIAID	National Institute of Allergy and Infectious Diseases
PI	Principal Investigator
UNICEF	United Nations Research Fund
WHO	World Health Organization

Glossary

Asynchronous Learning. A learning method that allows the audience to learn at their own pace through recorded sessions.

National Institute of Allergy and Infectious Diseases. An institute within the National Institutes of Health that conducts and supports basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases.

Onboarding. The process of introducing a new employee to an organization by presenting them with information that will benefit their knowledge and skills as they get acquainted with their new position.

Orientation. The process of introducing a new employee to their workplace.

Rapid Research Response. Research initiatives that are implemented rapidly to address urgent public health needs during a crisis such as a pandemic or outbreak.

Research Administrator. A research professional with the knowledge and skills to support sponsored research programs.

Synchronous. A learning method that requires the learner and instructor to engage in real-time.

Chapter 1. Introduction

1.1. Background.

The author of this Capstone Project has over 13 years of research administration and project management experience. During this time, the author has observed several types of onboarding sessions. Some have taken place in person and via synchronous orientation programs. These sessions have mostly contained generic information and are often hosted by the organization's human resources department. Topics covered in these human resources-led new employee orientation programs have included the history of the organization, the institution's core values, employee benefits, payroll, public affairs and communication, learning and development, environmental health and safety, information technology, and other resources that could be helpful to new employees. Supplemental new employee orientation sessions can also take place and these usually focus on ensuring that the new staff take the required training for information and security awareness and other training requirements per company policy. Based on the author's research, curriculums that do not include any orientation and training sessions tailored to the program that the staff will support, nor to their specific roles and responsibilities, may benefit from modifying their onboarding content.

Given that it could be costly to include additional orientation sessions in person or in a synchronous way, learning through asynchronous onboarding tools could be an alternate option for research institutions and the new employees. Not only can there be cost savings, but this method can also reduce time constraints and workload on the staff assigned to provide the program-focused onboarding sessions. Some of the benefits of asynchronous learning include that the employee can "learn at nay pace, personalize and

optimize the learning experience, revisit lessons as needed to improve comprehension and retention, take advantage of extra time to process, practice, and respond, adapt learning to self-accommodate for a disability”.¹ This Capstone Project will analyze methods for onboarding new staff at academic and non-academic institutions. The outcome will include the development of tools that organizations can utilize and incorporate when onboarding new research staff that will support a specific department or research program.

1.2. Statement of the Problem.

While organizational new employee orientation sessions contain valuable information for new employees, the content may not cover the role of the new employee within the research program they were hired to support. In addition, there may be no orientation session that provides background information on the assigned research program, such as a country, research studies that have been conducted, ongoing research, study protocols under development, and the study team that the new employee will be working with.

Not having an orientation nor training program available that introduces the new research staff to their program may delay the employee’s understanding of their role and how they fit in the program’s structure. Without clear guidance and training on their expected contributions, staff will not be empowered to fully accomplish their goals and the program will not fully benefit from the support the new research staff can provide in an immediate fashion.

1.3. Project Question.

¹ Panopto. “Asynchronous Learning Explained: Examples, Benefits, and More”. Accessed November 12, 2021.

The development and integration of an orientation and training program focused on the research project, department, or office can supplement the broader institutional orientation curriculum. This addition would be readily available to provide new staff with information that will aid them in their first days of employment. An orientation model used at Texas A&M University demonstrated that, “Orientation programs are one tool that established early communication and creates a positive working relationship.”² Understanding the objectives, roles, and mission of the research program shortly after their time of hire will provide a solid foundation for the new research staff. This can be achieved through the implementation of an asynchronous orientation and training program focused on the roles and specific country, department, or office that the new research staff will be supporting. This orientation and training program can be pre-recorded and divided into sessions to provide the new employee various levels of information according to their role and project.

1.4. Project Objectives.

“Onboarding is the process of *acquiring, accommodating, assimilating, and accelerating* new team members, whether they come from outside or inside the organization”.³ The project objectives were developed to accommodate new team members by providing the necessary tools they need to assimilate with the team and accelerate the research staff onboarding process within organizations that only provide onboarding sessions at organizational level and not specific to a research program.

² Mike McAllister and Charlene Miller. “Forging Partnerships Between Researchers and Research Administrators Through Orientation Programs,” *SRA Journal* 25, no. 1 (1993): 17.

³ George Bradt and Mary Vonnegut, *Onboarding: How to Get Your New Employees Up to Speed in Half the Time* (Hoboken: John Wiley & Sons, Inc., 2009), 3.

The main objectives of implementing the orientation and training program for new research staff focused on their research project and role are:

- Objective 1 – To inform new staff of the background of the research program, country, office, or department they were assigned or hired to support
- Objective 2 – To inform and train new staff on their role within the research program, country, office, or department
- Objective 3 – Create a proposed structure for the new orientation and training programs that will facilitate access to these tools for new staff

1.5. Significance.

Within the field of public health, there is research that is considered fast-paced. These research programs may involve international rapid-research response, such as Ebola Virus Disease (EVD)⁴, Zika⁵, or COVID-19⁶ research. In these situations, there is urgency to hire and onboard new staff. Tools that can be easily deployed to orient new research staff in their assignments may not be readily available. Developing tools that have been prepared in advance to train new staff during their onboarding process will benefit the new employee as well as the entire program. Given that team members may be deployed overseas when a new staff member is onboarded, having a repository library with a pre-recorded orientation program will allow for asynchronous learning. The new employee orientation sessions focused on a specific research program will also allow for

⁴ National Science Foundation. “Ebola rapid response”. Accessed on November 12, 2021.

⁵ National Science Foundation. “National Science Foundation awards \$1.7 million in rapid response grants to study Zika virus”. Accessed on November 12, 2021.

⁶ WHO. “Timeline: WHO Rapid Research Response to COVID-19”. Accessed on November 12, 2021.

the new employee to quickly learn about their program, its priorities, and their role in helping the program accomplish their goals.

1.6. Exclusions and Limitations.

Each research program varies in size, funding, and research focus. Therefore, this Capstone Project will focus on proposing detailed orientation and training sessions for research institutions who only provide broad organizational orientation sessions to their new research employees, such as research administrations and project managers. An initial set of two session templates focused on one research program will be developed by the author of this Capstone Project. Other program leads within an organization's research program can use the pre-recorded sessions and templates to re-create their own by inserting the information pertaining to the research program, country, or office they support. For this Capstone Project, it is assumed that sessions specific to organization-wide roles, such as a subcontracts or grants management support roles, should not require modification as this role may be standard across an organization.

Each organization interested in modifying their current onboarding process should conduct a needs assessment to determine the best learning method that will meet their objectives and needs as well as the best method to store these tools.

Chapter 2. Literature Review

2.1. Overview of literature review.

The Journal of Research Administration's article titled *Developing Effective Training Programs* discusses the components of what makes training programs successful as well as the benefits of implementing these in the workplace. "Not only can effective training promote productivity, it can foster personal and professional development, contribute to the progressive organizational environment, help boost productivity, and promote employee morale."⁷ The article further details that, "Training initiatives need to be tied to business strategies and the employee's particular professional development goals, relative to the employee's responsibilities, level of expertise, career goals, and departmental needs."⁸ The importance of the transfer of skills is also noted as part of an effective training program. This supports the idea of empowering staff with knowledge that they can apply in the workplace, such as recording a session on a particular area like subcontracts or research administration support. While training strategies are employed across businesses, "Training initiatives must prove their worth and are often among the first functions to be sacrificed during economic slowdowns. To survive in such an atmosphere, training must emphasize skills and the acquisition of knowledge in direct support of performance goals."⁹ Training programs that are ineffective not only run the risk of being eliminated, but they can also prove to be detrimental to the program and staff by not transferring the necessary skills and affecting employee morale. To avoid ineffective orientation and training programs, institutions

⁷ Carole Wagonhurst. "Developing Effective Training Programs," *Journal of Research Administration*; 33, no. 2 (2002): 77.

⁸ *Ibid.*, 81

⁹ *Ibid.*

should make an assessment and determine the best training methods for their specific needs.

During their assessment, organizations should consider what type of tools will work best for their new and current staff. Resources and staff availability should be taken into consideration. Orientation and training sessions can be conducted in-person and online. For example, the Learning and Development program at University of Massachusetts Amherst offers an in-person session on Orientation and Fundamentals of Research Administration for faculty and staff. “This orientation is meant to introduce new staff and faculty to key concepts essential to research administration”¹⁰. Topics covered in this session include “Overview of offices and functions, OMB Uniform Guidance, Cost Principles, Understanding F&A and MTDC, Overview of Research Compliance.”¹¹ Other institutions may opt for web-based training, such as The University of Arizona. Their Training and Professional Development office offers a video series for Principal Investigators. “The PI Orientation Video series is an online course designed to introduce University of Arizona Principal Investigators (PI) to the fundamentals of research administration and grants management at UA; the roles and responsibilities that come with being a PI; and the resources and offices available across the university to support PIs in fulfilling their administrative responsibilities as efficiently as possible”.¹² While the intended audience is new faculty, other research staff and students are able to watch the online orientation. Topics covered under the video content include an

¹⁰ University of Massachusetts Amherst. Workplace and Learning Development. Accessed on October 2, 2021. <https://www.umass.edu/wld/core-1-orientation-and-fundamentals-research-administration-person>

¹¹ Ibid.

¹² The University of Arizona. Training and Professional Development. Accessed on October 2, 2021. <https://research.arizona.edu/research-resources/training/faculty/pi-orientation-video-series>

introduction to the PI's research support team as well as project-focused sections on changes, reports, and closeout activities.

“Organizations have long recognized that focusing on the onboarding experience is vital to the success of the employee and the organization”.¹³ Implementing a structured onboarding process to introduce new staff to the work environment can also prevent employee turnover as studies have demonstrated that employees tend to leave their place of employment within the first three months if the job is not what they expected from the advertisement and interview.¹⁴ As new generations begin to be incorporated into the workforce, organizations need to re-structure their onboarding process to accommodate the needs and expectations of the new generation of employees. “Therefore, the initial onboarding has to set the stage in helping the new hires understand the values and objectives of the organizations and need to reinforce the values, so they are aligned to organization values”.¹⁵

2.2. Details of review.

The literature review has demonstrated the importance of implementing effective orientation and training programs for onboarding research staff in businesses and academic institutions. Scholarly articles that have focused on effective training strategies in the research enterprise support the development of the orientation and training sessions focused on a specific research program. In addition, literature demonstrates the impact an effective onboarding process has on retaining new staff, boosting employee morale, and improving productivity. Other applicable literature includes programs from Learning and

¹³ Bharat Chillakuri. “Understanding Generation Z expectations for effective onboarding,” *Journal of Organizational Management*; 33, no. 7 (2020): 1278.

¹⁴Ibid.

¹⁵ Ibid., 1285

Development Offices at higher education institutions. Information on the programs, including topics and the intended audience, are available through the institutions' websites. It is clear from the literature review that higher education institutions have established training curriculums for new research administrators and Principal Investigators to improve their onboarding process. Their approach further supports the idea of establishing orientation and training programs for new employees based on their roles and responsibilities.

2.3. Applicability of Literature Review.

The article *Developing Effective Training Programs* discusses the benefits of an effective training program, the importance of the transfer of skills, and the risks of implementing an ineffective training program. These factors are to be considered when developing the research program-focused orientation and training sessions. To avoid inefficiencies, the content of each session needs to be carefully considered to include relevant and complete information for the new staff member. "One way to avoid the perception that training has been poorly designed or delivered is to make sure it is well conceived and appropriately delivered."¹⁶ The program should also provide the tools and communication information to discuss the next steps and further the learning experience after watching the pre-recorded sessions. "After new information is communicated by lecture or video format, it is advantageous to reinforce it with activities such as reading assignments, research projects, and exercises that promote participant engagement in their own learning".¹⁷

¹⁶ Carole Wagonhurst. "Developing Effective Training Programs," *Journal of Research Administration*; 33, no. 2 (2002): 81.

¹⁷ *Ibid.* 80.

It is also important to onboard new staff quickly. This is particularly important in a rapid research response environment. “Whatever be the onboarding model and the duration, the underlying fact is that faster a new hire is absorbed into the organization, sooner the employee would be able to contribute to the organization”.¹⁸ Based on the literature, there is no question on whether an onboarding process will be beneficial for the organization and employees. Onboarding staff quickly and effectively is imperative when staff are expected to quickly start contributing to the team. This is applicable to research programs and teams working on emerging infectious diseases operating in a fast-paced environment focused on research readiness. In order to ensure an onboarding program is successful, organizations must take into account their audience and their expectations as new staff settle in the workplace.

The orientation and training programs posted on the websites of The University of Massachusetts Amherst and The University of Arizona serve as examples of programs that are tailored for new research staff. Topics covered are applicable to the development of the research program-focused orientation and training program, which aims to provide an overview of what a specific research program stands for, present key concepts, and outline specific roles and responsibilities. In addition, the various options presented by each university demonstrate that while the needs of each organization may differ, the common goal is to provide an introduction with valuable information to new employees. The model used by The University of Arizona, which includes an on-line pre-recorded

¹⁸ Bharat Chillakuri. “Understanding Generation Z expectations for effective onboarding,” *Journal of Organizational Management*; 33, no. 7 (2020): 1280.

course, serves as a primary example that online pre-recorded training programs are being utilized and are feasible methods for asynchronous learning.

Chapter 3. Need(s) Assessment

3.1. Need(s) Assessment.

In March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic.¹⁹ As COVID-19 research was prioritized in the United States and at a global level, it became clear that fast and effective action, including efficient onboarding processes, were necessary to initiate urgent research activities across institutions supporting rapid research response initiatives²⁰. “Onboarding helps to build, sustain, and perpetuate high-performing teams”²¹ and delays in onboarding research staff can have a negative impact on the overall work associated with the rapid research response initiatives. The current COVID-19 pandemic and EVD outbreak can serve as opportunities for institutions re-evaluate the content, length, platform, and availability of the onboarding programs they provide to new employees.

3.1.1. Assessment of Need.

“As part of the U.S. government’s response to the COVID-19 pandemic, NIAID is conducting and supporting clinical research to prevent, treat, and better understand the respiratory illness.”²² In addition to NIAID’s response, other organizations such as UNICEF²³, WHO, CDC²⁴ and NSF have also been engaged in the response through

¹⁹ World Health Organization. “WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020”. Accessed September 29, 2021. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

²⁰ Juan Siliezar. “NSF rapid grants awarded to coronavirus response projects.” *The Harvard Gazette*. (2020).

²¹ George Bradt and Mary Vonnegut, *Onboarding: How to Get Your New Employees Up to Speed in Half the Time* (Hoboken: John Wiley & Sons, Inc., 2009), 3.

²² National Institute of Allergy and Infectious Diseases. COVID-19 Clinical Research. Accessed September 29, 2021. <https://www.niaid.nih.gov/diseases-conditions/covid-19-clinical-research>

²³ UNICEF. “Global COVID-19 response”. Accessed November 12, 2021. <https://www.unicef.org/appeals/covid-19>

²⁴ CDC. “COVID-19 Science and Research.” Accessed November 12, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/science/science-and-research.html>

grants and contracts. In order to execute the work, organizations may be tasked with hiring research staff in support of these research efforts. In some cases, there may be long lead times before fully hiring the new research staff. These may be due to hiring delays, security clearance processes, or other human resources related issues. The rapid-research response environment may not allow for a complete and timely onboarding of new staff if resources are not available to orient new research staff on their research program and their role. Equipping a research program with a repository library containing pre-recorded and written materials that could assist with orienting and training new research staff could ameliorate these issues and provide for an improved onboarding experience for new research staff.

Once new research staff are onboarded through their organization's human resources orientation, the expectation may be that they had been informed of their role and that details of their research program had been provided to them. However, this may not be the case if the new research staff was not presented with an orientation program tailored to their role and project. Asking other staff to orient the new employee may not be ideal. If operating in an emergency response state, staff could be pulled from other urgent projects to assist the new employee. In addition to the time constraints, not all staff are aware of the details of other research programs, therefore, new research staff could be left with unanswered questions and lack of clarity regarding their specific project. As noted by McAllister and Miller regarding situations where initial contacts occur in crisis situations, "Clearly, this situation does not lend itself to development of the

communication links and partnerships needed to effectively enhance the research enterprise.”²⁵

Organizations lacking available pre-recorded resources would benefit from a repository library containing a pre-recorded new employee orientation program. Current and new staff across various research programs in an organization could access these to gain the knowledge and skills necessary to support their team in a timely manner. This structure could be utilized in a rapid-research response environment as well as in a non-emergency state.

3.1.2. Sources.

Based on the literature review and rapid research response initiatives taking place around the globe to address the COVID-19 pandemic and EVD outbreak, the author identified a need to develop a new employee orientation program. This program would be tailored for new research staff supporting research initiatives, including rapid research response. The sessions would focus on the research program the new research staff were hired to support and these are to be pre-recorded and saved in a repository library or server at the hiring research institution. It is recommended that access be provided across various research programs within an organization for the onboarding of new employees for consistency and sharing of resources.

The author of this Capstone Project developed the proposed orientation and training program materials and the plan to establish a repository library to house these tools and allow for an asynchronous learning experience for new research staff.

²⁵ Mike McAllister and Charlene Miller. “Forging Partnerships Between Researchers and Research Administrators Through Orientation Programs,” *SRA Journal* 25, no. 1 (1993): 18.

3.1.3. Committees.

No committees were used for this Capstone Project.

Chapter 4. Project Description

4.1. Discussion of project elements.

This Capstone Project focuses on the research the author conducted to create effective onboarding sessions for new research staff based on existing literature. The onboarding session templates can be used for research programs in the process of hiring new staff. In addition, given the importance of establishing an effective onboarding program for rapid research response initiatives, upon its development, this project can be implemented immediately by an organization whose needs assessment indicates they would benefit from these onboarding sessions. The onboarding sessions developed under this Capstone Project may be utilized as a model to develop program-specific sessions for new employees supporting a research program, country, department or office.

Chapter 5. Methodology

5.1. Methodology Overview.

To design the Capstone Project, the author analyzed literature on the benefits of establishing an effective onboarding process for new staff in the workplace. In addition, asynchronous academic models, including their structure and content, were also reviewed. These structured asynchronous learning systems are utilized in higher education systems for onboarding research staff and PIs. Based on the author's review, the literature and models support the need to establish onboarding sessions to facilitate the new research staff's introduction to their research program, ease the transition into their new role, and start their integration within the team as soon as possible. The analyzed literature and models have been considered for the design of the onboarding sessions and their structure.

5.2. Project Design and Discussion.

The project has been designed to include the development of modules that can be utilized for asynchronous learning within organizations that have determined the need for this type of onboarding process for new research staff. These modules or onboarding sessions will be created by the author, an experienced research professional, who has supported various research initiatives throughout their tenure at academic and non-academic institutions. "Onboarding new hires is a critical activity that allows the employee to integrate with the organization, culture, and access to information, helping them to be effective in their day-to-day jobs."²⁶ All of these important factors will be

²⁶ Bharat Chillakuri. "Understanding Generation Z expectations for effective onboarding," *Journal of Organizational Management*; 33, no. 7 (2020): 1279.

taken into consideration when developing the research program-focused orientation and training program.

The author will design onboarding module templates that may be used to cover several topics over the course of various sessions. The content of each module or session will be established according to the needs of the organization and research program. In order for the onboarding program to be successful, there are three objectives that must be met. These are to inform new staff of the background of their project, to inform new staff of their role within their project, and to create a repository for orientation and training programs within the institution.

The first objective to inform new staff of the background of their assigned project can be achieved by developing an initial session that serves as an introduction to the research program. This introductory session will include the below information:

- Name of the program
- Glossary
- Acronyms
- What does the program stand for?
- History of the program
- Program Accomplishments
- Program Impact
- Program Infrastructure
- Status of Research Studies
- Team Members

The subsequent sessions can be tailored according to the role of the new research staff. For example, if a research administrator will work on subcontracts or grants management, the second session can focus on this role. Topics in this session would include:

- Subcontract/Grants Management Acronyms
- Subcontracts/Grants Process
- Elements of the Subcontracts/Grants Process
- Points of Contact

The third objective, to create a structure for orientation and training programs within an organization will be accomplished by creating a repository of resources within the institution's server that will be available to the research program staff, including current and new employees. The materials can be updated on an as-needed basis by the project leads to ensure the most up to date information is reflected in the sessions. The repository will be structured by research program, country, office, or department, therefore, there will be a dedicated folder for each of these. For example, a folder can be created for COVID-19, Ebola, Zika, etc. Each folder will contain the onboarding sessions that are applicable to their research program. Some of the sessions may be included across various research programs, the main exception would be the introductory session as the content will be dictated by the specific research program.

Onboarding Library for [insert research program name]

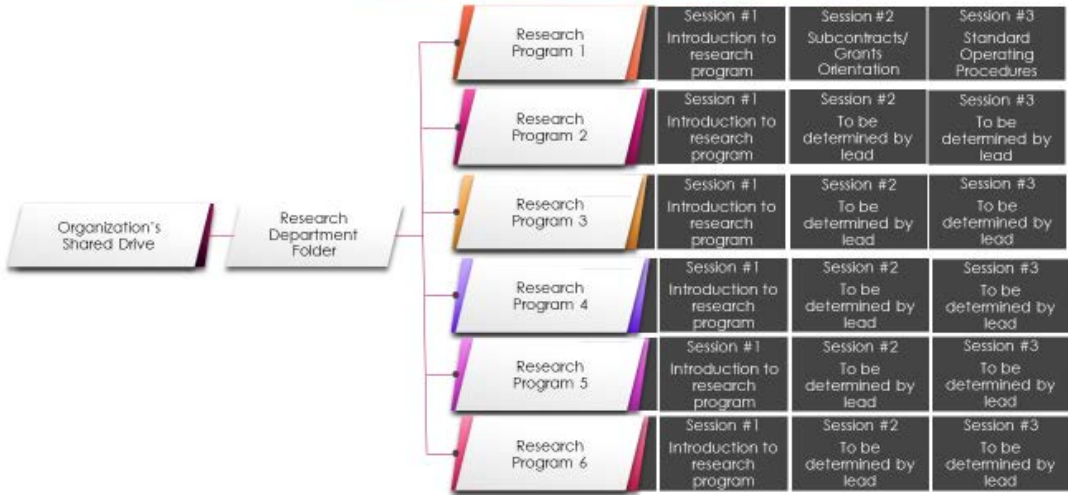


Figure 1. Proposed Onboarding Library Structure

Each of the folders will contain a set of onboarding sessions. The author will develop PowerPoint slides as templates for orientation sessions applicable to a research program. These onboarding sessions are to be stored in the repository, which will be a shared location where other research staff members can access and utilize the tools. The slides will also be used as a template for other research groups leading other research programs within the organization. The leads of these research programs will have the ability to re-create the sessions based on the needs of their program, country, department or office for the purpose of onboarding their new staff. A set of guidelines will be also be written by the author for other project leads to follow when developing and recording their sessions.

Chapter 6. Project Results and Discussion

After an in-depth literature review on the benefits of asynchronous learning, the author designed onboarding session templates for this Capstone Project. These sessions can be used in preparation of hiring new research staff at academic and non-academic institutions supporting emergency research response and steady state research programs. The author considered various topics that would be essential for the sessions. The topics selected fully aligned with two of the objectives of this Capstone Project. Within a timeline of three weeks, the author developed the templates for two onboarding sessions. The author also designed a structured repository that could be used within an organization's server or shared drive to store these new tools. The onboarding session templates and proposed structure for the repository can be utilized immediately to onboard new staff in research institutions hiring new staff.

6.1. Project Result 1.

The first onboarding session was designed to inform new staff of the research program they were hired to support. The session begins by welcoming the new research staff to the team and defines what the team stands for. The slides should include the name of the program and what it stands for. For example, if the name of the program is presented as an acronym, define it and explain the significance of the acronym. The session flows into an overview of common terminology. The glossary of terms and abbreviations will assist the new research staff in becoming familiarized with verbiage that is commonly used within the organization. This overview is followed by the history of the research program, including when, why, and how the program was formed. The session also covers the program's accomplishments to date, such as publications,

research outcomes, and awards received by the team. The impact of the research program in a global, regional, and local context also has a dedicated slide. This could include a timeline that covers the program's milestones, such as protocol development, protocol implementation, and results of the research studies (approvals, awards, licenses). In addition to the research program's accomplishments and impact, the session covers the current infrastructure, such as clinical research centers, laboratories, biorepositories, and data centers that are supported by the research program. This gives the new staff an idea of the width of the project and the resources the research program has available. In terms of work, the session covers the status of current and future research studies the program has in the pipeline. This provides a clear understanding of the goals of the program and where the program is going in the future. The session ends by introducing the research team with whom the new employee will be working with directly within their program, including names, titles, contact information and areas of expertise. By the end of the session, the new research staff should be knowledgeable on the past, present, and future of their research program.

6.2. Project Result 2.

The second onboarding session was designed to serve as an example on how to train the new research staff in one of the main roles they may be assigned. Research administrators and project managers are often tasked with supporting research subcontracts or grants from cradle to grave. The content of the second session was selected given that subcontracts and grants management support is crucial for the adequate execution of research programs. The content for this session is not specific to a particular research program. For example, it does not mention an office, country or

program name, therefore, the content can be utilized as part of the onboarding sessions for multiple research programs within an institution. Providing subcontracts support and grants management is one of the many roles and responsibilities assigned to research administrators, and it is also one of the most important as there are contractual implications with the associated activities that can have an impact on the research program. Appropriately orienting the new research staff on the subcontract and grant requirements and expectations will improve their understanding of the related responsibilities as part of their onboarding process.

6.3. Project Result 3.

Asynchronous learning tools are shared in various ways, depending on the needs of the organization and the resources they have available. Academic institutions commonly utilize online platforms to store pre-recorded sessions to make them accessible to faculty and students. Each organization should implement a structure or repository according to their needs assessment. For some organizations, the most efficient way to make the new onboarding sessions available to staff, may be to store them on the shared network drive that can be accessed by employees. Storing these tools on the organization's shared drive will ensure they are available for staff when they are needed, whether it's a rapid research response or steady state. In addition, they can be accessed remotely and they will be secure and backed up by the Information Technology Department. Having a structured repository will help organize the onboarding sessions for the research program. Each research program lead can decide the content that would be most beneficial for their staff and audiences can watch the sessions as many times as needed. The research program leads will also have access to the other projects' folders.

This means they can cross-check the content between research programs, countries, or offices, and re-utilize sessions that are already developed. One of the benefits of re-utilizing pre-recorded sessions, is that this will be time and cost effective for the organization and the project leads.

Chapter 7. Recommendations and Discussion

7.1. Introduction

Developing and creating new onboarding sessions tailored to a research program and building a repository to store these tools are important steps in improving the onboarding, training, and orientation processes within research organizations. The sessions designed by the author focus on two topics and these can be utilized as templates to develop additional sessions. It is recommended that research program leads review these tools and once established, share what they have developed with other research groups within their organization to build upon what they have created and made available within their institution.

7.2. Recommendations

To continue and complete the process of creating a repository for onboarding staff supporting various research programs within a research institution, the author has created a list of recommendations that include:

1. Identifying leads
2. Re-utilizing sessions that have already been pre-recorded
3. Reviewing sessions on a quarterly basis or as needed

7.2.1. Recommendation 1

It is recommended that each research program identify one research staff member who is familiar with the program to take the lead in developing the onboarding sessions for their team. This lead would be responsible for developing, uploading, and updating the tools in the repository and structure as proposed by the author. The management of the research program's folder on the server will be their responsibility. All research staff

identified to take on this role as lead can meet and share their templates, ideas, and pre-recorded sessions.

7.2.2. Recommendation 2

Collaboration within the onboarding session leads is important. In order to avoid overlap in content, it is recommended that sessions be re-utilized across the research programs within an organization. Onboarding sessions focused on one role can be used by all research programs within one institution as this may entail the same activities and responsibilities across projects. This will also be timesaving and will ensure consistency when it comes to training content. The content of the introductory sessions cannot be used across all projects; however, the format and table of contents can be used as a template.

7.2.3. Recommendation 3

Onboarding sessions need to be accurate in order to be effective. One of the advantages of designing new research program-focused onboarding and training sessions is to bring new research staff up to speed on their research program and their roles and responsibilities. It is recommended that each lead review their research program's onboarding sessions on a quarterly basis to ensure that the content being presented is accurate. In addition, sessions should also be updated when policies that may affect the content change. This may apply to onboarding sessions focused on subcontracts or when projects expand or complete their research projects.

Chapter 8. Conclusion

Based on the literature review and experience in the research field, the author identified the need to develop and integrate research program-focused onboarding and training sessions during a time when new staff were being hired to support steady state and rapid-research response activities. The author of this Capstone Project developed two asynchronous onboarding session templates designed to improve the onboarding process for new research staff, such as research administrators and project managers, supporting research programs. A structured repository to store the new onboarding sessions was also designed by the author. These sessions are key to the integration of new research staff as they improve the employee's understanding of the program they were hired to support and their roles and responsibilities within the program. According to the research performed by the author, there may be other benefits associated with improving the onboarding process, such as increasing employee productivity and avoiding employee turnover.

The results of this Capstone Project can improve prior standard onboarding processes at research institutions by addressing a gap identified by author. The project results have also met the proposed objectives outlined by the author of this Capstone Project. Two asynchronous onboarding session templates are now readily available to be used to train new staff. Research program leads can also continue building upon their repository by working together and expanding the number of sessions stored in their repositories.

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Appendix 1: Research Program Introduction Session Template

**Welcome to the
[Name of the Research Program]**

What is [Name of the Research Program]?

Insert information on what the research project stands for, including definition of acronym.

Glossary

Insert common terms that are used throughout the research program that will be useful for the new research staff member.

Acronyms

Insert common acronyms and their definitions that are used throughout the research program that will be useful for the new research staff member.

History of the Research Program

- When was the research program initiated?
- Why was it initiated?
- Who initiated the program?
- What is the outcome of the program?

Research Program Accomplishments

- Insert research publications
- Insert research awards
- Insert any type of accomplishments related to the research program

Global, Regional and In-country Impact

- Insert any impact that resulted from the research program
 - This can be in the form of a timeline, chart, summary, table
 - Include any milestones, such as protocol implementation, research results, ethics approvals
 - Include important dates

Research Program Infrastructure

Include a list of buildings or special equipment that are part of the research program infrastructure. Pictures of buildings can be included along with a description. These can include laboratories, research centers, and offices.

Status of Research Studies

Studies	Status	Comments
Include names of the research studies	Complete/In Progress/Under Development	Publications, delays, awards, etc.

Research Program Team

Include the names, titles, and contact information of the team members that the new research staff will be working with. You divide the names by role, such as, Principal Investigators, Research Administration, Program Management, etc.

Welcome on board!

Appendix 2. Subcontracts or Grants Management Training

Subcontracts/Grants Orientation Session

Subcontract/Grant Acronyms

Insert all subcontract and/or grant acronyms used at the organization.

Subcontract/Grants Process

Provide a brief description of the organization's subcontracts process. You may include how the process is initiated and by whom.

[Insert Elements of the Process]

Insert information on one of the elements of the process. How does the process get started? This could be a document or package issued by the organization.

Develop multiple slides to describe these elements. Potential documents may include grant or contract announcement, request for proposal, responses to the proposal, award, etc.

Subcontracts or Grants Management Role

Insert a description of the role of the research staff. This could include activities in the pre-award, post-award and closeout processes.

Staff

Insert the names and titles of contacts within the organization that are involved in the subcontracts or grants process.

Questions?

Insert the name and contact information in case the audience has any questions on the content of the session or on their roles and responsibilities.

Appendix 3. Guidelines for Onboarding Sessions

Guidelines	Version:	1.0
	Effective Date:	10/29/2021
Title:	Onboarding Sessions for [insert name of research program]	
Distribution	[Insert who will receive these guidelines]	
Mode of Distribution	[Insert how these guidelines will be distributed]	

1. Abbreviations

Acronym	Definition
Acronym	Definition
Acronym	Definition

2. Figures

Figure 1. Onboarding Library Structure Example

3. Purpose

The purpose of these guidelines is to describe the process of accessing and recording onboarding sessions for the [insert research program name].

4. Scope

These guidelines apply to research program leads developing onboarding sessions for new research staff hired to support the [insert name of the program] in the [insert country, department, or other details related to the program]. The research program lead is responsible for following these guidelines and maintaining the folder for their research program located in the organization’s shared drive.

5. Procedure

- a. A folder has been created for each one of the research programs in the organization's shared drive.
- b. Each research program will assign a lead that will be in charge of developing and selecting the appropriate onboarding sessions for their project.
- c. Each research program folder shall contain an onboarding session introducing the research program. This should be Onboarding Session #1. At a minimum, Onboarding Session #1 should contain:
 - a. Name of the research program
 - b. Abbreviations
 - c. Glossary
 - d. History of the research program
 - e. Status of the research program
 - f. Team members
- d. Other onboarding sessions will be determined based on the roles and responsibilities of the new research staff supporting the research program.
- e. Onboarding sessions can be re-utilized to save time and effort. For example, the subcontracts or grants onboarding session can be used across the research program if the activities under this role are standard within the research institution.
- f. The research program leads will develop PowerPoint presentations for each onboarding session.
- g. The research program leads will use the audio feature in PowerPoint to record their overview of each slide. This way, if updating is needed, the leads do not

have to re-record the entire onboarding session and have the ability to re-record on a “per slide” basis.

- h. Once the session has been recorded, it will be saved in the organization’s shared drive under the research program’s folder.
- i. It is recommended that each lead review their research program’s onboarding sessions on a quarterly basis or when processes are updated to ensure that the content being presented is accurate.
- j. The onboarding sessions will be shared with new research staff as part of their institution’s orientation and onboarding.

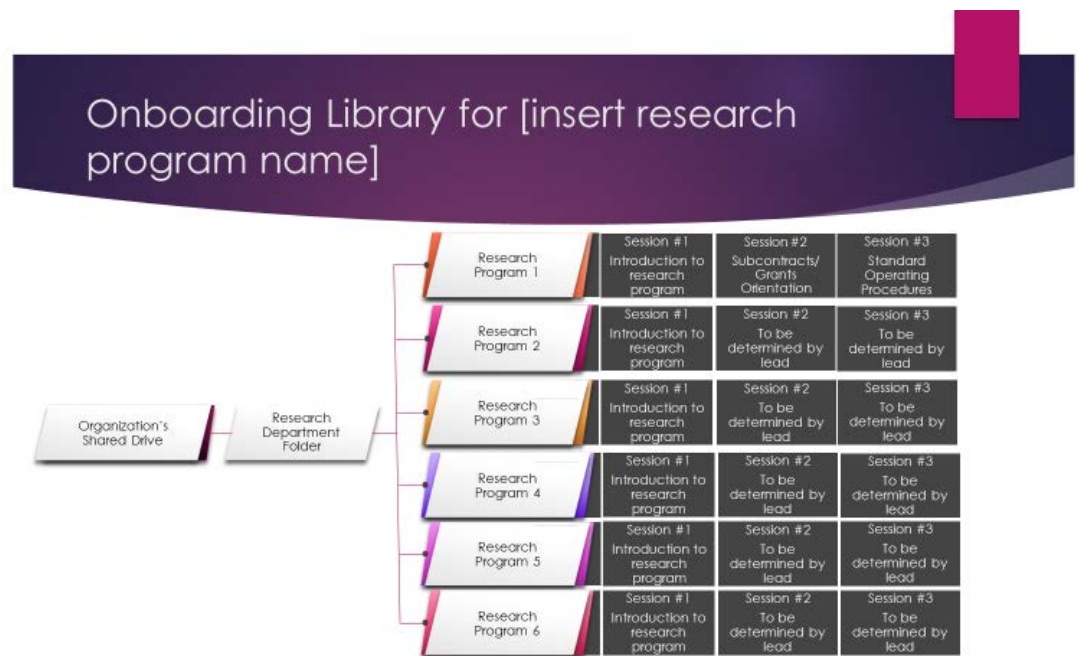


Figure 1. Onboarding Library Structure

Appendix 4: Biography

Alejandra Miranda, born in Brownsville, Texas in 1985, received her Bachelor of Arts Degree in Communication and Media Studies from Northeastern University in Boston, MA, in 2008. Alejandra began to support international research efforts in April 2013 and she is currently a Clinical Project Manager supporting a research program focused on infectious diseases in the Democratic Republic of the Congo. As part of her role, Alejandra provides oversight for seven subcontracts, supports clinical research operations, and outbreak research response for EVD and COVID-19. Prior to her current position, from 2014-2018, she supported research programs in Liberia, Guinea, and Sierra Leone by providing on-the-ground project management support. Alejandra has also provided translation and program management support for research programs in Latin America. Her professional involvement in the field of public health began in 2009 at Yale University's School of Public Health and Yale's School of Medicine where she worked in various projects focused on diversity, equity, and cancer research.