

UNCG



2022 ANNUAL REPORT

Enterprise Data Governance

[Abstract](#)

This report summarizes the activities and accomplishments of the UNCG Enterprise Data Governance team for the 2022 calendar year.

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Executive Summary

Introduction

In March 2022, the Enterprise Data Governance team was formed during a reorganization of the Division of Information Technology Services. The team is organized under Institutional Research & Enterprise Data Management, directed by Karen Blackwell. Alice Herring was promoted from within the university to the position of Enterprise Data Governance Manager and charged with the development and implementation of a sustainable Data Governance program for the university. Alice has been with UNCG for over 20 years and has worked with institutional data in several roles for over half of her career. With the knowledge and experience she has gained over the years she is uniquely positioned to understand the business side of data management as well as the IT side of data management.

UNCG has had issues with data management for many years and has attempted multiple times to implement a Data Governance program, with little success. Administrators struggle with organizing resources to get the best information possible to make sound decisions yet continue to have low confidence in the reports they receive. UNCG's administrators are aware of the need for Data Governance but are fatigued with failing attempts. The charge of implementing an enterprise-wide Data Governance program included not only the formation of Data Governance Committees, but also with the development of a full-scale metadata management and data quality program, and the hiring of a new staff. But on top of these elements, it was imperative to be sensitive to the institution-wide fatigue and to quickly generate broad interest and buy-in because Data Governance cannot be accomplished by a single person.

Activities

Supported and aided by knowledgeable consultants from BerryDunn, who have been partners in several engagements at UNCG, Alice developed a three-tier Data Governance framework consisting of the existing Executive Steering Committee overseeing the Data Trustees committee and the Data Stewards committee. This structure right-sizes the decisions required by each committee and puts decisions in the hands of those with the most knowledge for the specific task. The Data Trustees, as senior level administrators, have the purview of developing and overseeing the university's Data Strategy, and for developing and implementing necessary policies and standards. The Data Stewards are operational level individuals with strong data knowledge and skills and are responsible for metadata management and data quality efforts across campus. The committee roles and responsibilities are outlined in Appendix B, but it is worth pointing out that this is the first Data Governance framework for UNCG which takes formal advantage of the data knowledge of operationally oriented mid-level administrators. The two new committees kicked-off in August and September, respectively. Between the two committees, we have 47 individuals from areas across the campus meeting regularly to discuss data issues and develop resolutions.

In June 2022 Alice began an RFI/RFP process that culminated in the selection of Collibra Data Intelligence as the software solution for UNCG's metadata repository. Collibra is a robust data governance platform that offers a wide array of features and functions to manage and understand our data and support the Data Governance program. In addition to a feature rich catalog for creating Business Glossaries, Data Dictionaries, and Report and System Catalogs, Collibra offers workflow

functionality to support Data Governance approvals and the ability to automatically ingest system metadata elements and relate them to other collected data assets.

In the pursuit of clean and accurate data, Colibra is the key to providing crucial resources to data users across campus. Fully built out, this platform will provide us with the basis for a common UNCG data language, allowing data users to commonly understand business terms, key performance metrics and measures, the location and purpose of data sources, and the available published reports. Colibra will be available to the entire campus community and will provide users with the ability to interact quickly with Data Governance member to streamline the processes for changes or additions to our data.

A system like Colibra does not solve the myriad data management issues UNCG faces simply by existing. Such a system requires dedicated hands to build and maintain it. For the first time, UNCG has dedicated personnel resources specifically to the Data Governance program. Not just one, but four positions were developed to oversee the development and maintenance of the Data Governance program. In June 2022, Alice began the recruiting and interview process for the positions of Reporting Metadata Specialist, Systems Metadata Specialist, and Data Quality Specialist. A key characteristic Alice looked for in candidates for these positions was degrees and experience in Library and Information Science. Individuals in the Library and Information Science profession have experience in managing and organizing information resources. This experience is useful in Data Management activities and will give the new program an early advantage by bringing these perspectives to our data organization.

Achievements

In the past year, the Enterprise Data Governance team has successfully achieved the following:

- Developed a roadmap for Data Governance going forward. This roadmap currently contains 133 action items spanning two years, of which 87 have been completed as of the date of this report (**65% complete**).
- Implemented a tiered Data Governance framework and appointed and begun working with **47 Data Trustees and Data Stewards** from across campus.
- Identified **two policies and two standards** that have been drafted and begun the approval process.
 - The Metadata Collection & Management standard has been approved and is currently published.
 - The Data Governance Structure policy is currently with the Policy Approval Group for review.
- Developed and published a training course in Canvas currently containing **two training modules** for Data Trustees and Data Stewards that they are currently engaged in completing.
 - This training course is available and recommended for data users across campus using this link: <https://uncg.instructure.com/enroll/H8JYTC>.
- Completed the RFI/RFP process and selected **Colibra Data Intelligence** as the software solution for our metadata repository and begun onboarding for implementation.
- Recruited, interviewed, and hired for **three full-time specialist positions** to manage the software solution, metadata collection and management, and data quality programs.
- Completed a **Metadata Assessment** of UNCG's metadata resources, formulated a roadmap and processes for developing a centralized repository of metadata.

- Developed a **Business Data Model**, or a map of our information landscape that allows us to identify the subject areas and concepts that are critical to how the business of the university runs and which will serve as the foundation for our business term glossary.
 - **7 out of 14 subject areas have been modeled** to baseline level.
 - Plans for modeling the remaining 7 subject areas will span the next two years.
- Completed development of a **reporting catalog schema** which will allow consistent cataloging of published reports.

Planning Ahead

At the end of 2022, with a year of planning behind us, the Enterprise Data Governance team is now focused on implementing Collibra and developing schema and standards for cataloging the university's vast array of information resources.

Looking ahead, here are the activities planned for 2023:

- In February 2023, when we are joined by our new Data Quality Specialist, we will develop and implement a data quality program that will allow the institution to surface data issues and resolve them quickly. This program will include
 - Trapping reports and triage processes for handline adverse data events.
 - Scorecards, rubrics, and assessment processes for understanding the health and quality of our data.
 - Development of proactive methods for avoiding and permanently remediating adverse data events.
- The Data Trustees will be engaged in the development of an enterprise-wide Data Strategy, which will include current and planned ITS and Business initiatives and focus our activities on strategic goals for data management.
- The Data Stewards will engage with the Metadata Specialists and the Data Quality Specialist to collect metadata and handle data quality issues.
- The Enterprise Data Governance team will continue working to build out the Collibra system and to foster education and adoption of this tool across campus. Including the following activities
 - Cataloging published reports across campus for easy access.
 - Developing the Business Data Model that is the foundation for our Business Term Glossary.
 - Cataloging Banner Jobs to improve understanding and the process of provisioning.

In Summary

The past year has been full of planning and activities that are only now beginning to bear fruit. 2023 will be an incredibly important year for the Enterprise Data Governance team to begin to show the value of the work in which we are engaged. UNCG has a vast array of information resources to be organized, cataloged, and managed. The programs developed to manage the university's information will take time to fully build out. It is the goal of the Enterprise Data Governance team to build these programs out in such a way that the university community can take as much advantage of these tools as possible while we work. We appreciate your continued support of our efforts.

Strategic Plan

Vision

The UNCG Enterprise Data Governance vision is to deliver a clearly defined framework of roles, processes, and policies within which our institutional data is trusted, understood, accurate, and is provided and used in a consistent and meaningful manner.

Strategic Plan

Our strategic plan begun in March 2022 includes activities continuing through 2024. The full strategic plan is available in Box here: <https://uncg.box.com/s/qx7lhldijhsha7zhaj78g6mqfgu88sg1e>. We identified three major focus areas of work, each including several objectives:

1. To develop and implement a Data Governance program with related information resources for UNCG.
 - a. Clearly outline and define an Enterprise Data Governance committee framework and associated policies and procedures.
 - b. Develop and implement a comprehensive web presence for Data Governance at UNCG.
2. To develop and implement a comprehensive metadata management program in alignment with the Data Governance program.
 - a. Develop and implement the Business Data Model and Metadata Management processes.
 - b. Select and implement a Metadata Repository software solution.
 - c. Develop a training program for the Metadata Repository and Metadata Collection tracks.
3. To recruit, hire, and develop the Enterprise Data Governance team.
 - a. Recruit and hire three full-time specialist positions
 - b. Develop onboarding, training, and performance review processes
 - c. Develop Data Management internship programs to provide field experience for graduate and undergraduate students.

Over the next two years the Enterprise Data Governance team will work to achieve the above objectives. Our initial focus for 2022 was to define and implement an Enterprise Data Governance committee framework and associated policies, procedures, and training. Beginning in November of 2021, we began development of the Business Data Model and drafted metadata management processes. In June of 2022 we initiated an RFI/RFP process to select a metadata repository software solution, and then worked to recruit and hire three full-time specialists to manage campus metadata collection and data quality.

Progress

Develop and Implement a Data Governance program

In April of 2022 we entered an engagement with BerryDunn to provide consulting services for the development of a Data Governance framework and began work with Joe Traino, Tucker Cutter, and Chase Goode to create a roadmap of activities. An outline detailing this roadmap is in Appendix A. To date, we have outlined eight initiatives and have completed a significant portion of the action items for

those initiatives. Below, you will find the initiatives, a brief description of the action items, and the current percentage of completion since work began in April:

1. Roles, responsibilities, and culture – 100%
The action items in this initiative included defining Data Governance roles and responsibilities, defining the Data Governance framework, and identifying the committee members. Details about these items are in Appendix B.
2. Establish Data Governance policies, procedures, and norms – 96%
This initiative has been our largest and most complex to date. It includes 51 action items involving scheduling and planning kick off meetings for our two Data Governance Committees, the Data Trustees and Data Stewards, drafting policies and standards and submitting them for review through IT Leadership and through the Data Trustees committee, and developing and publishing training materials for the committees. In this initiative, we drafted appointment letters for each committee and had those delivered to our committee members, we met with the members of the Academic Unit Liaisons to explain how this committee will continue to function as an arm of Data Governance, and we developed committee procedures and elected Chairs for both committees. Details about these items are located in Appendix C.
3. Develop and gain approval for committee charters – 100%
In this initiative we drafted the new Data Governance Charter and reviewed it with both the Executive Steering Committee (ESC) and with the transition Data Stewardship Committee. The Charter and committee membership are published on the IT Governance website here: <https://it-governance.uncg.edu/datagovernance/>
4. Metadata collection and management – 22%
With 40 action items, the Metadata initiative is our second largest and most complex initiative. These action items include hiring the Enterprise Data Governance Team, selecting and implementing the metadata repository software solution, and resuming the development of the Business Data Model. We selected and are in the process of implementing Collibra Data Intelligence as our metadata repository and have hired three staff. The work of this initiative that will take the longest time is the development of the Business Data Model which will involve subject matter experts from all over campus and forms the foundation of our Business Term Glossary. More information about the items in this initiative are in Appendix D.
5. Develop training materials and provide training for stakeholders – 100%
The development of training materials for the Data Governance committees and campus data users involved producing two PowerPoint presentations, recording the presentation of those presentations, and developing quiz questions based on them. These items, along with some policy and standard reference materials, were published in a Canvas course and made available to the Data Governance committees and the DTS/DTC population on December 5, 2022. Additional modules related to metadata management and the use of Collibra Data Intelligence will be developed under a secondary training initiative in 2023. A pdf copy of the PowerPoint presentation used in Module 1: Intro to Data Governance is available in Box here: <https://uncg.box.com/s/yve3wqr9ekuw3a22ucn6uf3s8bktpgk3> . A pdf copy of the PowerPoint

presentation used in Module 2: How Data Governance Works is available in Box here:
<https://uncg.box.com/s/c9ka977zx6peskwb8fqda89qcoq3y0yw> .

6. Data Governance website development – 33%

Of critical importance to the success of the Data Governance program is the development of a website that will allow us to provide the campus with easy access to resources and information about Data Governance and how it works. The site as planned will provide tips, tricks, and training resources for Collibra Data Intelligence, access to the Canvas Data Governance training course, access to materials for the Data Governance Committees, and regular reporting and updates of Data Governance related activities and achievements. The development of this site is somewhat delayed due to the roll out of the Next Generation university website, but we hope to launch the site along with Collibra Data Intelligence in March 2023. The strategy document for the Data Governance website is available in Box here:

<https://uncg.box.com/s/766xhlg5fmhxcq92yjftv6dixulbnhg> . The conceptual model for the Data Governance website is available in Box here:

<https://uncg.box.com/s/710f253wbpt59d7ajo09oyn9901k4ez3> .

7. Annual reporting and Data Governance continuity – 50%

Much of the work of Data Governance is done behind the scenes. And if the work is well done and everything works, it is rarely commented on. It will be important to provide a continuous stream of communication to the campus community about Data Governance activities and initiatives. We are planning an annual report, quarterly communications, and a variety of dashboards to track our progress and performance and to highlight the work of data heroes across campus. This initiative includes activities such as assessing current available reporting capabilities, identifying appropriate reporting metrics with the help of the Data Trustees, developing standard reporting templates, and creating a project tracking dashboard.

8. Data Quality program development – 11%

Data Quality program development is our newest initiative, though data quality has been a central focus of all the work we have done. Data Governance and metadata management will go a long way towards guiding and educating the campus community and providing them with resources to help us achieve the common, unified language and understanding of UNCG's data. While these resources will, by their existence and use, cause improvement in our overall data quality, a dedicated program of data profiling and monitoring will help us to identify and clean up adverse data events closer to their occurrence. The combination will result in cleaner data and more accurate reporting information. This initiative includes activities such as defining what data quality means to us as an institution, the development of data quality goals (both proactive and reactive), the development and implementation of data quality rules, score cards, and a rubric-based quality assessment process. We will develop and implement a triage process for issues and a communication plan to make sure we keep stakeholders informed.

Develop and Implement a Comprehensive Metadata Management Program

The work on this focus area began with a Metadata Assessment in November 2021. This assessment was the charge of our first consulting engagement with Joe Corpe and Gary Hanson of Secure-IT. Between November and March, Gary worked with Alice and many subject matter experts across campus to assess the state of UNCG's metadata resources. In the process of conducting that assessment, Gary began development of the Business Data Model. The Business Data Model is an enterprise level model that is divorced from any specific system. It allows us to capture the vast landscape of university information by the business concepts by which we refer to it. It organizes the university's information into high level subject areas and identifies the one place a specific business concept originates in the university structure. During the engagement with Gary, we identified 14 subject areas (these are shown in the Business Subject Area model in the Appendix D) and began modeling 5 of them.

Gary surveyed many subject matter experts across campus about the state of UNCG's metadata and performed a gap analysis of our metadata resources. The outcome of this analysis indicates that as an institution, we have very few sources of metadata and these are available only to a limited number of people. Finally, a roadmap of metadata collection was developed, providing an outline of key activities that need to be accomplished in the next two years to develop the metadata repository. The final deliverables for this engagement are stored in Box at this link:

<https://uncg.box.com/s/pinoyen3cco3fwytasbb9dtzub8duy86> if you would like to review them.

In a subsequent engagement with Secure-IT from March through July 2022, we again enlisted Gary Hanson's assistance to continue developing out the Business Data Model. This engagement included working with campus subject matter experts to bring the original five model diagrams to baseline status. "Baseline" in this context means that the model diagrams correctly reflect the entities (or areas of business focus) for each subject area with correct relationships between them. The attributes (or descriptive characteristics of each entity in a subject area) will be updated with the help of the subject matter experts in several tracks of the metadata collection roadmap developed in the earlier engagement. The deliverables from this second engagement are stored in Box at this link: <https://uncg.box.com/s/x2gwrmiw9kls34ywefs2eh0iipxnstr8> should you want to review them. The Business Subject Area model is available in the Appendix D).

In June of 2022 an RFI/RFP process was begun to investigate and select a metadata repository software solution. The tool chosen was Collibra Data Intelligence. Collibra offers a vast array of features that will allow us to create a comprehensive metadata repository, or, as they term it, a Data Catalog. This tool, when fully built out, will include

- Business Term Glossary – a glossary of UNCG relevant business terms and their definitions.
- Data Dictionary – an index of UNCG data-related systems with detailed metadata about the available tables and columns. This feature will allow us to catalog, define, and describe the criteria for key performance metrics and measures used in campus reports.
- Report Catalog – a catalog of published reports from Institutional Research and other areas of campus providing descriptions of the reports, definitions of included metrics and measures, information on the relevant data source(s), report requestor and owner, dates developed, frequency of update, among other items.

- Reference Data Management tools – the ability to catalog our reference data (in Banner, these are the codes in validation tables, such as student type, admit type, cohort codes, or attribute codes). This will allow us to define the code sets and valid codes, indicating which codes are no longer in use, even when they must be retained for historical purposes.
- Tools for the development of Business Rules and Quality rules for our data. These will allow us to indicate in which cases a thing should be used and how, in order to maintain the quality of our data.
- Relationships between Business Terms, Data Elements, Key Performance Indicators, code sets, and reports so viewers can understand how these items interrelate.
- Data Lineage – mapping the lineage of our data allows us to track an element from a report back through any transformations, to the source system in which it originates. This will not only allow report users to understand where the data comes from and how the figures were arrived at, but also will provide business continuity, allowing new staff to pick up an existing report and continue maintaining it or redevelop it as necessary.

There are a host of additional features this software offers for our use that we will discover and implement as we learn the system and how it can best work for us. Foremost among these are the Help Desk which allows users to notify the system administrator of issues with metadata or the need for changes. It is our intention to integrate this system with ServiceNow to allow us to track and assign necessary resources when these issues are identified. Documentation for Collibra Data Intelligence is provided in Appendix D.

The Collibra implementation is currently underway. The most significant activity will take place in January and February of 2023. We should have first value from this system by February 2023 and the Enterprise Data Governance Team will begin building out the functions. Given the volume of our data landscape, it will take some years to fully build this system out. However, the Collibra Foundation Implementation plan is designed to fully implement a selection of use cases in order that the organization can begin making use of the system immediately, while the administrator continues to build out the content.

Should you be interested in learning more about Collibra, you may register for your Collibra Customer Portal account here: <https://www.collibra.com/us/en/register>

Self-paced training is made available by Collibra via the Collibra University, which you can access here, once you have registered for the portal: <https://university.collibra.com/>

Collibra recommends the following training paths for new users:

1. [Getting Started Learning Path](#)
2. [Foundation of Data Governance Learning Path](#)

Recruit, Hire, and Develop the Enterprise Data Governance Team

UNCG has previously attempted to implement a Data Governance program at least three previous times. Every time, we have failed to sustain the program. While this is common in many organizations, a key reason for failure is that dedicated resources are not assigned to the program. In this current implementation, UNCG has made the decision to dedicate not just one, but four full-time positions to

the effort of developing and sustaining a Data Governance and Metadata Management program. Resumes for the staff of the Enterprise Data Governance team are provided in Appendix E.

In March 2022, the Enterprise Data Governance team was formed in the division of Information Technology Services and reports to Karen Blackwell, the Director of Institutional Research & Enterprise Data Management.

Enterprise Data Governance Manager – Alice Herring

In March 2022, Alice Herring was promoted to the position of Enterprise Data Governance Manager, responsible for overseeing the development and implementation of the Data Governance and Metadata Management programs as well as recruiting and hiring a team of three full-time specialists.

Alice has been employed with UNCG since 2002 in several different areas of the university. Most recently, Alice was employed as a B & T Applications Analyst in The Office of Institutional Research & Analytics and was responsible for administering the Student Data Mart. In 2019, she was charged with the task of forming and running a data quality committee formally named The UNCG Data Accountability Group (DAG), but affectionately known across campus as “Whackamole.” This committee engaged subject matter experts across campus in identifying and remediating data quality issues. The members of this committee have been subsumed into the current Data Stewards Committee.

Alice received her Bachelor of Arts degree in Anthropology from UNCG in 2014 and received her Master of Library and Information Science also from UNCG in 2022. Her studies in metadata during the MLIS program stirred an interest in metadata and data management and opened the door to her current position.

Reporting Metadata Specialist – Jessica Dame

Jessica Dame joined the Enterprise Data Governance team in October 2022 as the Reporting Metadata Specialist. Jessica was previously employed in a temporary position with Jackson Library working as an Archives and Records Technician. Her work included expanding the development of the online web archive collection hosted by Archive-IT, authoring a collection development policy as well as a user manual for her position. She performed metadata work on the Digital Library on American Slavery in the form of data elements and controlled vocabularies. In a previous position with the South Carolina State Library, Jessica served as the Digital Curation and Preservation Librarian managed several digital collections during her time there. Her work included the development of metadata standards and guidelines.

Jessica received her Bachelor of Arts in Art History from Christopher Newport University in Newport News, VA, in 2010, and her Master of Library and Information Science from the University of South Carolina in 2012. She brings a wealth of metadata experience to her new position.

Systems Metadata Specialist – Madison Turner

Madison Turner joined the Enterprise Data Governance team in November 2022 as the Systems Metadata Specialist. Madison was previously employed as a Data Catalog Curator with MetLife and gained experience with the Collibra Data Intelligence platform. Madison partnered with community managers to facilitate the onboarding of their metadata, which required her to become very familiar with the data of each community with which she worked and to engage in significant collaboration working with subject matter experts and solution architects to organize the company’s metadata. She

has developed Standard Operating Procedures and User Guides for the system and developed BI reports providing real time answers to stakeholders. This and her previous work experiences and education has equipped her with valuable skills that now transfer to UNCG.

Madison received her Bachelor of Arts degree in English from UNCG in 2018 and continued on to receive her Master of Library and Information Science also from UNCG in 2022.

Data Quality Specialist – Serhiy Polyakov

Serhiy Polyakov will join the Enterprise Data Governance team in February 2023 as the Data Quality Specialist. Serhiy is currently employed as the Data Management Librarian at Weill Cornell Medicine-Qatar, where he has been since 2016. Serhiy is a Ukrainian national with permanent US Resident status. He is in the process of transitioning back to the US from Qatar. His work at Weill Cornell has included the development of data management services for the organization, facilitating the management and sharing of research data throughout the data lifecycle. His focus has been on applying best practices to the collection, description, preservation, access, and reuse of research data. The development of this program required significant collaboration with faculty and staff and the development and presentation of training materials. Serhiy brings skills in database systems, programming and scripting, data collection, analytics, and visualization development as well as data quality management. He has worked with a variety of digital libraries, repositories, and content management systems. He tells us that data quality is his passion and he is bringing a prodigious skillset to UNCG with which to develop our Data Quality Program.

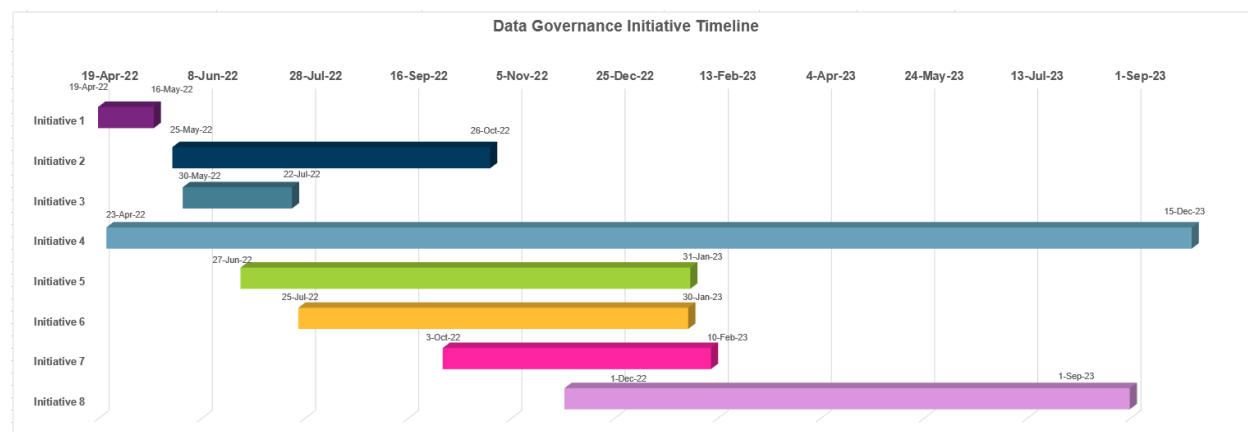
Serhiy received a Master of Science in Electrification and Automation of Agriculture from National Agricultural University in Kyiv, Ukraine in 1997. He received his Master of Science in Information Science from the University of North Texas in 2004, and his Doctorate in Information Science also from the University of North Texas in 2015. We are looking forward to having him join the team.

Appendices

Appendix A – Data Governance Roadmap

The development and implementation of Data Governance at UNCG is assisted by a roadmap of initiatives. The current roadmap has 133 action items, of which 87 have been completed as of the date of this report (65% complete). The initiatives described below cover areas such as the initial development of the governance framework and program, the drafting of policies and standards, the establishment of committees (including procedures and norms), the development and implementation of a metadata management program, designing and building a Data Governance website, developing reporting channels and tools, and the development and implementation of a data quality program.

Data Governance Timeline:



Initiative 1: Roles, Responsibilities & Culture

Description: The first phase of the Data Governance initiative roadmap is to establish the roles, responsibilities, and structure for the Data Governance Committee members.

Initiative Owner: Data Governance Committee

Dates: April 19, 2022 – May 16, 2022 (27 days)

Prerequisites: Understanding of existing roles and responsibilities. Understanding necessary changes to roles and responsibilities.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Path |
|-----------------------------------|-------------------------------|----------|------------|-----------|----------|---------------|
| Define roles and responsibilities | Alice Herring, BerryDunn Team | Yes | 19-Apr-22 | 10-May-22 | 21 | Yes |
| Define governance structure | Alice Herring, BerryDunn Team | Yes | 19-Apr-22 | 16-May-22 | 27 | Yes |
| Define committee membership | Alice Herring, BerryDunn Team | Yes | 5-May-22 | 16-May-22 | 11 | Yes |

Initiative 2: Establish Data Governance Policies, Procedures, and Norms

Description: Define policies for data governance and metadata management, include data governance operations, decision making processes; establish data governing guidelines for UNCG

Initiative Owner: Data Trustees, Data Stewards

Dates: May 25, 2022 – October 26, 2022 (154 days)

Prerequisites: Understanding of scope: identifying which policies exist currently, what is needed, including data security, data access, and privacy and confidentiality. Identification of parties to write policies. Formal approval process for new and revised policies. Understanding what procedures exist and what procedures/policies are needed. Understand what change management policies, plans, and processes exist now. Establish scope of change management regarding data governance. Build stakeholder engagement and Executive sponsorship.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Path |
|--|-------------------------------|----------|------------|-----------|----------|---------------|
| Schedule committee kickoff meetings | Alice Herring | Yes | 25-May-22 | 25-May-22 | 0 | Yes |
| Determine what policies and procedures need to be written for Data Governance | Alice Herring, BerryDunn Team | Yes | 26-May-22 | 26-May-22 | 0 | Yes |
| Write Policies (See Data Governance Policies) | Alice Herring, BerryDunn Team | 50% | 30-May-22 | 17-Aug-22 | 79 | Yes |
| Write Procedures (See Data Governance Procedures) | Alice Herring, BerryDunn Team | 100% | 30-May-22 | 17-Aug-22 | 79 | Yes |
| Identify policy template | Alice Herring, BerryDunn Team | Yes | 31-May-22 | 1-Jun-22 | 1 | No |
| Meeting to identify elements to be included in policies | Alice Herring, BerryDunn Team | Yes | 31-May-22 | 2-Jun-22 | 2 | No |
| BerryDunn provides draft policies to Alice Herring | BerryDunn Team | Yes | 31-May-22 | 17-Jun-22 | 17 | Yes |
| Meeting to edit Data Classification Policy | Alice Herring, Casey Forrest | Yes | 1-Jun-22 | 1-Jun-22 | 0 | No |
| Alice Herring provides policies to focus groups for review | Alice Herring | Yes | 9-Jun-22 | 10-Jun-22 | 1 | Yes |
| Focus groups review policies and provides feedback | UNCG Focus Groups | Yes | 9-Jun-22 | 17-Jun-22 | 8 | Yes |
| Transition metadata management and data integration policies to standards | BerryDunn Team | Yes | 13-Jun-22 | 15-Jun-22 | 2 | Yes |
| Meetings between BerryDunn and UNCG to discuss procedures | Alice Herring, BerryDunn Team | Yes | 15-Jun-22 | 15-Jun-22 | 0 | Yes |
| Schedule meeting with ESC and provide documentation of roles, responsibilities, and structure in advance | Alice Herring | Yes | 16-Jun-22 | 17-Jun-22 | 1 | Yes |
| Draft appointment letters for the Data Governance Committees | BerryDunn Team | Yes | 17-Jun-22 | 24-Jun-22 | 7 | Yes |
| Provide draft policies to the ESC for review before discussion (DG Structure Policy and Charter) | Alice Herring, BerryDunn Team | Yes | 17-Jun-22 | 17-Jun-22 | 0 | Yes |
| Focus group policy feedback is addressed by Casey Forrest, Alice Herring, and BerryDunn team | Alice Herring, BerryDunn Team | Yes | 17-Jun-22 | 20-Jun-22 | 3 | Yes |
| Incorporate feedback for policies, procedures, and charter (DG Structure Policy and Metadata Standard) | Alice Herring, BerryDunn Team | Yes | 20-Jun-22 | 24-Jun-22 | 4 | Yes |
| Incorporate feedback to appointment letters | BerryDunn Team | Yes | 20-Jun-22 | 25-Jun-22 | 5 | No |
| ESC provides feedback for draft policies, procedures, and charter documentation (DG Structure Policy and Charter) | Alice Herring | Yes | 21-Jun-22 | 22-Jun-22 | 1 | Yes |
| Feedback from ESC is addressed (DG Structure Policy and Charter) | Alice Herring, BerryDunn Team | Yes | 22-Jun-22 | 24-Jun-22 | 2 | Yes |
| Incorporate responsibilities of Data Governance team members in public job descriptions | Alice Herring, BerryDunn Team | No | 1-Dec-22 | 30-Mar-23 | 119 | Yes |
| Review appointment letters | Alice Herring | Yes | 24-Jun-22 | 24-Jun-22 | 0 | No |
| Publish roles, responsibilities, structure, and committee membership to the IT Gov website | Alice Herring | Yes | 21-Jul-22 | 22-Jul-22 | 1 | No |
| Submit appointment letter drafts to the ESC (Donna Heath) for review | Alice Herring | Yes | 27-Jun-22 | 27-Jun-22 | 0 | No |
| ITS management reviews policies and provide feedback on draft policies (DG Structure Policy and Metadata Standard) | Casey Forrest, ITS Mgmt. | Yes | 27-Jun-22 | 8-Jul-22 | 11 | Yes |

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Path |
|---|-------------------------------|----------|------------|-----------|----------|---------------|
| ITS management policy feedback is addressed by Casey Forrest, Alice Herring, and BerryDunn team (DG Structure Policy and Metadata Standard) | Alice Herring, BerryDunn Team | Yes | 11-Jul-22 | 13-Jul-22 | 2 | Yes |
| Provide draft policies to ESC for review and feedback (DG Structure Policy and Metadata Standard) | Alice Herring, BerryDunn Team | Yes | 13-Jul-22 | 15-Jul-22 | 2 | No |
| Provide draft policies to DSC for review before discussion (DG Structure Policy and Metadata Standard) | Alice Herring, BerryDunn Team | Yes | 13-Jul-22 | 20-Jul-22 | 7 | No |
| Submit draft policies to Policy Approval Group (DG Structure Policy) | Alice Herring, Casey Forrest | Yes | 25-Jul-22 | 25-Jul-22 | 0 | No |
| Obtain ITS approval for Metadata Standard | Alice Herring, Casey Forrest | Yes | 1-Aug-22 | 30-Sep-22 | 60 | No |
| Provide draft procedures to DTC for review | Alice Herring, BerryDunn Team | Yes | 22-Aug-22 | 22-Aug-22 | 0 | Yes |
| Communicate committee membership to the ESC | Alice Herring, BerryDunn Team | Yes | 13-Jul-22 | 13-Jul-22 | 0 | Yes |
| Discuss draft policies with the DTC (DG Structure Policy and Metadata Standard) | Alice Herring, BerryDunn Team | Yes | 20-Jul-22 | 20-Jul-22 | 0 | Yes |
| Distribute appointment letters in advance of August 22 meeting | ESC | Yes | 21-Jul-22 | 22-Jul-22 | 1 | Yes |
| Target to have Data Governance Procedures completed in advance of August meeting | BerryDunn Team | Yes | 24-Aug-22 | 24-Aug-22 | 0 | Yes |
| Data governance structure policy submitted to the policy review group | Alice Herring, Casey Forrest | Yes | 25-Jul-22 | 25-Jul-22 | 0 | Yes |
| Prepare for Data Trustees Kickoff Meeting (8/24) | Alice Herring, BerryDunn Team | Yes | 10-Aug-22 | 19-Aug-22 | 9 | No |
| Prepare for Data Stewards Kickoff Meeting (9/14) | Alice Herring, BerryDunn Team | Yes | 1-Sep-22 | 12-Sep-22 | 11 | No |
| Prepare for A-team Meeting intro to Data Governance (9/14) | Alice Herring, BerryDunn Team | Yes | 1-Sep-22 | 12-Sep-22 | 11 | No |
| Data Stewards Kickoff Meeting | AH, BD, DS | Yes | 14-Sep-22 | 14-Sep-22 | 0 | No |
| Meet with A-team intro to Data Governance | Alice Herring, BerryDunn Team | Yes | 14-Sep-22 | 14-Sep-22 | 0 | No |
| Document ground rules, foundation, and etiquette for governance operations | Alice Herring, BerryDunn Team | Yes | 1-Aug-22 | 19-Aug-22 | 18 | No |
| Provide IT Leadership Policies and Procedures for Review (Data Integrity Policy and Data Integration Standard) | Alice Herring, BerryDunn Team | Yes | 15-Aug-22 | 26-Aug-22 | 11 | Yes |
| IT Leadership provides feedback to Policies and Procedures (Data Integrity Policy and Data Integration Standard) | ITS | Yes | 22-Aug-22 | 26-Aug-22 | 4 | No |
| Incorporate ITS feedback to Policies and Procedures (Data Integrity Policy and Data Integration Standard) | Alice Herring, BerryDunn Team | Yes | 29-Aug-22 | 2-Sep-22 | 4 | No |
| Communicate policies and procedures to DSC and DTC in advance of September meeting (Data Integrity Policy and Data Integration Standard) | Alice Herring, BerryDunn Team | Yes | 13-Sep-22 | 30-Sep-22 | 17 | Yes |
| Meeting with ESC and DTC to discuss policies and procedures (Data Integrity Policy and Data Integration Standard) | Alice Herring | Yes | 26-Oct-22 | 26-Oct-22 | 0 | Yes |
| Policy and Procedure feedback is addressed (Data Integrity Policy and Data Integration Standard) | BerryDunn Team | Yes | 26-Oct-22 | 14-Nov-22 | 19 | Yes |
| Communicate ground rules, foundation, and etiquette to Data Governance team members | Alice Herring | Yes | 22-Aug-22 | 14-Sep-22 | 23 | No |

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Path |
|--|-------------------------------|----------|------------|-----------|----------|---------------|
| Receive feedback (ground rules, foundation, and etiquette) | Alice Herring, BerryDunn Team | Yes | 25-Aug-22 | 14-Sep-22 | 20 | No |
| Incorporate feedback (ground rules, foundation, and etiquette) | Alice Herring, BerryDunn Team | Yes | 1-Sep-22 | 21-Sep-22 | 20 | No |

Initiative 3: Develop and Gain Approval for Committee Charters

Description: Establishing ground rules, foundation, and etiquette for governance operations. Identifying charge: Program Title, Business Problem Statement, Program Goals List, Program Expected Results, Program Start Date, Program Manager Name and Title

Initiative Owners: Data Sponsor (ESC), Data Trustees, Data Stewards, Data Custodians

Dates: May 30, 2022 – July 22, 2022 (53 days)

Prerequisites: Review previous charters and decide what is retained. Research best practices for charters. Finalize role definitions and structure.

| | | | | | | |
|--|-------------------------------|-----|-----------|-----------|----|-----|
| Review previous charters and determine what should be retained | Alice Herring, BerryDunn Team | Yes | 30-May-22 | 1-Jun-22 | 2 | Yes |
| Develop Data Governance Charter. | Alice Herring, BerryDunn Team | Yes | 2-Jun-22 | 17-Jun-22 | 15 | Yes |
| Draft a charter | BerryDunn Team | Yes | 7-Jun-22 | 10-Jun-22 | 3 | Yes |
| Review by UNCG team | Alice Herring, Casey Forrest | Yes | 10-Jun-22 | 13-Jun-22 | 3 | Yes |
| Incorporate feedback | BerryDunn Team | Yes | 13-Jun-22 | 29-Jun-22 | 16 | Yes |
| Have Charter draft ready for June 22nd meeting | BerryDunn Team | Yes | 17-Jun-22 | 22-Jun-22 | 5 | Yes |
| Send Charter to DSC in advance of the meeting on the 22nd | Alice Herring, BerryDunn Team | Yes | 20-Jun-22 | 20-Jun-22 | 0 | No |
| Provide Charter draft to ESC for review | Alice Herring, BerryDunn Team | Yes | 21-Jun-22 | 22-Jun-22 | 1 | Yes |
| Present Charter to DSC for review | Alice Herring, BerryDunn Team | Yes | 22-Jun-22 | 22-Jun-22 | 0 | Yes |
| ESC and DSC provide feedback on Charter | ESC / DSC | Yes | 22-Jun-22 | 29-Jun-22 | 7 | Yes |
| Feedback from ESC and DSC is addressed | BerryDunn Team | Yes | 29-Jun-22 | 1-Jul-22 | 2 | No |

Initiative 4: Metadata Collection & Management

Description: Select, procure, and implement tool to manage metadata. Implement program for ongoing collection and management of metadata and maintenance of the business model. Recruit, hire, and develop three full-time professional staff members for the Enterprise Data Governance team.

Initiative Owners: Data Sponsor (ESC), Data Custodians

Dates: April 23, 2022 – December 15, 2023 (601 days)

Prerequisites: Identify proof of concept. Complete the RFP. Develop positions, obtain necessary approvals for hiring.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Path |
|--|-------------------------------|----------|------------|-----------|----------|---------------|
| Identify proof of concept for the metadata management tool | Alice Herring | Yes | 23-Apr-22 | 4-May-22 | 11 | Yes |
| Demo Collibra | Alice Herring | Yes | 3-Jun-22 | 5-Jun-22 | 2 | Yes |
| Select the metadata management tool | Alice Herring | Yes | 20-Jun-22 | 5-Aug-22 | 46 | Yes |
| Implement the chosen metadata management tool | Alice Herring | No | 20-Aug-22 | 13-Feb-23 | 177 | No |
| Procure the chosen metadata management tool | Alice Herring | Yes | 29-Aug-22 | 29-Aug-22 | 0 | No |
| Submit purchase request and project demand | Alice Herring | Yes | 9-Aug-22 | 15-Aug-22 | 6 | No |
| Identify training requirements for the metadata management tool to educate stakeholders | Alice Herring, BerryDunn Team | No | 3-Oct-22 | 13-Feb-23 | 133 | No |
| Develop training materials (including vendor resources) to educate stakeholders (See Training Materials) | Alice Herring, BerryDunn Team | 100% | 7-Oct-22 | 28-Feb-23 | 144 | No |
| Complete the initial data load | Alice Herring | No | 7-Nov-22 | 9-Jan-23 | 63 | No |
| Develop a timeline for training stakeholders on the metadata management tool | Alice Herring, BerryDunn Team | No | 7-Nov-22 | 28-Feb-23 | 113 | No |
| Test the chosen metadata management tool | Alice Herring | No | 8-Nov-22 | 16-Jan-23 | 69 | No |
| Communicate the metadata collection process to Data Governance stakeholders | Alice Herring | No | 12-Nov-22 | 28-Feb-23 | 108 | No |
| Communicate the training timeline and materials to appropriate Data Governance team members | Alice Herring | No | 12-Nov-22 | 28-Feb-23 | 108 | No |
| Hire Systems Metadata Specialist | Alice Herring | Yes | 1-Jul-22 | 7-Nov-22 | 129 | No |
| Hire Reporting Metadata Specialist | Alice Herring | Yes | 1-Jul-22 | 10-Oct-22 | 101 | No |
| Hire Data Quality Specialist | Alice Herring | Yes | 1-Jul-22 | 9-Nov-22 | 131 | No |
| Retire current Data Data Cookbook implementation (if iData is not the tool selected) | Alice Herring, UNCG ITS | Yes | 20-Aug-22 | 20-Aug-22 | 0 | No |
| Implement training timeline activities | Alice Herring, EDG Team | No | 14-Nov-22 | 28-Feb-23 | 106 | No |
| Baseline Modeling Round 2 - Person SA Adjustments | Alice Herring, EDG Team | No | 22-Nov-22 | 9-Jan-23 | 48 | No |
| Baseline Modeling Round 2 (continued) - Advancement SA | Alice Herring, EDG Team | No | 12-Dec-22 | 28-Feb-23 | 78 | No |
| Baseline Modeling Round 2 (continued) - Housing, Student Affairs SA | Alice Herring, EDG Team | No | 12-Dec-22 | 28-Feb-23 | 78 | No |
| Baseline Modeling Round 2 (continued) - Procurement, Contracts & Grants, Finance SA | Alice Herring, EDG Team | No | 12-Dec-22 | 28-Feb-23 | 78 | No |
| Baseline Modeling Round 3 - Student Success SA | Alice Herring, EDG Team | No | 1-Mar-23 | 14-Apr-23 | 44 | No |
| Baseline Modeling Round 3 - Research & Engagement SA | Alice Herring, EDG Team | No | 1-Mar-23 | 14-Apr-23 | 44 | No |
| Baseline Modeling Round 4 - Administration SA | Alice Herring, EDG Team | No | 17-Apr-23 | 31-May-23 | 44 | No |

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Pa |
|--|-------------------------|----------|------------|-----------|----------|-------------|
| Baseline Modeling Round 4 - Facilities & Services SA | Alice Herring, EDG Team | No | 17-Apr-23 | 31-May-23 | 44 | No |
| Baseline Modeling Round 5 - University Libraries SA | Alice Herring, EDG Team | No | 1-Jun-23 | 30-Jun-23 | 29 | No |
| Metadata Collection Track 1 - Student SA | Alice Herring, EDG Team | No | 1-Mar-23 | 14-Apr-23 | 44 | No |
| Metadata Collection Track 1 - Person SA | Alice Herring, EDG Team | No | 1-Mar-23 | 14-Apr-23 | 44 | No |
| Metadata Collection Track 1 - Admissions SA | Alice Herring, EDG Team | No | 1-Mar-23 | 14-Apr-23 | 44 | No |
| Metadata Collection Track 2 - Human Resources SA | Alice Herring, EDG Team | No | 17-Apr-23 | 31-May-23 | 44 | No |
| Metadata Collection Track 2 - Finance SA | Alice Herring, EDG Team | No | 17-Apr-23 | 31-May-23 | 44 | No |
| Metadata Collection Track 3 - Advancement SA | Alice Herring, EDG Team | No | 1-Jun-23 | 14-Jul-23 | 43 | No |
| Metadata Collection Track 3 - Student Accounts SA | Alice Herring, EDG Team | No | 1-Jun-23 | 14-Jul-23 | 43 | No |
| Metadata Collection Track 4 - Student Affairs SA | Alice Herring, EDG Team | No | 17-Jul-23 | 15-Sep-23 | 60 | No |
| Metadata Collection Track 4 - Student Success SA | Alice Herring, EDG Team | No | 17-Jul-23 | 15-Sep-23 | 60 | No |
| Metadata Collection Track 5 - Research & Engagement SA | Alice Herring, EDG Team | No | 18-Sep-23 | 27-Oct-23 | 39 | No |
| Metadata Collection Track 5 - Administration SA | Alice Herring, EDG Team | No | 18-Sep-23 | 27-Oct-23 | 39 | No |
| Metadata Collection Track 6 - Facilities & Services SA | Alice Herring, EDG Team | No | 30-Oct-23 | 15-Dec-23 | 46 | No |
| Metadata Collection Track 6 - University Libraries | Alice Herring, EDG Team | No | 30-Oct-23 | 15-Dec-23 | 46 | No |

Initiative 5: Develop Training Materials and Provide Training to Stakeholders

Description: Develop training materials to educate stakeholders on data governance.

Initiative Owners: Data Trustees, Data Stewards, Data Custodians, Data Users

Dates: June 27, 2022 – January 23, 2023 (218 days)

Prerequisites: Initiative 1, Initiative 3, Informed by change management plan.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Pa |
|--|-------------------------------|----------|------------|-----------|----------|-------------|
| Develop list of training materials (See Training Materials) | Alice Herring, BerryDunn Team | Yes | 27-Jun-22 | 1-Jul-22 | 4 | Yes |
| Develop training materials for Data Governance | Alice Herring, BerryDunn Team | 100% | 11-Jul-22 | 26-Oct-22 | 107 | No |
| Develop pre and post quizzes to assess training effectiveness | Alice Herring | Yes | 17-Oct-22 | 26-Oct-22 | 9 | No |
| Complete pre and post quizzes to assess training effectiveness | Alice Herring | Yes | 17-Oct-22 | 1-Dec-22 | 45 | No |
| Initiate Training | Alice Herring, BerryDunn Team | Yes | 3-Oct-22 | 1-Dec-22 | 59 | Yes |
| Establish cadence and mechanism for recurring training | Alice Herring, BerryDunn Team | Yes | 10-Oct-22 | 14-Nov-22 | 35 | No |
| Administer training to Data Governance team members | Alice Herring | Yes | 17-Oct-22 | 31-Jan-23 | 106 | Yes |
| Publish training materials to Canvas course | Alice Herring | Yes | 14-Nov-22 | 9-Dec-22 | 25 | No |

Initiative 6: Data Governance Website Development

Description: Create and Publish Data Governance Web Page

Initiative Owners: Data Trustees, Data Stewards, Data Custodians, Data Users

Dates: July 25, 2022 – January 30, 2023 (189 days)

Prerequisites: Next Gen university web development launched. Initiative 1, Initiative 3, Informed by change management plan.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Pa |
|--|-----------------------------|----------|------------|-----------|----------|-------------|
| DG Website Strategy, Objectives, and Scope Development (Strategy and objectives statement) | Alice Herring | Yes | 25-Jul-22 | 12-Aug-22 | 18 | No |
| DG Website Structure Development (conceptual model, user segmentation of pages) | Alice Herring | Yes | 12-Aug-22 | 18-Nov-22 | 98 | No |
| DG Information Architecture (content structure and organization) | Alice Herring and Kelly Fei | No | 4-Nov-22 | 16-Dec-22 | 42 | No |
| DG Website skeleton and surface design | Alice Herring and Kelly Fei | No | 14-Nov-22 | 13-Jan-23 | 60 | No |
| User testing of DG website | Alice Herring and Kelly Fei | No | 3-Jan-23 | 20-Jan-23 | 17 | No |

Initiative 7: Annual Reporting & Data Governance Continuity

Description: Identify annual reporting requirements and develop reporting dashboards/metrics

Initiative Owners: Data Trustees, Data Stewards, Data Custodians, Data Users

Dates: October 3, 2022 – February 10, 2023 (130 days)

Prerequisites: Initiative 1, Initiative 3, Informed by change management plan.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Pa |
|--|-------------------------------|----------|------------|-----------|----------|-------------|
| Identify annual reporting requirements and metrics | Alice Herring, BerryDunn Team | Yes | 3-Oct-22 | 16-Nov-22 | 44 | No |
| Assess reporting capabilities and procedures | Alice Herring, BerryDunn Team | Yes | 25-Oct-22 | 1-Dec-22 | 37 | No |
| Develop standardized reporting templates | Alice Herring, BerryDunn Team | No | 13-Jan-23 | 27-Jan-23 | 14 | No |
| Design project tracking template | Alice Herring, BerryDunn Team | No | 30-Jan-23 | 10-Feb-23 | 11 | No |

Initiative 8: Data Quality Program Development

Description: Develop and implement the Data Quality Program

Initiative Owners: Data Trustees, Data Stewards, Data Custodians, Data Users

Dates: December 1, 2022 – September 1, 2023 (274 days)

Prerequisites: Data Quality Specialist is hired and onboarded. Initiative 1, Initiative 3, Informed by change management plan.

| Action Item | Assigned to | Complete | Start Date | End Date | Duration | Critical Pa |
|--|----------------------------------|----------|------------|-----------|----------|-------------|
| Identify available data quality tools and tool gaps | Alice Herring, EDG Team | Yes | 1-Dec-22 | 14-Dec-22 | 13 | No |
| Define data quality | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | No |
| Define data quality goals: proactive and reactive | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | No |
| Begin developing data quality rules | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | Yes |
| Develop data quality score cards | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | Yes |
| Develop an assessment process, rubric, and review cycle for data quality | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | No |
| Develop triage process | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | Yes |
| Develop communication plan | Alice Herring, EDG Team, BerryDu | No | 1-Feb-23 | 7-Feb-23 | 6 | Yes |

Appendix B – Roles & Responsibilities, Data Governance Framework

Roles & Responsibilities

Excerpt from the Data Governance Structure policy currently under review for approval.

3. Definitions, Roles, and Responsibilities

The following are the descriptions of the primary roles and responsibilities within the Data Governance Structure.

1.1 | Data Sponsor

Role Description

The Data Sponsor provides executive-level sponsorship and support of UNCG data governance activities.

Responsibilities

The Executive Steering Committee (ESC) serves as the current Data Sponsor for UNCG data governance. The Data Sponsor (i.e., the ESC) is trained, qualified, and responsible for supporting and sponsoring data governance initiatives. The

Data Sponsor clears barriers to effective data governance and has a key role in communicating enterprise-wide initiatives to campus stakeholders. The Data Sponsor is regularly informed of data governance efforts and policy initiatives. Additionally, the Data Sponsor is responsible for securing funding for data governance activities and approving enterprise-level data governance policies. Data Sponsors understand the importance of sponsorship and support required for institutional data governance. Data Sponsors are accountable for governing institutional data in a safe and responsible manner.

The Data Sponsor will appoint Data Trustees and, through the establishment of data policies and institutional priorities, provide direction to them, Data Stewards, and Data Custodians. Data Governance (DG) at UNCG is comprised of the Executive Steering Committee (Data Sponsor), Data Trustees, and Data Stewards Committees that meet regularly to address data governance initiatives, issues, and concerns.

The Data Sponsor delegates authority and responsibility for the management and governance of institutional data to the Data Governance bodies of Data Trustees and Data Stewards. Members of these committees are authorized to make campus-wide rules and key decisions regarding the treatment of institutional data and enforce the Data Governance and Data Quality programs within their data domains in accordance with the Data Governance Charter.

Communication Expectations

Data Governance members will communicate bi-annually with the Data Sponsor (i.e., the ESC), in addition to other communication as deemed necessary. This expectation will be met by either the Data Governance Committee Chairs or the Enterprise Data Governance Manager attending a scheduled ESC meeting to provide an activity update twice per year. Other communication with the ESC will be handled via the Enterprise Data Governance Manager through the Vice Chancellor for Information Technology Services, who serves on the ESC.

Decision Making

The Data Sponsor decision making responsibilities include:

- Strategic planning of data governance initiatives
- Prioritization of data governance initiatives
- Approval of major changes in Information Technology (IT) services

- Data compliance decisions

1.2 | Data Trustee or Business Stewards

Role Description

A Data Trustee is a senior University official (or their designee) who has planning and policy-level responsibilities for data within their functional areas and management responsibilities for defined segments of institutional data.

Responsibilities

Data Trustees are responsible for assigning Data Stewards, participating in establishing policies and standards, and promoting data resource management for the good of the University. A Data Trustee plans and sets data policy and responds to data access and policy or standards implementation issues.

Data Trustees are responsible for planning and prioritizing data governance projects and initiatives. Data Trustees assign Data Stewards and communicate with Data Sponsors and Data Stewards within their domain. Data Trustees develop, approve, and support data policies and promote data resource management. Data Trustees are responsible for responding to access and policy implementation issues and outline training framework for Data Stewards and Users. Data Trustees may serve as consultants for Data Stewards and can implement data standards. Additionally, Data Trustees establish, review, and report on Key Performance Indicators (KPIs) aligned with the strategic plan. Data Trustees also approve data access requests for the University. Data Trustees are trained, qualified, and understand implications of planning and policy-level decisions related to data within their functional areas. Data Trustees are held accountable for working with institutional data in a safe and responsible manner. Data Trustees are also responsible for approval of data classification levels, and data storage and classification at each classification level.

Communication Expectations

Data Trustees communicate monthly with Data Stewards regarding policy management. Meetings may be merged to streamline meetings among Data Stewards.

Decision Making

Data Trustees' decision-making responsibilities include:

- Reviewing changes made by Data Stewards

- Establishing, implementing, and enforcing standards
- Developing, revising, and enforcing policies
- Developing the data strategy to align with the University's strategic plans
- Developing and/or defining KPIs
- Approving access requests, as appropriate

1.3 | Data Steward

Role Description

A Data Steward is a University official with direct operational-level responsibility for information management.

Responsibilities

Data Stewards (Operational Data Stewards, Technical Stewards, or Data and Information Stewards) are responsible for operational-level metadata management and ensuring data quality. Data Stewards help build data literacy and have direct hands-on data responsibilities. Data Stewards handle data inquiries, train and onboard new staff, and elevate policy or standards changes to Data Trustees. Data Stewards are trained, qualified, and understand the implications of data management and quality across the institution. Data Stewards are held accountable for working with institutional data in a safe and responsible manner.

Communication Expectations

Data Stewards (Operational Data Stewards, Technical Stewards, or Data and Information Stewards) communicate monthly with Data Trustees (or Business Stewards) regarding policy management. Meetings may be merged to streamline meetings among Data Stewards.

Decision Making

Data Stewards' decision-making responsibilities include:

- Approving changes (reference (new codes) and master data changes)
- Developing metadata terms and definitions
- Setting data quality rules
- Setting business data rules
- Making changes to data processes

1.4 | Technology Custodian

Role Description

Information Technology Services (ITS) and distributed campus technology personnel serve as Technology Custodians. Technology Custodians provide a secure infrastructure in support of the data including, but not limited to, providing physical security, backup and recovery processes, granting access privileges to system users with approvals as required by the Data Trustees (or their designees), and implementing and administering controls over the information.

Responsibilities

ITS and distributed technology personnel serve as Technology Custodian and responsibilities include, but are not limited to, providing a secure infrastructure, ensuring system availability and adequate response time, and granting access privileges to system users. Technology Custodians remove access as necessary in a timely manner, implement and administer controls over information, and participate in setting data governance priorities. Additionally, Technology Custodians are responsible for the review and audit of data classification policies, and data storage and handling requirements.

Technology Custodians are trained, qualified, and understand the implications of managing data environments securely. It is important that ITS and distributed technology personnel work collaboratively to meet the data needs of the campus community. Technology Custodians are held accountable for working with institutional data in a safe and responsible manner.

Communication Expectations

Technology Custodians have representatives on the data governance committees who meet monthly and share information back to the larger group via current communication paths. Technology Custodians will have the opportunity to participate in meetings regarding data or policy management as needed.

Decision Making

Technology Custodians decision-making responsibilities include:

- ITS-related decisions
- Architecture (Hardware/Software) and cloud decisions
- Infrastructure, integration, and reporting decisions

- Data access management

1.5 | Data User

Role Description

Data Users are individuals who need and use University data as part of their assigned duties or in fulfillment of assigned roles or functions within the University community. Individuals who are given access to sensitive data have a position of special trust and as such, are responsible for protecting the security and integrity of the data. There is an expectation of accountability in working with institutional data.

Responsibilities

Data Users need and use University data with the understanding of the importance of data and its impacts (i.e., security, integrity, quality, consistency, handling, and dissemination). Data Users who have access to sensitive data carry a position of trust within the University. Data Users are champions in their areas of expertise, and report concerns related to data management and protections. Data Users are aware of the classification of the data with which they work, and usage is compliant with Federal and State regulations as well as University policy. Data Users are trained, qualified, and understand the up-stream and down-stream implications of creating variants of conformed business terms for local use. Data Users are held accountable for working with institutional data in a safe and responsible manner.

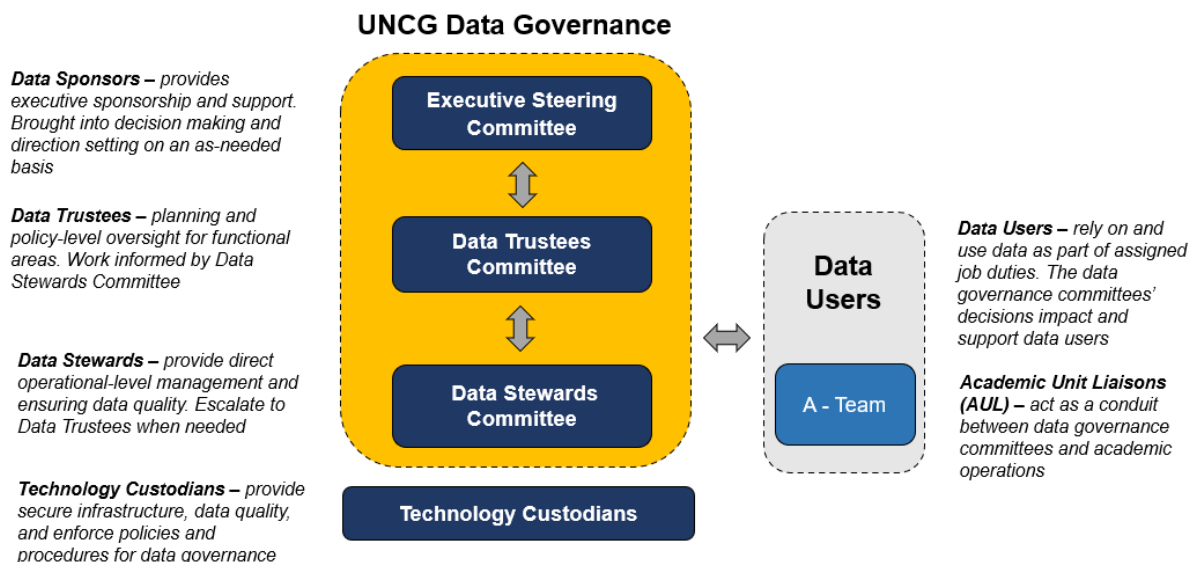
Communication Expectations

Data Users receive quarterly and annual communications from the Enterprise Data Governance Team regarding policy management or data standards and may participate in weekly communication with those maintaining the Business Data Model.

Decision Making

Not applicable

Data Governance Framework



Appendix C – Policies, Procedures and Norms

Data Governance Structure Policy

The Data Governance Structure Policy codifies the existence of Data Governance at UNCG and the structure it will take. It provides the authority to the committees to do their work within the scope of the charter. This policy was reviewed under the previous Data Stewardship Council and is now undergoing review by the Policy Approval Group. The policy draft is available in Box here:

<https://uncg.box.com/s/kuyimlrtq2tgewf459xnqoage5n8fgn6>

Metadata Collection & Management Standard

The Metadata Collection and Management standard provides requirements for the collection, management, and storage of metadata and stipulates that the process of metadata collection and management is handled by the Data Stewards. This standard is currently undergoing the IT Standards Approval process. The standard has been approved and is published in the 6-Tech Knowledge Base here:

https://uncg.service-now.com/kb?id=kb_article_view&sysparm_article=KB0011893

Data Integrity Policy

The core purpose of the Data Integrity policy is to “improve the integrity of the data, resulting in greater accuracy, timeliness, and quality of information for decision-making.” This policy is being developed to improve the overall integrity of university data by establishing that all members of the UNCG community who create, collect, store, manage, or use institutional data are accountable for the accuracy of that data. The policy codifies that responsibility and asserts that accountability for accuracy extends to compliance with protection and control methods and requires accurate presentation of the data. The policy further assigns the responsibility for overseeing information management and data integrity to the Data Stewards Committee, who are operational level administrators responsible for data quality and

metadata management. This policy is intended to support the development of standards which address the quality and integrity of institutional data. The current draft of this policy is available on Google Drive here: https://docs.google.com/document/d/1_2ZXd2LvurLMp7zmAAGZSI5Gz-GqarVW/edit?usp=share_link&ouid=117855372849101037699&rtpof=true&sd=true

Data Integration Standard

The core purpose of the Data Integration Standard is to set the requirement that systems that store, process, and interact with institutional data must conform to defined policies of data integration in order that they may interact with existing systems and integrations. The standard is intended to improve the overall interaction between data systems and ensure compliance with necessary requirements. Among the requirements included in the standard is the obligation to submit to the existing evaluation process by ITS, and to communicate the need for the use and storage of institutional data to both ITS and Data Governance. It stipulates the provision that integrations should be evaluated for compliance with security, access, and usage policies and compatibility with established technical architecture standards. The standard allows for the development of common integration methods to support standard definitions of institutional data regardless of technology and integration pattern. The standard is intended to support consistency in how institutional data is exposed and to guide the future development of systems and middleware. The current draft of this standard can be reviewed on Google Drive here:

https://docs.google.com/document/d/1u7Bz5nez63ollgHN2JEIkDs1bxPhSXBt/edit?usp=share_link&ouid=117855372849101037699&rtpof=true&sd=true

Appendix D – Metadata Collection & Management

Business Subject Area Model

The Business Subject Area Model is a high-level conceptual model of the information organization of the university. This is the starting point for the Business Data Model and provides us with the Subject Areas and Super Entities of the university information landscape.

Appendix E – Enterprise Data Governance Team Resumes

Resumes for all staff appear on pages following

Alice E. Herring, Enterprise Data Governance Manager

Alice E. Herring

(Resume contact info removed)

PROFESSIONAL SUMMARY

Motivated and conscientious Data Management Specialist with 10+ years of experience in technical and data analysis working in various projects in a higher education environment. Strong skills in collaboration and communication and proven ability in problem solving. With the ability to quickly learn new environments, systems, and policies, previous roles engendered success in data management and integrity, increased discoverability of data assets, and development of policies and practices for sensitive data.

EDUCATION

MASTER OF LIBRARY AND INFORMATION SCIENCE | 2022 | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

- Areas of concentration: Metadata, Information Management, Collection Management

BACHELOR OF ARTS | 2014 | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

- Major: Anthropology

ASSOCIATE OF ARTS | 1994 | SAINT MARY'S COLLEGE, RALEIGH, NC

- Major: Fine Arts | Concentration: Visual Art

SKILLS PROFILE

COMPUTING AND TECHNICAL

- Metadata development and management using tools such as Erwin Data Modeler by Quest, and iData Data Cookbook
- Reporting, qualitative and quantitative data analysis, data quality assurance, data management, access, evaluation, and support using software such as EAB Rapid Insight Veera Construct, SAS Enterprise Guide, and Tableau Desktop
- Database design, development, testing, implementation, and administration using tools such as Microsoft Access, Microsoft SQL Server, MySQL, VBA, Transact SQL, and ODBC
- Business & Technical Applications administration and support
- IBM PC/Microsoft platform hardware and software installation, training, troubleshooting, and maintenance
- Website management and versioning using Git, competence with HTML and CSS and web development software such as WordPress and Adobe Dreamweaver
- Technical procedural writing and process documentation, instructional video production

ADMINISTRATION AND COMMUNICATION

- Data management, data governance, metadata management, and data quality assurance
- Standards and policy development
- Program and technology solutions implementation and management
- Business practice and process review and development
- Research and information management
- Project management and collaboration
- Marketing document design and graphics
- Records management and maintenance
- Accounts management, financial reporting, and analysis
- Supervision of professional and student staff (management, professional development, scheduling, human resource coordination)

EXPERIENCE

ENTERPRISE DATA GOVERNANCE MANAGER | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | 2022- PRESENT

- Data governance program development and operationalization
- Oversight for enterprise level metadata management processes and systems

pronouns: she, her, hers, herself

(Resume contact info removed)

- Oversight for enterprise level data quality processes and systems
- Development of standards and policies related to Enterprise data governance, metadata management, and data quality assurance
- Assure compliance to standards and policies related to Enterprise data governance, metadata management, and data quality assurance
- Collaboration and communication with Data Governance bodies, stakeholders, and campus partners at all levels regarding Enterprise data governance, metadata management, and data quality assurance
- Supervise three (3) full-time professional staff and additional contract employees including hiring, management, professional development, scheduling, and human resources coordination

SENIOR METADATA SPECIALIST, INFORMATION TECHNOLOGY SERVICES | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | JANUARY 2022- MARCH 2022 (PROMOTED)

- Metadata development and management at an Enterprise level
- Development and management of logical business data model at the Enterprise level
- Development of standards and policies related to Enterprise metadata management
- Assure compliance to standards and policies related to Enterprise metadata management
- Collaboration and communication with Data Governance bodies, stakeholders, and campus partners at all levels to identify and define key business data elements

BUSINESS & TECHNICAL APPLICATIONS ANALYST, OFFICE OF INSTITUTIONAL RESEARCH & ANALYTICS | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | 2020-2022 (PROMOTED)

- Data quality assurance, management, analysis, and reporting
- Campus Administrator for UNC System Office systems: Student Data Mart and Insight
- Research and technical support, data management for specific software applications
- Process review and development, development of reporting guidelines and structures
- Development of use cases and best practices related to UNC System Office systems
- Project management and internal and external cross-unit and multi-level collaboration
- Extensive experience in data quality maintenance, analysis, and reporting of Ellucian Banner Student data
- Department technical support specialist

BUSINESS & TECHNICAL APPLICATIONS TECHNICIAN, OFFICE OF INSTITUTIONAL RESEARCH & ANALYTICS | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | 2015-2020 (PROMOTED)

- Data collection, analysis, and reporting
- External reporting and survey data support
- UNC System Office liaison for Student Data Mart
- Project management and collaboration
- Technical support, data integrity for specific software applications

TECHNICAL SUPPORT/OPERATIONS MANAGER, OFFICE OF INSTITUTIONAL RESEARCH & ANALYTICS | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | 2014-2015

- Data collection, analysis, and reporting
- Technical support, data integrity for specific software applications
- Administrative support, records management, financial reporting

DATABASE MANAGER, LEARNING ASSISTANCE CENTER | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG) | 2011-2014

- Database administration (design, develop, test, quality assurance)
- Analysis, reporting, cost projection, and data collection
- Department technical support and training specialist
- Supervise student staff including hiring, management, professional development, scheduling, and payroll

(Resume contact info removed)

OFFICE ASSISTANT, SPECIAL SUPPORT SERVICES | THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO (UNCG)
| 2004 - 2011

- Design, develop, test, administer program database
- Analysis and reporting, specifically Annual Performance Report to U. S. Department of Education
- Office administration, records management, financial reporting
- Marketing document design
- Supervise student staff including hiring, management, professional development, scheduling, and payroll
- Program technical support specialist

Employment information earlier than 2004 available upon request

PROFESSIONAL ACCOMPLISHMENTS

- Collaborated with a team of professional consultants and campus stakeholders and partners to develop and operationalize an Enterprise level Data Governance program including developing processes and implementing a technology solution for metadata management and data quality assurance.
- Collaborated with a professional consultant to develop an Enterprise level logical business data model showing the relationships of the various areas of the University through data used, resulting in increased understanding of data flow through business practices and improved reporting information.
- Developed and chaired (2019 - 2022) a committee oriented towards improvement of university-wide data quality resulting in a significant increase in data quality and overall campus commitment to data integrity.
- Collaborated with Enrollment Management Data Analyst to review and correct data issues prior to the Census data snapshot deadline and reduced time to post-snapshot official reporting by 12 weeks.
- Substantially expanded a Microsoft Access database to include tracking and reporting elements for academic skills resulting in increased reportability and improved support of student success.

PROFESSIONAL ACTIVITIES

COMMITTEES

Data Accountability Group (DAG) - Chair, 2019-2022

The DAG is responsible for identifying and resolving issues in institutional data to improve institutional data quality and integrity. In addition to ensuring accurate data for institution level internal and external reporting needs, the DAG is responsible for ensuring the accurate reporting of data via the UNC System Data Marts (Student, Human Resources, and Finance). As chair of this committee, I determine membership, develop agendas, track and report on issues surfaced and resolved, and facilitate discussions. I also report on committee activities to our oversight group, the Data Governance Committee, and members of executive administration. This committee involves a high level of collaboration and communication across the campus data management infrastructure.

Academic Programs Committee (APC) - Member, 2017-2022

The Academic Programs Committee addresses the need for information sharing between key administrative offices related to academic programs to ensure the integrity of curriculum and course data maintained by the University's administrative offices. As a member of this committee, I am involved in reporting relevant information to the group from an Institutional Research perspective and report information from the group to Institutional Research members.

Organization Change Team - Member, 2019-Present

The Organization Change Team provides a communication forum for organizational changes in unit, department, hierarchies, and movement of people to individuals who function as Data Trustees, Data Stewards, or Campus System Administrators. As a member of this committee, I am involved in reporting information regarding organizations changes back to my department and responsible for ensuring that said changes are reflected in the Student Data Mart data reported externally.

INTERNSHIP EXPERIENCE

Building Strong Library and Information Science Education (BSLISE) Intern - Fall 2019

During the Fall of 2019 I served as an Intern for the Building Strong Library and Information Science Education (BSLISE) Working Group. BSLISE (bslise.org) is an initiative of the International Foundation of Library Associations Education and Training Section (IFLA SET), LIS Education in Developing Countries Special Interest Group (IFLA SIG),

(Resume contact info removed)

and the Library Theory and Research Section (LTR) devoted to developing international standards for LIS education. My responsibilities during this internship involved working with the Communications Subgroup to develop and manage content for the BSLISE website and social media accounts. My work on the social media platforms dramatically increased followership on Facebook, Instagram, and Twitter. During the semester, in addition to the main work specific to my position, I developed a handbook of content and communication guidelines for the BSLISE Communications Subgroup.

Practicum Advisor: Dr. Anthony Chow formerly of UNC Greensboro, now at San Jose State University, San Jose, CA

Practicum Supervisor: Dr. Albina Krymskya of the Saint Petersburg State School of Culture, St. Petersburg, Russia

JESSICA DAME

(Resume contact info removed)

Experience

Archives and Records Technician

University of North Carolina at Greensboro

Greensboro, North Carolina (remote)

03/2020 – Present

- Developed a web archiving workflow and user manual for Archive-It web crawls.
- Created collection development guidelines for web archival collections across UNCG campus and the local Triad community.
- Create descriptive, technical, and structural metadata across web archive collections using Dublin Core Standards to comply with best practices.
- Maintain and apply quality control measures to the web archive and new web crawls.
- Update digital objects in ArchiveSpace to reflect the available seeds in Archive-It.
- Writing documentation for the Digital Library of American Slavery project, People Not Property, including a Data Dictionary and a User Guide.
- Providing guidance and support in the use of data elements and controlled vocabularies in the People Not Property Data Dictionary to bring consistency to data and use of inclusive and conscientious description.
- Approve and edit transcriptions of digitized materials using Scripto in Omeka.
- Metadata cleanup and quality control across digital collections following the merge from ContentDM to Islandora.
- Grant writing for the next phase of the Digital Library of American Slavery project, People Not Property.

Social Media Specialist

Dr. Teresa Johnson, PLLC

Plymouth, New Hampshire (remote)

12/2019 – 03/2021

- Generate, edit, publish and share daily content (original, text, images, video or HTML) that builds meaningful connections and encourages social media members to take action.
- Continuously improve by capturing and analyzing the appropriate social data/metrics, insights and best practices, and then acting on the information.
- Create and maintain ad campaigns across platforms.

Digital Curation and Preservation Librarian

South Carolina State Library

Columbia, South Carolina

11/2013 – 07/2019

- Created descriptive, technical, and structural metadata for digitized and born-digital content using Dublin Core Standards, and Library of Congress Subject Headings.
- Maintained and applied quality control measures for digital collections in DSpace digital management system.
- Collected born-digital state documents using Archive-It, created file names in a consistent convention, and placed the files into a filing system for inclusion in our digital collections based on urgency, agency, and need.
- Oversaw the preservation and conservation of the SC State Library's book collections, including the Rare Book Collection.
- Edited MARC records for the Special Collections to include conservation notes, and provenance history.
- Created exhibits for public display using the SC State Library collections.
- Performed outreach and training to state agency employees on the State Library's state documents acquisition process.
- Promoted digital resources for the South Carolina State Library and the South Carolina Digital Collections through social media, articles, and publications.
- Trained staff, interns, and public library employees around the state engaged in digitization and preservation.
- Documented workflows and best practices for digitization, metadata, and preservation.

Metadata Specialist

Georgetown University, Lauinger Memorial Library

Washington, DC

08/2012 - 10/2013

- Performed metadata production for description, access and preservation of print and digital resources using Dublin Core Standards.
- Cataloged resources using the appropriate metadata schemas to support Georgetown University Libraries'.
- Performed copy cataloging of incoming titles using Library of Congress Subject Headings, Library of Congress Classifications, and RDA standards.
- Performed trouble-shooting in DSpace for DigitalGeorgetown's collections and the overall accessibility and display.
- Provided maintenance and analysis of metadata for DigitalGeorgetown for quality assurance and access.
- Received and processed Firm order and Approval order invoices for multiple vendors.
- Monitored E-Resources email and trouble-shoot access issues to solve problems experienced by faculty, staff, and students.
- Provided maintenance and analysis of metadata and URLs in Serial Solutions, including providing up-to-date access to entitlements.
- Contributed to the revision of the unit's policy and procedures manual.
- Batch-loaded collections for tests and final production.

Archives of American Gardens Intern

Smithsonian, Smithsonian Gardens

Washington, DC

Summer 2012

- Cataloged digital objects at item and series level in Horizon while adhering to MARC, AACR2, LCSH and AAT.
- Provided maintenance and analysis of metadata of the online catalog.
- Processed Rudy J. Favretti's Monticello and Mt. Vernon papers from the Rudy J. Favretti Collection.
- Authored blog postings for the Smithsonian Gardens blog and the Garden History & Design Newsletter.

Digital Humanities Information Specialist

University of South Carolina, Center for Digital Humanities
Columbia, South Carolina

2011-2012

- Managed the start-up project Handheld Art in the digital management platform Omeka (handheldart.org).
- Collaborated closely with the USC Department of Art and the Columbia Museum of Art.
- Co-authored and awarded grants for Handheld Art totaling \$20,000.
- Cataloged digital objects for Handheld Art.
- Implemented PBworks for online collaboration, project management, and documentation.
- Trained and supervised two volunteers.
- Edited and maintained footnotes for the companion website accompanying the publication *Van Gogh: The Life* (vangoghbiography.com).

Curatorial Intern

McKissick Museum
Columbia, South Carolina

2012

- Edited 1000+ digital images for the Catawba pottery collection, created technical metadata, and uploaded content to the collection management system Past Perfect.
- Created index of minerals for a 19th century mineral catalog to be used by curatorial staff while taking inventory of the geological collections.

Graduate Assistant

University of South Carolina, Ernest F. Hollings Special Collections
Columbia, South Carolina

2010-2012

- Digitized 14th century Missal, including photography, photo editing, metadata creation, and batch ingesting.
- Copy cataloged multiple collections of Girl's Books.
- Administered a condition survey of 100 books within the Collection of Scottish Literature, contributing metadata for the continued preservation of the collection.
- Managed reference desk during appointed hours, providing assistance to patrons and processed newly acquired materials.

Graduate Assistant

University of South Carolina, Davis College Computer Lab
Columbia, South Carolina
2010-2011

- Administered assistance to students with software, web access, scanning and printing requests, while maintaining computers and workstations.

Jean Outland Library Intern

Chrysler Museum of Art
Norfolk, Virginia
2009

Unpaid internship

- Organized and preserved rare books from the Moses Meyer Collection.
- Conducted provenance research on Walter P. Chrysler Jr.'s permanent collection which provided new historical resources for docents.
- Created exhibits for the reading room to compliment museum exhibits.

Circulation and Cataloging Student Library Assistant

Christopher Newport University, Paul and Rosemary Tribble Library
Newport News, Virginia
2008-2010

Circulation Clerk

Hampton Public Library, Main Branch
Hampton, Virginia
2005-2008

Education

Master of Library and Information Science

University of South Carolina
Columbia, South Carolina
May 2012

Bachelor of Art (Art History)

Christopher Newport University
Newport News, VA
May 2010

Awards: Helen Alexick/Fecher Art Endowed Scholarship and Award of Promise in Art History

Associates of Science (Social Science)

Thomas Nelson Community College
Hampton, Virginia
May 2007

Library and Technology Skills

Metadata Creation and Manipulation | Dublin Core, MODS, XML, Excel
Cataloging | MARC, AACR2, RDA, OCLC Connexion, Classification Web
Software Skills | Microsoft Office, Adobe DC, Google Docs, Wordpress
Content Management | Dspace, Islandora, Archive-It, Omeka, Past Perfect
Library Systems | Millennium, Sierra, Evergreen, Innovative
Data Analytics | Excel, Survey Monkey
Photo Editors | Photoshop, GIMP, Canva

Publications, Web Creations & Social Media

Peer Reviewed Papers:

- Dame, Jessica (2021). "Web Archiving in North Carolina's Piedmont Triad During COVID-19," *Journal of Contemporary Archival Studies*, Vol. 8 , Article 12.
- Heid, Karen, & Dame, Jessica (2014). "HHA: Using Handheld Technology to Foster Interdisciplinary Learning between Art and the Humanities," *Annual Review of Cultural Heritage Informatics*, 119-136.

Articles:

- Dame, Jessica and Sheila Dorsey (2019, October). The Work of Their Hands: and How We Got It Into Ours. *Computers in Libraries*.
- Dame, Jessica (2016, September). Digitization in a Box Project: Making Digitization Attainable and Inclusive. *Computers in Libraries*.
- Dame, Jessica (2015). Put the Kettle On: Crowdsourcing with a Cup of Tea. *South Carolina Libraries*, 1(2), Article 6. Retrieved from scholarcommons.sc.edu/scl_journal/vol1/iss2/6/
- Dame, Jessica (2015, April). Preservation Awareness for Children. *More...*, 47(4), 2. Retrieved from dc.statelibrary.sc.gov/handle/10827/18264
- Dame, Jessica (2015, April 17). Preservation Awareness for Children. *SCAAzette*, 17(1), 11. Retrieved from scarchivists.org/images/SCAAzette_April2015.pdf
- Dame, Jessica (2014, May). Libraries Care about Your Personal Archive! *More...*, 46(5), 4. Retrieved from dc.statelibrary.sc.gov/handle/10827/15217

Blog Posts:

- Dame, Jessica, (2012, July 20). The Doctor is In: Physic Gardens. *Smithsonian Gardens*. Retrieved from smithsoniangardens.wordpress.com/2012/07/20/the-doctor-is-in-physic-gardens/
- Dame, Jessica (2009, September 25). The Body as Art. *Jean Outland Chrysler Library Blog*. Retrieved from chryslermuseumlibrary.blogspot.com/2009/09/body-as-art.html
- Dame, Jessica (2009, July 17). Item of the Week: Jessica's Favorite. *Jean Outland Chrysler Library Blog*. Retrieved from chryslermuseumlibrary.blogspot.com/2009/07/item-of-week-jessicas-favorite.html

Social Media:

- Co-managed the South Carolina Digital Library's Facebook presence, 2016-2019.
- Contributed to social media platforms for the South Carolina State Library, 2014-2019.
- Handheld Art Project - Created online presence to increase awareness and market Handheld Art through Facebook and Twitter.
- Library and Information Science Student Association Social Networking Chair - Increased student involvement and awareness of the student organization through maintaining the organization's online presence through Facebook, Twitter, Flickr, Tumblr, and Google+.

LibGuides:

- Dame, Jessica (2016). South Carolina State Library: Rare Books. South Carolina State Library LibGuides. Retrieved from statelibrary.sc.libguides.com/c.php?g=555177&p=3815461
- Dame, Jessica (2013). Electronic Resources Help: Common E-Resource Problems. *Georgetown University Library LibGuides*. Retrieved from guides.library.georgetown.edu/c.php?g=75732
- Dame, Jessica (2013). Electronic Resources Help: Browser Help. *Georgetown University Library LibGuides*. Retrieved from guides.library.georgetown.edu/c.php?g=75732&p=490324

Presentations and Posters

- Dame, Jessica (2022). *The Triad COVID-19 Web Archive* (Poster Presentation). IIPC Web Archiving Annual Conference.
- Dame, Jessica (2021). *The Triad COVID-19 Web Archive* (Poster Presentation). North Carolina Library Association Annual Conference.
- Dame, Jessica, & Stone, Amanda (2015). *Digitization in a Box* (Poster Presentation). South Carolina Library Association Annual Conference.
- Dame, Jessica, & Stone, Amanda (2014). *Personal Digital Archiving: Preserving Digital Memories*. Library Resources and Information Sharing Conference.
- Dame, Jessica (2013). *Discoverability: Enhancing our Collections*. Georgetown University Library Staff Meeting.
- Dame, Jessica (2012). *RDA and Linked Data*. Georgetown University Libraries Staff Meeting.

Professional Service and Organizations

National:

- American Library Association, Member. 2014-2019.
- Beta Phi Mu, Member.

State/Regional:

- Society of North Carolina Archivists, At-Large RAAC Member, 2022-2023.
- South Carolina Digital Library Metadata Working Group, Member. 2015-2019.
- Palmetto Archives, Libraries & Museums Council on Preservation, Secretary. 2015-2017.

- South Carolina Library Association, Member. 2014-2018.

Volunteering Experience

Howlmore Animal Sanctuary Volunteer

Howlmore Animal Sanctuary
Columbia, South Carolina
2018-2019

Horticulture and Animal Services Volunteer

The Virginia Living Museum
Newport News, Virginia
2007-2008

Additional Experience

Artist

jessicadame.com

2016-Present

- Mixed media artist and creator of Lady Dame Prints.
- Participate in exhibitions across the SouthEast United States.
- Create and apply design concepts to public spaces including storm drain locations across Richland County in South Carolina, and hotel art in North Carolina and South Carolina.

Madison Turner

Education Experience

Master of Library and Information Science Program (MLIS), The University of North Carolina at Greensboro, Spring 2022.

- GPA 4.0
- Public and K-12 Certifications
- John and Kate McNairy Scholar 2019
- Member of Student Library Association and Graduate Association
- Served as the alternate representative of MLIS program in the Graduate Student Association

Bachelor of Arts in English, The University of North Carolina at Greensboro, August 2018.

- GPA 3.5
- Minors in Anthropology and American Sign Language
- Member of Alpha Lambda Delta, Sigma Tau Alpha, National Society of Collegiate Scholars and Student Anthropological Society

Work Experience

Data Catalog Curator, MetLife

Cary, NC. March 2022- Present

- Collibra Solution Architect and Data Steward Certifications
- Executes onboarding, maintenance and support of metadata documentations and data asset ingestion in the enterprise data catalog
- Collaborates with data owners in data governance programs to ensure compliance
- Educates others on data governance benefits while enforcing requirements and standards
- Updates standard operating procedures and other artifacts to assure ongoing applicability of an agile and contemporary data cataloging and curation program

Media Coordinator, The Burlington School

Burlington, NC. August 2019 - March 2022

- Create, budget, analyze, and maintain the learning environment that coincides with the school and library mission, strategic plan, and policies
- Maintain library management system (patrons, data, collection, and reports)
- Collaboration with educators to create lessons for our students
- Instructional Technology Teacher/Tech Team- Google Admin/Technology Update Project 2021
- Organize community events and book fairs

Cheer Coach, After School Director, & Summer Camp Director at Kidsport Gymnastics

Academy, Burlington, NC. September 2014-December 2019

- Teach, collaborate, budget and manage
- Data-entry and program planning

Skills/Professional Organizations

- Team player/collaboration
- Problem solving
- Teaching/leading others
- Research
- Constant optimization
- Metadata literacy

American Library Association, 2019 - North Carolina School Library Media Association, 2019
Southeastern Library Association, 2020

Serhiy Polyakov

(Resume contact info removed)

HIGHLIGHTS OF QUALIFICATIONS

Knowledge of metadata schemes and standards. Experience in research and teaching of data modeling, metadata, data management, information organization, and information technology. Experience in development and administration of databases, repositories, and digital libraries.

EMPLOYMENT

| | |
|---|------------------------|
| Data Management Librarian, <i>Health Sciences Library, Weill Cornell Medicine–Qatar, Doha, Qatar.</i> | 2020–present |
| Metadata and E-Resources Librarian, <i>Distributed eLibrary, Weill Cornell Medicine–Qatar, Doha, Qatar.</i> | 2016–2020 |
| Postdoctoral Research Associate, <i>School of Information, Kent State University, Kent, OH, USA.</i> | 2015–2016 |
| Teaching Fellow, Adjunct Faculty, <i>College of Information, University of North Texas, Denton, TX, USA.</i> | 2013–2015 |
| Senior Research Assistant, <i>Texas Center for Digital Knowledge, Denton, TX, USA.</i> | 2005–2007 |
| Research and Teaching Assistant, <i>School of Library and Information Sciences, University of North Texas, Denton, TX, USA.</i> | 2002–2004 2007–2013 |
| Instructor, <i>Department of Management Information Systems, National Agricultural University, Kyiv, Ukraine.</i> | 1995–2001 |
| Project Coordinator, Database Manager, <i>Univest Marketing, Joint Limited Company, Kyiv, Ukraine.</i> | 1995–1995 |

EDUCATION

| | |
|--|------|
| PhD in Information Science, <i>College of Information, University of North Texas, Denton, TX, USA.</i> Dissertation: "Enhancing User Search Experience in Digital Libraries with Rotated Latent Semantic Indexing". | 2015 |
| MS in Information Science (Program in Information Systems), <i>School of Library and Information Sciences, University of North Texas, Denton, TX, USA. GPA 3.93.</i> | 2004 |
| MS in Electrification and Automation of Agriculture (with distinction), <i>National Agricultural University, Kyiv, Ukraine.</i> | 1997 |

SELECTED PROFESSIONAL EXPERIENCE

- Project Lead. Data Services Project, Weill Cornell Medicine–Qatar, Doha, Qatar. 2022.*
- Established Research Data Management and Measuring Research Performance consultation services for faculty and staff

Project Lead. Discovery Service Projects, *Weill Cornell Medicine–Qatar, Doha, Qatar.* 2016, 2021.

- Implemented Primo discovery service and Alma integrated library system
- Implemented EBSCO discovery service and EZproxy

Project Lead. Exploring smart data approaches to the history of innovation and invention at Liquid Crystal Institute at Kent State University, *Kent State University, Kent, USA,* 2015.

- Developed procedures for scientometric analysis of institutional research output

Developer. University of North Texas System Center Repository project. 2011–2012.

- Developed a metadata application profile based on MODS
- Designed and implemented a prototype of digital library for managing documents and datasets

Senior Research Assistant. Comparative Assessment of Peer Review Project. Funded by *National Science Foundation (NSF).* 2010–2011.

- Designed a digital library of documents based on Fedora Commons digital repository platform
- Developed procedures and XML tools for metadata audit and quality control in the digital library

Collaborator. Information Management Resource Kit (IMARK) Adaptation Project. Funded by *Food and Agriculture Organization of the United Nations (FAO).* 2006.

- Adapted unit Metadata Standards and Subject Indexing from English into Russian

Developer. Texas Heritage Digitization Initiative: IMLS Grant Partner Project. 2006–2007.

- Developed workflow and installed SRU/SRW gateways for Lucene-based digital repositories

Research Assistant. MARC Content Designation Utilization: Inquiry and Analysis Project. Funded by *Institute of Museum and Library Services (IMLS), Texas Center for Digital Knowledge.* 2005–2006.

- Designed and implemented a database for storing 56 million MARC 21 records in decomposed form
- Developed methods and procedures to conduct analyses of MARC 21 content designation

TEACHING EXPERIENCE

AS SOLE INSTRUCTOR

Data Publishing and Sharing in Clinical Research (continuing professional development workshop). *Weill Cornell Medicine–Qatar.* 2022.

- Topics taught: research data lifecycle, data publishing policies and standards, the FAIR (findable, accessible, interoperable, reusable) principle, data repositories.

Metadata and Networked Information Organization and Retrieval (graduate level course). *University of North Texas.* 2013–2015.

- Topics taught: metadata schemes and standards, metadata application profiles, OAI-PMH, metadata crosswalks, OpenURL, metadata quality, overview of data content and data value standards, linked data and Semantic Web, RDF.

AS TEACHING ASSISTANT

Information Organization. Database Application Development for Information Professionals.

SKILLS

Database systems and indexing engines

intermediate to advanced skills: MySQL, PostgreSQL, Oracle, MS Access, Apache Solr/Lucene

Programming and scripting

intermediate to advanced skills: RegEx, Python, Perl, PHP, SQL, SPARQL, RDF, XML, XSLT, CSS, JavaScript

Data collection, cleansing, analytics, and visualization

intermediate skills: Qualtrics, OpenRefine, Microsoft Power BI, Google Analytics

Digital libraries, repositories, and content management

advanced skills: DSpace, Fedora Commons, Drupal, Sierra, Alma

SELECTED PUBLICATIONS [Google Scholar: citations = 60, h-index = 5]

JOURNAL ARTICLES (REFEREED)

- Polyakov, M., Polyakov, S., & Iftekhhar, M. S. (2017). Does academic collaboration equally benefit impact of research across topics? The case of agricultural, resource, environmental and ecological economics. *Scientometrics*, 113(3), 1385-1405. doi: 10.1007/s11192-017-2523-7
- Eklund, A. P., Miksa, S. D., Moen, W. E., Snyder, G., & Polyakov, S. (2009). Comparison of MARC content designation utilization in OCLC WorldCat records with national, core, and minimal level record standards. *Journal of Library Metadata*, 9(1-2), 36-64. doi:10.1080/19386380903095073

PROCEEDINGS (REFEREED)

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ADDITIONAL INFORMATION

Eligible to work in the United States without sponsorship (permanent resident).