


<b>Host and Project Title</b>	<div data-bbox="492 212 837 300" data-label="Image"> </div> <p>Harvard Library - <b>Format Migration Plans and Framework for Harvard Library</b></p>
<b>Project Summary</b>	<p>The Harvard Library (HL) seeks a National Digital Stewardship Resident to design a format migration framework. This framework will be used to plan and execute the migration of obsolete files held in the Library's long-term preservation repository - the Digital Repository Service (DRS).</p> <p>The format migration framework will document the general process for preparing for and performing a format migration, including but not limited to the steps that need to be taken, the decisions that need to be made, key stakeholders to include, the types of research and testing that needs to be done, migration artifacts that should be preserved, and templates to facilitate this process. The framework will be developed by working through several real use cases with the Library's Preservation Services staff:</p> <ul style="list-style-type: none"> <li>- the migration of 7,000+ archival images in the now obsolete Kodak PhotoCD format to a TBD preservation image format</li> <li>- the migration of 10,000+ RealAudio delivery files to a modern audio delivery format (MP3)</li> <li>- the migration of 46,000+ SMIL audio playlists to a modern audio playlist format (AES-60)</li> </ul> <p>For more information about the DRS see:  <a href="http://hul.harvard.edu/ois/systems/drs/">http://hul.harvard.edu/ois/systems/drs/</a></p>
<b>Goals</b>	<p>The overall goal of the project is to design, document and test a framework that can be used for ongoing migrations at Harvard Library for content in obsolete formats. The framework will include the entire process needed to plan for, document and conduct migrations.</p> <p>To develop the framework the resident will work with Library staff to work through this process for three real use cases. For each of these use cases, migration plans will be developed.</p> <p>A successful project will:</p> <ul style="list-style-type: none"> <li>- incorporate the relevant migration and format literature</li> <li>- incorporate the requirements and feedback of key stakeholders and experts at the Library and beyond including image and audio reformatting experts, the DRS manager, DRS developers and maintainers, and format experts</li> <li>- result in plans for the migration of the Kodak PhotoCD, RealAudio and SMIL files in the DRS</li> <li>- be documented to the extent that it can be replicated for additional formats in the future</li> <li>- share the results with the digital preservation community to advance the ability of other institutions to be able to perform similar format migrations</li> </ul>

<b>Timeframe &amp; Deliverables</b>	<p>September - October 2014:  Tasks: Research literature on format migrations including those done at other institutions, relevant formats, learn about the DRS, its content and the Harvard Library  Deliverables: Annotated bibliography, summary paper on migration research, collection of relevant papers and specifications</p> <p>November - December 2014:  Tasks: Draft format migration plan for Kodak PhotoCD images  Deliverables: Format migration plan for Kodak PhotoCD images</p> <p>January - March 2015:  Tasks: Draft format migration plan for RealAudio and SMIL files  Deliverables: Format migration plan for RealAudio and SMIL files</p> <p>April - May 2015:  Tasks: Generalize the format migration plans into a format migration framework that can be used for ongoing format migrations at the Library, document and present work  Deliverables: Document describing the format migration framework, Completed presentations / blog posts, etc. meant to disseminate the information</p>
<b>Required Resources</b>	<p>Standard office space; use of a computer; access to samples in Kodak PhotoCD, RealAudio and SMIL formats; space to collect documents, install and test migration tools</p> <p>1 Resident, 1 Mentor (Goethals), access to designated Harvard Library staff</p> <p>As needed, contacts with staff at other institutions with specialized knowledge or experience with formats and/or format migrations</p>
<b>Context</b>	<p>To keep its digital collections usable long-term, Harvard Library needs to periodically migrate content in obsolete formats to modern formats. This project will give the Library the foundation for performing these format migrations.</p> <p>The Library recently assessed its preservation repository, the DRS, using the Levels of Digital Preservation developed by the National Digital Stewardship Alliance (NDSA). This assessment revealed that a key gap in the DRS infrastructure is the ability to do format migrations. This project will address this gap area.</p> <p>For more information about the NDSA Levels of Digital Preservation see: <a href="http://www.digitalpreservation.gov/ndsa/activities/levels.html">http://www.digitalpreservation.gov/ndsa/activities/levels.html</a></p>
<b>Required Knowledge and Skills for Resident</b>	<p>This project requires an awareness of and interest in file formats and format migrations, and the ability to conduct research. In addition, the candidate must be able to communicate clearly in writing and with people of varying technical backgrounds in meetings and presentations. The candidate must be able to work both independently and in group settings.</p>


<b>Preferred Knowledge or Experience</b>	The ideal candidate will have a technical bent - be able to read and comprehend technical reports and specifications; and be able to download, install and test file conversion tools. Because this project will require learning about the metadata, tools and data models used in the DRS, the candidate should be flexible and able to learn new concepts and tools.
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<b>Host and Project Title</b>	 <b>Making Music Last: Preservation Planning for 'Music at MIT' Digital Audio Content</b>
<b>Project Summary</b>	<p>Music is the second most popular minor at MIT and "Making Music Last" NDSR project is an ideal next step at MIT Libraries for an ongoing project to inventory, digitize, preserve, and make available the treasured audio documentation of Music at MIT. The Digital Audio working group in the Libraries has been working on the first phase of workflow definition and implementation for managing audio content. The NDSR project would advance the Libraries objective to document our current practice and devise an optimal workflow for audio that will be adaptable to any kind of digital content. As the digital audio project shifts from a planning and design phase to an implementation and improvement phase, the NDSR resident will be responsible for and actively engaged in core phases of that process. By the end of the project, the NDSR resident at MIT Libraries will have:</p> <ul style="list-style-type: none"> <li>• Acquired a deeper understanding of life cycle management activities for digital content</li> <li>• Gained hands-on experience managing digital audio content using standards-based practice</li> <li>• Been a contributing member of the digital audio working group, working with team members and others in key roles across the life cycle at the Libraries in completing the project</li> <li>• Contributed to the iterative development, enhancement, and use of a standards-based workflow</li> <li>• Conducted a gap analysis of workflow documentation for managing digital audio content</li> <li>• Identified potential implications of applying the workflow for digital audio to video or any content</li> <li>• Acquired experience with core components of ongoing preservation planning for digital content, the project will also be very beneficial to MIT Libraries in making measurable progress in managing digital audio content. The project deliverables and other results will be of immediate use for improving the preservation of and access to digital audio content as well as informing the life cycle management of other digital content more generally.</li> </ul>
<b>Goals</b>	<p>The NDSR resident for the Making Music project will work independently and with the Music at MIT Digital Audio working group to:</p> <ul style="list-style-type: none"> <li>• Complete a gap analysis of workflow documentation for managing digital audio content then:</li> <li>• Test and enhance the life cycle workflow documentation for digital audio content</li> <li>• contribute to an ongoing PREMIS gap analysis of existing versus required preservation metadata</li> <li>• review and recommend preservation formats, preservation metadata, packaging for digital audio</li> <li>• use batches of audio content to verify and enhance the workflows and</li> </ul>

	<p>supporting documentation</p> <ul style="list-style-type: none"> <li>• develop discussion documents, procedures, and operational rules to fill gaps in the workflows</li> <li>• work with Music Library staff to prioritize discovery and use preferences of the users</li> <li>• explore and recommend discovery and dissemination options for digital audio content</li> <li>• devise a workable plan for implementing the selected dissemination option</li> <li>• complete a targeted project to test and/or demonstrate the implementation of the plan using the resources of the Digital Sustainability Lab at the Libraries</li> <li>• consider the implications of extending the workflows to apply to video or any content</li> <li>• contribute to evidence that demonstrates compliance with relevant TRAC standards</li> <li>• collaborate with interested area institutions, sharing results and findings</li> <li>• develop a poster presentation of the project's results for internal and external presentations</li> <li>• document (blog?) the project throughout the process to share updates and progress</li> </ul>
<b>Timeframe &amp; Deliverables</b>	<p>This outline reflects the overall sequence of activities and outcomes:</p> <p>Sep 2014: Orientation to project and definition of development plan</p> <p>Sep 2014: Conduct gap analysis of workflow documentation for digital audio content *</p> <p>Oct 2014: Determine priorities for gaps and work on filling gaps in workflow documentation *</p> <p>Nov 2014: Run batches of content through workflow, document results, identify improvements *</p> <p>Dec 2014: Identify and offer solutions for workflow bottlenecks and problem areas *</p> <p>Jan 2015: Identify discovery and use options informed by user requirements</p> <p>Feb 2015: Develop plan for implementing selected dissemination option and map out prototype *</p> <p>Mar 2015: Determine implications of extending workflow to video and possibly other content types *</p> <p>Apr 2015: Formalize recommendations for preservation metadata, formats, and object packaging</p> <p>May 2015: Prepare and present final results</p> <p>* Indicates activities that continue once begun during the residency</p>
<b>Required Resources</b>	<p>Music at MIT Digital Audio Working Group:</p> <ul style="list-style-type: none"> <li>- Nancy McGovern, Head, Curation and Preservation Services (CPS) and Mentor for resident</li> <li>- Thomas Rosko, Head, Institute Archives and Special Collections (IASC)</li> <li>- Liz Andrews, Associate Director for Collections, IASC</li> <li>- Kari Smith, Digital Archivist, IASC</li> <li>- Mikki Macdonald, Metadata Archivist</li> </ul>

	<ul style="list-style-type: none"> <li>- Peter Munstedt, Music Librarian and project manager</li> <li>- Ann Marie Willer, Preservation Librarian and digital audio specialist, CPS</li> <li>- Cate Gallivan, Music at MIT project librarian</li> </ul> <p>Equipment (software and hardware) in the Digital Sustainability Lab  e.g., FRED machine, BitCurator instance, Archivematica instance</p> <p>Workstation with production tools for project (workflow documentation tools, access to project wiki)</p> <p>Access to MIT's Music faculty</p> <p>Opportunities to engage with audio project teams at area institutions</p>
<b>Context</b>	<p>The Making Music project is ideally timed to extend the work of the Music at MIT Digital Audio Working Group at MIT Libraries. This is an opportunity to influence and implement a optimal workflow (human decisions into computer-aided action) for a digital content type that is present in many digital collections and still presents near-term and long-term challenges. The Music Library has a very active and productive relationship with the Music faculty at MIT, providing an opportunity to work directly with interested users in determining and testing options for discovery and use. The digital audio project is a core project within the digital content management initiative, a strategic priority at MIT Libraries. There is increasing support for the organizational, technological, and resources to enable effective and sustainable digital content management.</p>
<b>Required Knowledge and Skills for Resident</b>	<p>M.A. in library, archives, museum, information studies or equivalent</p> <p>General Knowledge</p> <ul style="list-style-type: none"> <li>- demonstrated interest in the management of digital collections within institutional setting</li> </ul> <p>Specialized Knowledge or Experience</p> <ul style="list-style-type: none"> <li>- familiarity with digital curation and preservation principles and practice</li> <li>- ability to conduct background research and synthesize results</li> <li>- demonstrated strength in oral and written communication</li> </ul> <p>Technical Experience</p> <ul style="list-style-type: none"> <li>- comfortable with using new and familiar tools for digital preservation and curation</li> </ul>
<b>Preferred Knowledge or Experience</b>	<p>These skills are preferred, but not required:</p> <ul style="list-style-type: none"> <li>- familiarity and some experience with digital curation and preservation standards and practice</li> <li>- familiarity with audio content in analog and digital formats</li> <li>- experience with installing, configuring, and using software</li> </ul>


## NDSR Boston 2014/15 Project Description

<b>Host and Project Title</b>	 <p>Northeastern University Archives and Special Collections - <b>Channeling streams of Archival records: Northeastern University</b></p>
<b>Project Summary</b>	<p>Northeastern University's University Archives and Special Collections seeks a National Digital Stewardship Resident to assist Archives and Information Technology staff with managing the ingest and accessioning of digital assets into the Libraries' Digital Repository Service (DRS). This Resident will develop workflows for the three main categories of material offered to UASC: recently born-digital, legacy born-digital, and digitized.</p> <p>The Resident will first learn about the hardware/software used by Northeastern University Library's technology department that provides the structure of the DRS. They will research and document the state of the preservation environment for archival material stored in this system. The Resident will then benchmark best practices of area Repositories and identify ways in which Northeastern's policies and procedures for ingest/accessioning could be improved for security/preservation purposes. They will then suggest ingest and accessioning policies and procedures for archival materials. The Resident will then use written/altered procedures to work through the three identified collections and test for accuracy/security.</p>
<b>Goals</b>	<p>Areas of engagement for this residency will include:</p> <p>Migrate 8,428 digitized items from La Alianza Hispana and Inquilinos Boricuas en Acción collections from Omeka to the DRS</p> <ul style="list-style-type: none"> <li>• Recommend appropriate additional metadata; either item- or folder-level</li> <li>• Map Dublin Core to MODS fields</li> <li>• Work with Library IT staff to script transfer metadata and attached items from one system to another</li> <li>• Research and suggest bulk display for collections based on metadata categories.</li> <li>• Evaluate and make plan for ingesting born digital objects from the (now defunct) Hispanic Office of Planning and Evaluation. Collection includes xx floppies, xx cds, etc., and will be migrated to the DRS.</li> <li>• Research discovery procedures for out-of-date removable media</li> <li>• Conduct a limited peer survey on best practices for born digital acquisitions, accessioning, and ingestion procedures</li> <li>• Write Northeastern-specific recommendations for accessioning born-digital material</li> <li>• Research and provide a roadmap for the transfer of digital objects, including all their attached rights and copyrights, from Northeastern's digital humanities project "Our Marathon, the Boston Bombing Digital Archive"</li> </ul>

	<ul style="list-style-type: none"> <li>• Meet with Project Leads to identify various filetypes, total storage needed, and accessibility needed for the project over time</li> <li>• Analyze metadata attached to items; identify gaps and/or inaccuracies</li> <li>• Research and recommend transfer/timeline for capture, accessioning, ingest, and scheduled migration of each filetype.</li> </ul>
<b>Timeframe &amp; Deliverables</b>	<p>September-October 2014: Immersion/education</p> <p>November 2014: Written baseline description of Northeastern systems, policies and procedures for Archival material stored in the DRS. Develop processes for ingesting born-digital collections</p> <p>December-January 2014: Prepare and ingest IBA/LAH collections</p> <p>February-March 2014: Develop procedures for transfer of electronic files and related corollary material from Our Marathon</p> <p>April-May 2014: Analyze legacy HOPE collection and prepare for ingest.</p> <p>Project deliverable: The Resident will develop and implement policies and procedures for ingesting/accessioning born-digital collections.</p>
<b>Required Resources</b>	<p>1 Primary mentor (Mecagni)</p> <p>3 Additional mentors (Yott, Sweeney, Flanders)</p> <p>1 Resident</p> <p>Access to additional departmental staff including archives, IT, and Digital Services group.</p> <p>Laptop, cubicle</p>
<b>Context</b>	<p>Founded in 1898, Northeastern is a global, experiential, research university built on a tradition of engagement with the world, creating a distinctive approach to education and research. The university offers a comprehensive range of undergraduate and graduate programs leading to degrees through the doctorate in nine colleges and schools, and select advanced degrees at graduate campuses in Charlotte, North Carolina, and Seattle.</p> <p>The Northeastern University Library is at the hub of campus intellectual life. The Snell Library building welcomes 1.5 million visitors a year on the Boston campus and the library's web site serves users around the world. The library provides award-winning research and instructional services, a growing focus on networked information, and extensive special collections that document social justice efforts in the Greater Boston area. The library has an ambitious vision to expand its digital initiatives by developing its digital repository, digitizing unique collections, constructing integrated collaborative spaces, and fostering the adoption of digital media and the creation of new knowledge. The Northeastern University Library leads the way in redefining library service in the 21st century.</p> <p>The Archives and Special Collections Department plays an important role in preserving Northeastern's rich past and the history of Boston's under-represented African American, Asian American, Latino, and GLBTQ communities. Collections include the records of Stull and Lee, Inc., an African American Boston-based architectural and urban planning firm, and</p>



	Northeastern's Oral History Office records, a diverse collection of oral histories documenting the American China Mission, Cambridge School Crisis, Immigrant Voyages, New England Fishermen, Town Histories, Vietnam War, World War I, and World War II.
<b>Required Knowledge and Skills for Resident</b>	Unafraid to experiment. Strong working knowledge of metadata structures including EAD and MODS. Ability to work with (or learn) XML and XSLT with the Oxygen editing suite, as well as proficiency with Excel and/or other desktop database products. Understanding of the purpose and power of structured language and metadata.
<b>Preferred Knowledge or Experience</b>	Archives, computer science, or digital humanities background.


<b>Host and Project Title</b>	 <b>Tufts University - Institutional Knowledge of Research Data at Tufts University</b>
<b>Project Summary</b>	<p>Tufts University proposes a National Digital Stewardship Residency project that would focus on exploring strategies for Tufts to gain a more complete understanding of the research data produced by its faculty, research staff, post docs, and graduate students. In particular, this project would focus on investigating and testing strategies for producing metadata objects that represent Tufts-created research datasets and managing those representative objects in Tufts' Fedora-based institutional repository. These digital objects could reference datasets that are managed externally in environments such as subject-based repositories, or managed internally within Tufts' institutional repository. These digital objects may also reference datasets described in data management/sharing plans that are yet to be created. Understanding the scope of present and future datasets would enable Tufts to better understand its data management and stewardship obligations.</p> <p>The digital objects in the repository would provide baseline stewardship metadata that would enable Tufts to understand the location, structure, subject matter, retention periods, access requirements, and associated rights and responsibilities of these datasets. The goal of this exploratory project is to create a process for Tufts to have a better understanding of the research data it produces, regardless of where those datasets are managed. The project would also give Tufts a framework for understanding what information it needs about its datasets to manage their governance, use, and preservation, and support data management education for the Tufts community.</p> <p>The resident would collaborate with archives, library, IT, and research administration staff to identify environments and documents that contain information about research datasets and develop methods to extract and transform this information into metadata objects that can be ingested into the institutional repository. Likely sources for information about datasets include a research data management system currently being piloted at Tufts, data management plans, domain-specific repositories that contain Tufts-created datasets, and a small number of datasets held by the Digital Collections and Archives (DCA) and the Tisch Library at Tufts.</p> <p>This is a highly collaborative project that will require the resident to work with archives, library, IT, and research administration staff, and researchers. The primary mentor for this project would be Eliot Wilczek, Acting Director and University Archivist, DCA. Secondary advisors would be Alicia Morris, Head of Technical Services, and Regina Raboin, Data Management Services Coordinator/Science Research Librarian, both of Tisch Library. The DCA is a central administration office reporting to the Office of the Provost that serves as the university archives of Tufts and the</p>

	Tisch Library serves as the Arts & Sciences and Engineering library of the university reporting to the Office of the Dean of Arts & Sciences.
<b>Goals</b>	<ol style="list-style-type: none"> <li>1. Identify dataset metadata sources <ol style="list-style-type: none"> <li>a. Undertake a survey and assessment of the systems, environments, and documents that contain significant bodies of information about research datasets produced by Tufts researchers. This work would identify existing information about datasets that can be used for this project; it would not be an exhaustive inventory of dataset information. Likely sources include a research data management system currently being piloted at Tufts, data management plans, domain repositories that contain Tufts-created datasets, and a small number of datasets held by the DCA and Tisch Library at Tufts.</li> <li>b. Document what type of metadata this information contains, such as rights, technical, or descriptive metadata, and how this metadata is structured.</li> <li>c. This will build on previous survey and investigative work done at Tufts that explored how its faculty conduct their research and create and manage their research data.</li> </ol> </li> <li>2. Model metadata objects representing datasets <ol style="list-style-type: none"> <li>a. Determine the descriptive, technical, rights, and other types of metadata that Tufts needs to properly manage, preserve, and share research datasets over time.</li> <li>b. Model a structure to encode this required metadata in an object that can be ingested into the Fedora-based institutional repository.</li> <li>c. Model relationship statements that link these representative metadata objects with datasets.</li> <li>d. The modeled metadata objects and relationship statements should have the flexibility to describe datasets from a variety of disciplines; various states of encoding and structure; and reference datasets that are either in the institutional repository, in an external resource, or do not yet exist.</li> <li>e. This work will include examining best practices and standards in the data management field and local needs at Tufts.</li> </ol> </li> <li>3. Model workflow <ol style="list-style-type: none"> <li>a. Model an overall workflow that describes processes that move from the original source of information about research datasets, to creating representative metadata objects, to ingesting those objects into the institutional repository.</li> <li>b. This work builds on existing processes and tools for metadata and digital object creation and repository ingest at Tufts.</li> </ol> </li> <li>4. Create and ingest proof-of-concept objects <ol style="list-style-type: none"> <li>a. Create and ingest a small number of representative metadata objects that reference research datasets produced at Tufts. The metadata objects should represent datasets from a range of disciplines, include metadata originally captured from an array of resources, represent datasets existing in a range of environments, and reference datasets in a various states of encoding.</li> <li>b. Example metadata objects include: objects drawing metadata from data management plans representing datasets that have yet to be created, objects</li> </ol> </li> </ol>

	<p>representing datasets in domain repositories, objects describing datasets in the institutional repository.</p> <p>5. Write policies and procedures</p> <p>a. Based on the work of the first four Goals/Objectives, write policies and procedures that document sources of information about research data at Tufts and methods for extracting that information, creating metadata objects that represent datasets, and ingesting those objects into the institutional repository.</p> <p>b. This work builds on policy and procedure management frameworks and policies and procedures for the institutional repositories already in place at Tufts.</p> <p>6. Contribute to data management curriculum and data management/sharing plans</p> <p>a. Observe data management classes provided by Tisch Library for Tufts faculty, research staff, post-docs, and graduate students.</p> <p>b. Assist in updating data management curriculum as needed based on the lessons learned, best practices, and requirements that emerge from this project and institutional needs.</p> <p>c. Help assist researchers with developing data management/sharing plans.</p> <p>d. Help modify data management/sharing plan templates based on the lessons learned, best practices, and requirements that emerge from this project and institutional needs.</p> <p>7. Write project report</p> <p>a. Write a project report that analyzes strengths and weaknesses of the processes developed in the project. The report will include an evaluation of the resources required to scale this proof-of-concept project to a production-level process. It will also include a discussion of the viability of the Fedora-based institutional repository as a system of record for Tufts-produced research datasets.</p>
<b>Timeframe &amp; Deliverables</b>	<p>Months 1 to 2 Observe and learn the various processes that concern this project. These include, but are not limited to, writing data management plans, creating metadata, and preparing digital objects for ingest into the institutional repository.</p> <p>Months 1 to 2 Dataset metadata sources (Goal/Objective 1)</p> <p>Months 2 to 7 Model metadata objects representing datasets (Goal/Objective 2) and model ingest workflow (Goal/Objective 3).</p> <p>Months 4 to 8 Create and ingest proof-of-concept objects (Goal/Objective 4). Much of this work will be done iteratively with Goal/Objective 2 and 3.</p>

	<p>Months 5 to 8 Write policies and procedures (Goal/Objective 5). Much of this work will be done iteratively with Goal/Objective 2, 3, and 4.</p> <p>Months 5 to 9 Contribute to data management curriculum and data management/sharing plans service. (Goal/Objective 6). Much of this work will be done iteratively with Goal/Objective 2, 3, 4, and 5.</p> <p>Months 7 to 9 Write project report (Goal/Objective 7).</p> <p>Deliverables</p> <ol style="list-style-type: none"> <li>1. Description of the systems, environments, and documents that contain significant bodies of information about research datasets produced by Tufts researchers.</li> <li>2. Metadata element set or data dictionary for objects representing research datasets and associated relationship metadata.</li> <li>3. Policies and procedures for creating and managing metadata objects representing research datasets.</li> <li>4. Updated data management curriculum and data management/sharing plan templates that incorporate lessons learned, best practices, and requirements emerging from the project.</li> <li>5. Project report.</li> </ol>
<b>Required Resources</b>	<ul style="list-style-type: none"> <li>• Workstation and cubicle.</li> <li>• Access to standard systems and tools available to Tufts staff.</li> <li>• Access to the systems, environments, and documents that contain significant bodies of information about research datasets produced by Tufts researchers.</li> <li>• Access to staff in the archives, libraries, central IT division, research administration office.</li> <li>• As-needed access to faculty, staff researchers, post-docs, or graduate students who created research datasets that are represented by metadata objects created during this project.</li> </ul>
<b>Context</b>	<p>Research universities are facing a growing number of challenges in managing, preserving, and providing access to the research data produced by its faculty, research staff, post-docs, and graduate students. Funders are increasingly demanding that universities and researchers make their research data broadly available to the public. Most notably, the National Science Foundation now requires applicants to submit data management plans articulating how they plan to manage and provide access to the data they produce from their NSF-funded projects. Researchers are creating increasingly large and complex datasets that present significant resource and preservation challenges to research universities and institutions. Emerging data research techniques in the humanities, social sciences, and natural sciences often rely on pulling large, disparate sets of data for machine-based analysis, placing an increased importance on ensuring that research data are discoverable and well-structured to enable reuse. While domain-specific data repositories and metadata schemas have played an important role in</p>

	<p>managing, preserving, and providing access to research data within academic fields, research universities and institutions still face the challenge of understanding and documenting the research data its own members produce across a wide spectrum of disciplines.</p> <p>As a student-centered research university, Tufts researchers create a wide range of research datasets in the natural and health sciences, social sciences, and the arts and humanities. Tufts University is undertaking several initiatives to strengthen its infrastructure in order to properly support its research. This work has included expanding its research data storage capacity, implementing a new research administration system, and starting a pilot project to explore research data management solutions. The Tisch Library has been actively engaged in assisting faculty create NFS-mandated data management plans and constructing and delivering data management course material to faculty, post-docs, and graduate students.</p> <p>Despite these advances, Tufts continues to struggle to gain a holistic understanding of the research data that its faculty, post-docs, research staff, and graduate students produce. Researchers store datasets in a variety of environments, including disciplined-based repositories hosted at other institutions, Tufts network storage, and local storage environments. In addition, records that provide evidence of datasets are found in data management plans. Tufts does not have a baseline metadata set for documenting stewardship responsibilities, rights, and requirements for these research dataset. This makes long-term management of these datasets difficult as these responsibilities, rights, and requirements are not clearly delineated.</p>
<b>Required Knowledge and Skills for Resident</b>	<ul style="list-style-type: none"> <li>• Communication skills. This includes talking with people with diverse professional backgrounds and experience levels in order to collect information and translate among disciplines and areas of expertise.</li> <li>• Workflow development</li> <li>• Project management</li> <li>• Documenting processes and procedures</li> <li>• XML and XSLT</li> <li>• Building metadata schemas</li> </ul>
<b>Preferred Knowledge or Experience</b>	<ul style="list-style-type: none"> <li>• Data modeling</li> <li>• Familiarity with repository systems, particularly Fedora and how Fedora objects are structured</li> <li>• Managing datasets</li> <li>• Research data management systems</li> <li>• Curriculum development or other teaching experience</li> </ul>

<b>Host and Project Title</b>	 <b>WGBH Digital Media Preservation Project</b>
<b>Project Summary</b>	<p>This project will consist of four phases, taking place over the span of nine months.</p> <p>Phase One: During this two-month phase the resident will become acclimated with the process of working in a radio and television media archive. The resident will experience working with production elements (including digital video, audio, and text) from a variety of departments and in a variety of digital formats. This phase will require the resident to perform backup and accessioning of drives that have been submitted to the MLA department for archiving by Production Units. This work will include checking the hard drive's folder structure and file contents against a Filemaker database to ensure accuracy before ingesting into our Digital Asset Management (DAM) system. The resident will develop a manual of guidelines for archiving drives and tracking them through the archive workflow. This manual is for use within the MLA.</p> <p>Phase Two: During this three-month phase the resident will be working with digitized files that were part of the American Archive digitization project. In Spring of 2013, over 7,000 analog tape items from WGBH were processed and digitized as part of the American Archive of Public Broadcasting. Those digitized files will soon be delivered back to the WGBH MLA, and the resident will assist in ingesting those items in the DAM system. This phase will require the resident to import and add metadata records, catalog material and participate in digital file preservation planning.</p> <p>Phase Three: During this two-month phase, the resident will be working as a liaison between the MLA staff and Boston Media Production (BMP) staff to apprise digital files, their folder structure, and how to insert archiving into the current production workflow. Building on experience from Phase One, the resident will facilitate delivering production elements from the BMP to the MLA, ensuring metadata is accurate and preparing assets for long-term preservation and access in the DAM system. The resident will develop folder naming and organization conventions, recommend steps to integrate archival and production workflows, and align metadata requirements for MARS and DAM.</p> <p>Phase Four: The final, two-month phase will have the resident creating and hosting a webinar instructional session. This session will be used as part of future American Archive of Public Broadcasting training to help stations not readily familiar with digital asset preservation become better informed. As such, the resident will explain the basics of managing born digital materials and how best to archive assets. The training resource created in this phase will be made available online on the American Archive of Public Broadcasting website as well as other WGBH MLA outlets. At this point in</p>

	the project, the resident will have handled assets from newly created born digital media in Phases One and Three to newly created digital assets from analog media in Phase Two, giving the resident an overview of where each Phase lies in the scope of digital preservation and access.
<b>Goals</b>	<ul style="list-style-type: none"> <li>•Understand digital workflow deliverables and what should be required by an archive.</li> <li>•Prepare delivered hard disk folders and files for digital accessioning, understanding how metadata in database links to assets.</li> <li>•Provide robust metadata records that will aid future discoverability and access for assets and records.</li> <li>•Collaborate with departments within WGBH to deliver accurate and well-groomed assets and records.</li> <li>•Understand the variety of ways a digital asset can be preserved accessed in a media archive.</li> <li>•Create database connections for digital assets whose source is an analog, physical asset within a collection.</li> <li>•Deliver webinar on the knowledge gained by the project for other institutions or individuals not familiar with digital asset preservation.</li> </ul>
<b>Timeframe &amp; Deliverables</b>	<p>At the end of Phase One the resident will have ensured an accurate relationship between delivered archive databases and delivered production hard drive folders and files, in preparation for ingestion into the MLA DAM system.</p> <p>At the end of Phase Two the resident will have processed digitized files from the American Archive of Public Broadcasting into WGBH's DAM system, this includes cataloging and adding metadata.</p> <p>At the end of Phase Three the resident will have successfully coordinated with another department within WGBH to deliver their born digital assets to the MLA.</p> <p>At the end of Phase Four the resident will produce a webinar that is able to be shared online, as a instructional tool for institutions and individuals looking for digital preservation guidance.</p> <p>At the conclusion of the project the resident will write a summary of their nine-month experience working with the WGBH Media Library and Archives.</p>
<b>Required Resources</b>	<p>1 Primary Mentor (Davis)  3 Additional Mentors (Muraszko, Luf, Weisse)  1 Resident</p> <p>Access to departmental staff who are responsible for delivering born-digital</p>



	<p>production elements to the archive</p> <p>Office cube, laptop computer, telephone</p>
<b>Context</b>	<p>WGBH Educational Foundation is America's preeminent public broadcasting producer, the source of fully one-third of PBS's prime-time lineup, along with some of public television's best-known lifestyle shows and children's programs and many public radio favorites. The WGBH Media Library and Archives (MLA) establishes the policies and procedures for access, acquisition, intellectual control, and preservation of WGBH's physical media and digital media production and administrative resources. Today's MLA collection constitutes over three quarters of a million production and administrative assets including film, video, audio, computer, stills and print media. The collection is extensively used by WGBH television, radio, and educational projects. The Media Library and Archives maintains collection and shot level content databases, including copyright and source details, of originally produced and acquired footage and stills.</p> <p>For years, production staff have delivered physical media to the archive as part of their program deliverables, which are due at the end of each production life cycle. Only in recent years have productions begun to deliver final program masters and production elements on file-based media. Through this residency, the resident will become aware of the challenges and issues faced with audio-visual digital asset management and preservation, particularly the challenges faced when working with production staff who are responsible for delivering final productions to the archive. Additionally, the resident will gain experience managing digital assets through the lifecycle -- accessioning, ingest, metadata management, preservation planning, and access.</p> <p>In November 2013, the Corporation for Public Broadcasting selected WGBH in collaboration with the Library of Congress as the permanent home for the American Archive of Public Broadcasting, an initiative to identify, preserve, and make accessible as much as possible the archives of public television and radio. To date, the American Archive team has worked with 120 stations to create 2.5 million inventory records, digitizing 40,000 hours of content from the collection, which will be preserved for future audiences at the Library of Congress. Throughout this collaboration, WGBH is responsible for outreach to station participants and access to the collection.</p> <p>WGBH is one of more than 300 public media stations across the country. Over the past 25 years, WGBH has been a leader in public media archival management. Through the stewardship of American Archive of Public Broadcasting, the project staff have found that most public media stations at this time are not aware of the challenges of managing born-digital media, much less the best practices for creation, management, and preservation of audiovisual file-based media. By month 8, the resident will have developed a skill-set for audio-visual digital curation, which will be shared with other stakeholders in the public media industry. Taking the form of a webinar and</p>

	training kit, this instructional session will serve as a launching point for future opportunities in which the AAPB project team will facilitate training for public media stakeholders on the best practices of digital asset preservation.
<b>Required Knowledge and Skills for Resident</b>	<p>The successful candidate will have good communications skills, enthusiasm about audiovisual archives, an ability to prioritize and stay organized, a strong attention to detail, and the ability to work independently and as part of a team. Additionally, the successful candidate will be familiar with XML schemas and have created XML documents, have some experience working with information systems and FileMaker databases.</p> <p>Technical experience should include use of Apple Macintosh computers and Microsoft Office.</p>
<b>Preferred Knowledge or Experience</b>	A highly successful candidate will have some experience handling media, an understanding of analog and digital audio-visual formats, working knowledge of PBCore, experience in training or instruction, and have taken coursework in digital curation.