Abstract

University of Missouri Libraries (MU Libraries) in collaboration with the Donald W. Reynolds Journalism Institute (RJI), UCLA Library and the Educopia Institute requests \$86,716 to host a national forum consisting of cross-sector stakeholders to advance the knowledge and practice of preserving online born-digital news content.

RJI and MU Libraries will be the lead institution for the proposed Dodging the Memory Hole National Forum Grant. Collaborators include UCLA Libraries and The Educopia Institute. Those three organizations will be represented by six directors: Edward McCain (Digital Curator of Journalism, MU Libraries/RJI) will be the PI, Todd Grappone and Sharon Farb (UCLA Associate University Librarians), Martin Klein and Peter Broadwell (UCLA scientists), as well as Katherine Skinner (Executive Director, Educopia) will be Co-PIs.

The applicants plan to host the third in a series of Dodging the Memory Hole (DtMH) events, with the overarching goal of advancing and implementing a national strategy for born-digital news preservation, at UCLA in Los Angeles. These gatherings respond to increasingly strong evidence that the shift from analog to digital media has resulted in the loss of journalism in binary formats. The traditional systems memory institutions have used for collecting, preserving and providing access to this "first rough draft of history" are simply not adequate for preserving a vital and growing portion of our nation's cultural record in the 21st century. Because this is a systems-level disruption affecting a broad community of stakeholders, a fundamental requirement for achieving a solution involves bringing disparate people and institutions together in meaningful dialog. Librarians, journalists, archivists, technologists, researchers, funders, historical societies, academics, museum professionals and others have a vested interest in continuing access to an authentic chronicle of events and the ways journalism both captured and influenced society's perception of – and reaction to – such events. Previous DtMH events have identified priorities and created Action Teams in key areas, including preserving web-based content. The explosive growth of online news resources and lack of a cohesive strategy for long-term collection and access urgently calls for coordinated action, informed by this national forum.

This cross-sector forum will be held at UCLA and will accomplish six goals: 1) to produce and publish an outline for a proposed national agenda for preserving born-digital news online; 2) to identify concrete roles for each stakeholder community required to accomplish this agenda; 3) to facilitate cooperation and knowledge sharing between news technologists and digital preservation experts; 4) to examine how technology platforms such as content management systems (CMSs) can be adapted to work with existing digital preservation infrastructure; 5) to better prepare students, especially those in library science, archival and museum studies and information sciences for the digital preservation needs of 21st Century journalism; and 6) to identify specific fundable projects that will advance online preservation practice today.

The project's time frame extends from March 2016 through January 2017. Planning will resume upon funding and organizational/logistical activities will continue until the event. The forum itself is scheduled for October 13–14, 2016. A series of webinars before and after the event and will extend further opportunities for learning and active participation to research librarians and other partners. A minimum of 10 scholarships will be available to graduate students enrolled in library/information science, journalism or computer science programs in the United States. Successful applicants will provide a proposal for a project that will provide a deliverable that supports one or more goals of the forum Publicity surrounding the event will reach thousands of people either directly or through stakeholder distribution channels. We plan to accommodate approximately 100 participants. This represents a higher number compared to previous DtMH events with roughly the same concentrations of memory institution attendees but more participants from the journalism and technology sectors. We will increase marketing and outreach to underserved and minority communities in order to attract an overall diversity of participants. After the forum we will conduct a voluntary survey to assess: 1) the diversity of participants and 2) the perceived increase in participant awareness, knowledge and application of learning. The results will be summarized in a Final Performance Report by the end of 2016.

Narrative

University of Missouri Libraries in collaboration with the Donald W. Reynolds Journalism Institute, UCLA Library and the Educopia Institute requests \$86,716 to host a national forum consisting of cross-sector stakeholders to advance the knowledge and practice of preserving online born-digital news content.

1. Statement of Need

Yahoo, Huffington Post and Buzzfeed: today's top 10 news websites include notable Internet brand names such as these in addition to more familiar legacy broadcast networks and newspapers. The number of U.S. adults who access their newspaper solely online increased by 129 percent between 2010 and 2014. Today, a growing number of newspapers, radio stations and television broadcasters are converging on an assortment of online channels to deliver their content: desktop, mobile, tablets, podcasts and and an array of social media platforms.

Born-digital journalism is more prolific and accessible than ever before, but a growing body of evidence shows that it is also less likely to survive for more than a few years.³ A 2014 national survey of 476 news organizations by the Donald W. Reynolds Journalism Institute's (RJI) Journalism Digital News Archive (JDNA) program indicated that 27 percent of "Hybrid" (print and online) news producers have experienced a significant loss of content, while 17 percent of "Online Only" organizations have encountered this kind of failure.⁴ The JDNA survey respondents also indicated that 30 percent of Online Only and 27 percent of Hybrid news producers either didn't know if their content was simply backed up (i.e. not archived) or had no copy at all. Further questioning indicated that long-term digital preservation activities were out of the scope of U.S. news enterprises. Asked if their journalistic output is held by a memory institution, a full 86 percent of Online Only and 34 percent of Hybrid organizations said there was no such arrangement.⁵ The low percentage of Hybrid organizations that indicate working with a memory institution may have more to do with lack of clarity between their policies for print versus digital content.

The value of news content in scholarly research has made it one of the most popular sources of primary and secondary resources in modern memory institutions. Beginning with newsprint, later moving into microfilm, libraries, archives, historical societies and museums have a long-standing tradition of collecting, preserving and providing access to the articles, photographs, illustrations, advertisements and graphic design of journalistic output from publishers large and small. Yet, as demonstrated above, this tradition has faltered as the production medium has shifted from print to digital. For the first time in centuries, we have a dangerously incomplete record of events and perspectives—of the news stories that not only chronicle, but also *influence*, events and the public's reaction to them as they unfold.

Unlike the physical newspapers of the past, which have been acquired and held by a range of dedicated memory institutions, the vast majority of today's born-digital news is not being collected. As journalism has shifted from paper to "digital first" environments (and increasingly "mobile first" and "social first" as well), libraries, archives, historical societies and museums have remained focused on paper and/or pre-print PDF files of the paper. The live feeds, regularly updated stories, video imagery, reader responses and other features that have radically altered our experience of news stories – from the epidemic of mass shootings to the legalization of same-sex unions – are not collected, preserved or made accessible to readers, not because libraries, archives,

¹ Pew Research Center's State of the News Media 2015 report: http://www.journalism.org/2015/04/29/digital-news-audience-fact-sheet/

² Today's Newspaper Audience - Print & Online: Intersect Media Solutions: http://intersectmediasolutions.com/sites/default/files/docs/WhoReadsNewspapers.pdf

³ http://anjackson.net/2015/04/27/what-have-we-saved-iipc-ga-2015/

⁴ Reynolds Journalism Institute: Saving the news: When your server crashes..., https://www.rjionline.org/stories/saving-the-news

⁵ International Federation of Library Associations 2014: http://www.ifla.org/files/assets/newspapers/Geneva 2014/s6-carner-en.pdf

historical societies and museums do not *want* to collect this material, but because they do not know *how* to collect it, have limited or no access to such content and in many cases have not yet thought about collecting it.⁶

In our still-emerging digital information environments, we lack a national strategy for saving online news. Looking at online news channels in particular, how can we identify and advance workable objectives that help draft and manifest that blueprint? What roles might various stakeholders—technologists and journalists, press association directors and publishers, librarians and archivists, commercial content management system providers and researchers—play in order to ensure the longevity of this crucial digital historical record? What opportunities exist for cross-sector cooperative projects that can provide useful examples for other stakeholders to follow?

These are the questions this project seeks to answer through the hosting and facilitation of a crucial event, Dodging the Memory Hole 2016, where stakeholders from across this spectrum will gather and accomplish six goals: 1) to produce and publish an outline for a proposed national agenda for preserving born-digital news online; 2) to identify concrete roles for each stakeholder community required to accomplish this agenda; 3) to facilitate cooperation and knowledge sharing between news technologists and digital preservation experts; 4) examine how technology platforms such as content management systems (CMSs) can be adapted to work with existing digital preservation infrastructure; 5) to better prepare students, especially those in library science, archival and museum studies and information sciences for the digital preservation needs of 21st Century journalism; and 6) to identify specific fundable projects that will advance online preservation practice today.

This DtMH event would be the first of the series to gather on the west coast, allowing easier access for those in geographic proximity to Los Angeles, California (LA) where the UCLA campus and Los Angeles International Airport are relatively close. We expect around 100 participants, a slightly higher number compared to previous meetings in the series, with roughly the same concentrations of librarians, archivists, historical societies and researchers. We hope to increase the percentage of journalists and technologists through marketing efforts and due to the large potential audience available among the 18.6 million people in the greater LA area alone.

Background: a brief history of news preservation

In recognition of the important role of journalism as the "first rough draft of history" and the ephemeral nature of news content, the National Endowment for the Humanities (NEH) and Library of Congress (LC) initiated the United States Newspaper Program (USNP) in 1982. Although USNP concluded operations in 2009, another NEH/LC collaboration, the National Digital Newspaper Program (NDNP), established in 2003, continues the work with states to save and share the record of print journalism from 1836 through 1922. Although the technology platform developed for NDNP has enabled some participating states to collect and preserve born-digital pre-print PDF files on their own, collection and preservation of born-digital news content is currently outside of the scope of NDNP guidelines.

As early as the 1960's information technology began to change newsrooms with computerized indexes and abstracts to articles. Throughout the next four decades, the shift away from paper, film and even electronic forms of analog media was driven by competition and market forces to produce and deliver information faster and more efficiently. The introduction of the World Wide Web in the 1980's and Hypertext Text Markup Language (HTML) in the 1990's set the stage for publication of binary news formats via web browsers. The past two decades have seen a dramatic shift toward digital content creation and distribution channels. Virtually all journalistic content today is created on a computer or digital sensor; only about half of that will appear as ink on paper. Current trends portend a rapidly expanding role for digital publication of news.

⁶ See e.g. the findings from an in-depth survey of North Carolina:

 $[\]underline{https://docs.google.com/document/d/1d4geifFZyhtSkvzk76BpzEmQOgkcpX4kz6RORpJH3Jg/edit\#heading=h.h7u3rlpvrzbharden between and the proposed and the proposed$

The move from analog to digital formats is not limited to journalistic endeavors. All manner of record keeping gradually migrated from analog to digital during the same time frame. As with all means of recording the human experience, digital resources required certain steps to keep them viable for future access. The Library of Congress was charged with leading the nation's memory institutions in strategy and implementation of preserving our digital treasures. LC's National Digital Information Infrastructure and Preservation Program (NDIIPP) received an up to \$100 million appropriation from Congress in 2000. At its core, NDIIPP's strategy is based on community partnerships and distributed infrastructure.

Saving born-digital news: the need for cross-sector dialog

In the same spirit of cooperation among those with a vested interest, early efforts to preserve born-digital journalism have consistently emphasized cross-sector dialog. More than 50 digital news stakeholders, including journalists, archivists, distributors and researchers, attended a workshop convened by NDIIPP in September 2009 with an intent to define "digital news," prioritize collections for the nation and discuss the roles for local and national content owners and public archives in preserving digital news.⁹

As a next step in this emergent community conversation, NDIIPP facilitated the "Citizen Journalists and Community News: Archiving for Today and Tomorrow" in November 2010. One meeting theme focused on the new challenges inherent in technologies that shift communication from journalism's existing "one-to-many" model to using social media in a "many-to-many" distribution paradigm. Suggested next steps for the LC were identified and documented in the meeting notes, but still await action.¹⁰

In April of 2011, RJI and University of Missouri (MU) Libraries hosted "The Newspaper Archive Summit" sponsored by The Mizzou Advantage and LC. The admission-free event's goal was to broaden and diversify the network of people and organizations interested in addressing the problems of orphaned, lost and born-digital newspaper archives. The summit attracted 125 participants representing six sectors: 1) stewardship organizations; 2) print and online news organizations; 3) academic scholars; 4) genealogists; 5) experts in news copyright; and 6) commercial vendors and aggregators. In the summit white paper, Vicky McCargar observed "The biggest challenge will continue to be to keep participants engaged, at least peripherally, between now and when the group reconvenes." 11

In 2013, RJI and MU Libraries launched the JDNA program, an on-going agenda specifically focused on preserving born-digital journalism. In order to strengthen and build on the network from the 2011 Summit, JDNA and Educopia coordinated two intentionally-related events under the "Dodging the Memory Hole" title, a reference to the mechanism for erasing news in Orwell's "Nineteen Eighty-Four." The distinguishing goal of these events was to advance a national strategy and identify next steps for saving born-digital news. No registration fee was charged for either event and all proceedings were open.

The inaugural event "Dodging the Memory Hole: Saving Born-digital News Content" forum was held in November 2014. More than 75 representatives from diverse stakeholder communities gathered at RJI for engaging keynote presentations, high-profile news preservation case studies, guided conversations with news industry executives and structured breakout sessions. Three strategic areas were identified and prioritized and volunteer "Action Teams" were formed to explore six-month initiatives as follows:

⁸ Pew Research Center:

http://www.stateofthemedia.org/2013/digital-as-mobile-grows-rapidly-the-pressures-on-news-intensify/digital-by-the-numbers/

⁹ The Library of Congress: http://www.digitalpreservation.gov/news/2009/20091001news article digitalnews meeting.html

¹⁰ NDIIPP: http://www.digitalpreservation.gov/meetings/documents/othermeetings/CitizenJournalismNotes_final.pdf

¹¹ Victoria McCargar, "A Mandate to Preserve": http://hdl.handle.net/10355/12219

¹² Edward McCain, https://www.rjionline.org/stories/mccainspeakwrite-or-how-i-came-up-with-the-name-dodging-the-memory-hole

Awareness

- 1) Environmental scan
- 2) Advocacy messaging
- 3) Public-private partnerships

Standards and Practices

- 4) Preserving print-ready (born-digital) PDFs
- 5) Preserving web-based content
- 6) News metadata / Content Management Systems

Legal Framework

7) Succession Agreements

A DtMH Leadership Team Google Group was formed to lightly support the teams and to provide a means of rapid information exchange. The object for each of the "Action Teams" was to accomplish concrete deliverables and report out and invite input on those during "Take Action!" Sessions at a follow-up DtMH event in Charlotte, North Carolina. Surveys of participants perception of knowledge about born-digital news preservation at the beginning and end of the forum show a significant shift towards greater confidence in knowledge about born-digital news preservation. 4

Designed for a smaller audience than the Missouri event with just over 60 journalists, technologists, librarians, press association directors, professors, publishers, archivists, researchers and government representatives, "Dodging the Memory Hole II: An Action Assembly," was sponsored by the NEH and RJI and held at the Charlotte Mecklenburg Public Library in May 2015. The event was structured around three goals: 1) to incorporate new voices into the growing DtMH community, 2) to highlight advances in the work of the "Action Teams," and 3) to inspire additional "Action Teams" and community-based volunteer efforts. Participants drafted functional requirements, edited survey instruments, outlined a set of guidelines for donation/succession agreements, and developed a schema for interoperability between content management systems. The event also celebrated newly funded work, including a collaborative effort to build a Momento plugin for WordPress. 15

Next steps were identified to advance understanding and practice within the scope of each Action Team. 16

The opportunity to leverage existing NDNP resources to preserve contemporary news content was the topic of the RJI-sponsored "Dodging the Memory Hole: Beyond NDNP" facilitated by NDNP participants from the University of California at Riverside and University of North Texas. The meeting was held at the U.S. Capitol Building, Washington, D.C. in September 2015 through the assistance of U.S. Senator Roy Blunt from Missouri. The 30 attendees included current NDNP award recipients from 15 states, government agencies, library and news associations and the private sector. The keynote address called on attendees and other NDNP participants to collect and preserve contemporary born-digital pre-print PDFs and to envision ways to save online news content.¹⁷ Participants built consensus for: 1) joining a stakeholder consortium; 2) scoping "born-digital" news; 3) developing a roadmap to preservation; 4) creating a roadmap to access. Many attendees joined the DtMH Google Group and will be encouraged to continue this work at DtMH 2016.

Efforts to preserve born-digital news content since 2009 have rightly revolved around building and strengthening a diverse community invested in ensuring access to today's journalism for future generations. In order to advance a national agenda for saving born-digital news, any number of cross-sector and interdependent issues will need to be resolved. We believe that the DtMH outreach initiatives have thus far played a useful role

¹³ McCain, "Plans to save born-digital news content examined": https://missouri.box.com/s/ezklap7ydwiv0hl49sqq6x53nt97qqb9, or see supporting documents, McCain NRJ Vol 36-3 2015.pdf

¹⁴ See Supporting Documents: Products or evaluations from previously completed or ongoing projects of a similar nature

¹⁵ Github, Mememto for Wordpress: http://wordpress-memento-plugin.readthedocs.org/en/latest/

¹⁶ Educopia Institute, Dodging the Memory Hole II: An Action Assembly https://educopia.org/events/dmh

¹⁷ Edward McCain: https://www.rjionline.org/stories/models-for-preserving-news-archives-that-long-served-the-industry-leave-dig

in building a robust network of motivated stakeholders and providing structure to identify strategic goals in pursuit of the larger agenda. Of the plethora of problems we now face, one area stands out as having reached crisis proportions is that of preserving online news content. Digital journalism is on a trajectory of exponential growth. Unless we meet the challenge to collect, preserve and access these ephemeral news resources, we face the certainty that much of our nation's history and heritage and a vital pillar of democratic society will be lost.

2. Impact

We plan to measure four impacts from DtMH 2016: 1) An advance in the interest, understanding and application of preserving born-digital news content, 2) An increase in the overall number of participants at a DtMH event 3) An increase in the number of technologists and journalists in attending a DtMH event 4) the diversity of individuals and institutions attending a DtMH event.

The challenges to preserving born-digital online news content are manifold: rapid changes to complex technological systems for creation and distribution; outdated copyright laws; the immense volume of content generated in a 24/7/365 news cycle. Interwoven with those obstacles is a more fundamental stumbling block: the seeming disconnect between the long-term goals of memory institutions and the short-term financial goals of journalistic enterprises. Given these factors, it is no wonder that archives of online journalism are rare and incomplete. Overcoming these obstacles to 21st Century news preservation requires highly-trained professionals who have the requisite background, domain knowledge, cultural competence and cutting-edge skill set with which to address them. The desiderata involved in preparing for a role in online news preservation go beyond most typical web archiving, collection management and rights management scenarios. The DtMH Web-based preservation Action Team will lead the exploration and assessment of best practices in this rapidly evolving environment. Both students and experienced digital preservationists will gain insight into state of the art archiving of online news media – and the people and institutions involved – as a result of this event and related outreach efforts. We will conduct a post conference assessment to evaluate whether participants perceive an increase their level of awareness and knowledge about this issue and how well participants expect to employ their newfound knowledge.

The interconnected nature of the components and systems required to ensure the longevity of born-digital online news content requires reaching outside the world of libraries, archives and museums. Without a broad coalition of the willing to build the foundational understandings and basic trust, little progress can be made. The DtMH events are essential elements in advancing solutions because they bring such a wide variety of key stakeholders together and engender positive dialog. Essential to connecting the sometimes-disparate communities necessary for progress in this area is building awareness of the high-stakes and urgency involved. Repetition of key messages is one of the best ways to improve awareness and build engagement. Holding DtMH 2016 will reinforce existing mindfulness of the need to save born-digital news and leverage the previous successful investments of time, money and human capital. With this in mind, the diversity of presenters, students and other attendees is an essential measure of success.

We will conduct a voluntary survey to assess the diversity of forum participants, summarize the results and include them with forum participant learning findings in a Final Performance Report by the end of 2016.

3. Project Design / Criteria

Goals and objectives: DtMH 2016 participants will: 1) produce and publish an outline for a proposed national agenda for preserving born-digital news online; 2) identify concrete roles for each stakeholder required to accomplish this agenda; 3) facilitate cooperation and knowledge sharing between news technologists and digital preservation experts; 4) examine how technology platforms such as content management systems (CMSs) can be adapted to work with existing digital preservation infrastructure; 5) better prepare students, especially those

in library science, archival and museum studies and information sciences for the digital preservation needs of 21st Century journalism; and 6) identify specific projects that will advance online preservation practice today.

Conference Format: The anticipated schedule of the two-day conference will feature a keynote panel discussion involving archivists, academic researchers, and journalists. Attendees will be asked to register, but no admission fee will be required. Notable attendees who have committed to speak, participate in panels and/or present case studies of their work include professionals from online news outlets such as Scott Klein from ProPublica and journalist/technologist Ben Welsh from the Los Angeles Times. Other stakeholders who have expressed interest include: Clifford Lynch (Coalition for Networked Information); Roger Macdonald and Jefferson Bailey (Internet Archive); Marc Wilson (TownNews.com); Prof. Tim Groeling and Prof. Francis Steen (UCLA Communication Studies); Herbert Van de Sompel (Los Alamos National Laboratory), Michael L. Nelson (Old Dominion University), and Daniel Chudnov (George Washington University). Invited attendees include representatives from the California Digital Library, Yahoo! News, Google News, local newspapers, researchers from the UCLA NewsScape and SoLoGlo projects to preserve web-based, TV and social news, and independent/public television and radio news producers from Los Angeles and the Bay Area.

The event will open with a vision-oriented panel, which will be complemented by the presence of a second "implementation" panel composed of developers and analysts involved in managing the technological details of preserving and making accessible the content under discussion.

Other case study presentations as well as shorter lightning-style updates about ongoing projects (including those initiated at previous meetings) will then alternate with breakout "action" sessions in which attendees who are interested in particular topics will meet in smaller groups to develop and refine agendas for advancing specific pressing issues in online news preservation. Special attention will be given to allow news producers from small or minority communities a venue to speak to the issues and needs at play in preserving their online cultural heritage.

Student involvement: A minimum of ten scholarships will be available to graduate students enrolled in library/information science, journalism or computer science programs in the United States. Selection of scholarships will be decided by the PIs and will be based on availability of funding and the student's two-page letter of interest, including justification of the funds they request. Notice of scholarship opportunities will require scholarship applicants to include a proposal for a project that will provide a deliverable that supports one or more goals of the forum. These rather short-term projects must be well defined with one of the PIs designated as a primary sponsor. The scholarship recipient and primary sponsor will be responsible for clear and timely communication with each other in order to complete the stated goals of the project satisfactorily and on time. Examples of potential scholarship projects include, but are not limited to: 1) visualizations of tweets and/or other (social) media mentions before, during, and after the DtMH 2016 forum 2) providing an overview of the archival coverage of select news publishers 3) a quick test of "archival readiness" of news publishers websites (e.g. 13% of web resources from latimes.com can not be archived due to access restrictions or technical difficulties) 4) authoring or editing a portion of the event white paper 5) other scholarly output from the forum. Members of minority groups and underserved communities will be encouraged to apply.

4. Diversity Plan

The confluence of lessons learned at previous DtMH forums and the location of the next proposed forum at UCLA in Los Angeles offers an unprecedented opportunity to expand our digital news preservation efforts to underserved groups and underrepresented communities. Specifically, we plan to invite representatives of local and regional news outlets from among the numerous discrete but also globally connected ethnically focused groups within the Los Angeles region, sharing with them the insights and best practices that have emerged at previous DtMH meetings while soliciting these representatives' own experiences and desires regarding effective

digital news preservation, in the hopes of fostering future collaboration. Such organizations include print and online newspapers, radio stations, and television broadcasters oriented towards audiences of Latin American, Middle Eastern, Near Eastern, and East, South, and Southeast Asian descent – who together account for the majority of residents of the city and county of Los Angeles. Additionally, we will offer travel funding to interested members of similar organizations from outside the Los Angeles area to attend as participants and potential speakers, and will provide travel scholarships to at least 10 graduate and motivated undergraduate students in related disciplines from Los Angeles and elsewhere. The inclusion of these participants will ensure that the overall profile of the conference attendees incorporates a diverse range of viewpoints and origins, and will help encourage the participation of historically underrepresented groups in the still-nascent field of news preservation, as well as in journalism.

Preservation of news from diverse viewpoints is a central tenet of the Dodging the Memory Hole initiative. Recording only a single viewpoint – derived from a majority perspective or not – represents a "memory hole" in its own right. The preservation of multiple perspectives, by contrast, enables scholars and other interested members of the public to develop a much more nuanced understanding of past events and their relationships to present realities. Therefore, although large-scale, mainstream media corporations are by no means immune to the loss of news archives, the meetings and online conversations of the Dodging the Memory Hole participants have focused primarily on the extreme risks facing smaller news sources that have few if any resources to devote to systematic archiving. Such outlets are highly exposed to the whims of the fast-changing media environment, and may struggle to effect even emergency archiving strategies when forced to close or relocate suddenly due to shifts in the marketplace. Past DtMH meetings have highlighted the cases of the Rocky Mountain News, the oldest newspaper in Denver, Colorado, which closed abruptly in 2009 and avoided the loss of its entire archival holdings only due to a last-minute arrangement between its owner, E.W. Scripps and the Denver Public Library; and the Dallas-based KXAS, the first television station in Texas, whose extensive video archives are just now being digitized through a partnership with the University of North Texas. As these situations demonstrate, partnerships and coordination between news providers and regional journalistic associations, universities, libraries, and other archival institutions often prove pivotal to effecting viable news preservation.

Targeted groups and potential benefits

UCLA and neighboring institutions have established preservation partnerships with a few of the local and regional news producers in and around Los Angeles, but as is true in most areas of the country, the majority of news sources have no institutional partners or even any coherent strategy for preservation. A conference at UCLA therefore would offer many opportunities for discovering shared priorities between attendees, as well as simply increasing awareness of the importance of news preservation among a large audience of producers and users of valuable but at-risk news. Potential invited conference participants from the greater Los Angeles area include Spanish- and English-language neighborhood newspapers, some of which already are collaborating with Occidental College to develop the Northeast LA Community Newspapers collection, ¹⁸ as well as Los Angeles-based foreign-language city newspapers, such as the *Korea Times* and *La Opinión*, whose archival online news content is of great interest to researchers and librarians at UCLA and elsewhere, but is not presently accessible. Representatives of regional television stations, including the affiliates of the large Spanish-language networks (Azteca, Telemundo, Univision) as well as others such as KSCI, ¹⁹ which air multiple free over-the-air local and international news channels in Korean, Japanese, Armenian, Mandarin, and Vietnamese – often with accompanying, community-oriented web sites – also would make extremely valuable contributions as participants in the proposed conference.

¹⁸ Occidental College Library, Community Newspapers:

 $[\]underline{http://www.oxy.edu/library/special-collections-college-archives/northeast-la-regional-history/community-newspapers}$

¹⁹ KSCI-TV, Los Angeles, California: www.LA18.tv

5. Project Resources: Personnel, Time, Budget

For this 2-day forum and associated activities, the total budget for IMLS will be approximately \$96,716 (\$70,166 direct costs plus \$16,550 F&A plus \$10,000 RJI cost share).

These funds will cover travel expenses, and lodging for 12 invited speakers and scholarship stipends for a minimum of 10 graduate students. A student assistant will assist RJI staff in coordinating conference planning and logistics. Further expenses include hotel-to-conference site transportation and catering for an expected 100 attendees.

Experience from previous events at RJI and Educopia has demonstrated that significant resources need to be devoted to marketing and outreach. Valuable constituencies such as representatives of smaller news organizations from minority, underrepresented and geographically isolated communities are hard to reach. Likewise, publishers, influential journalists, technology thought-leaders, news industry executives and other potential champions for the cause represent a challenging but worthwhile segment to approach. Even within the world of memory institutions, much work needs to be done to recruit people and institutions to the born-digital news preservation cause.

Even though not required for this proposal, RJI will cost share a total of \$10,000 and MU Libraries/RJI, UCLA and Educopia will devote staff time to promote and manage the event. RJI/MU Libraries will be the lead institution on this joint project with UCLA and the Educopia Institute as supporting institutions.

Edward McCain (PI), founded the Journalism Digital News Archive (JDNA) agenda and its related "Dodging the Memory Hole" outreach initiative. JDNA's purpose is to preserve and ensure access to born-digital journalism. Using Theory of Change modeling, JDNA proposes to address the complexities of preserving born-digital news by recognizing and engaging the stakeholders and the systems they employ in order to define a pathway toward long-term, sustainable change. McCain's research has been supported by the Mizzou Advantage and the John S. and James L. Knight Foundation.

Sharon E. Farb (co-PI), has been UCLA's Associate University Librarian for Collection Management and Scholarly Communication since 2007. She specializes in legal and policy issues that impact libraries, archives, and museums in the areas of intellectual property, copyright, licensing, privacy, intellectual freedom, stewardship, and data curation, with an overall focus on providing the broadest possible access to scholarly information and recorded knowledge. Sharon is active in statewide, national and international planning, policy, and consortial activities that address these topics.

Todd Grappone (co-PI), has been UCLA's Associate University Librarian for Digital Initiatives and Information Technology since 2010. He previously served in similar roles at Occidental College, USC Libraries, and the Stanford University School of Medicine. He has leadership, management, and policy and planning responsibilities for all digital initiatives and information technology services and operations at the UCLA Library and direct supervisory responsibility for enterprise-wide departments dedicated to digital initiatives and information technology, including the Digital Library Program, Library Computing Services, and Library Information Technology.

Martin Klein (co-PI), has a distinguished career in web preservation and digital libraries. His research is focused on the temporal aspect of the web, discovery and access of (archived) web resources, and scholarly

communication. He has co-authored numerous articles in the web science and digital libraries domain and is the lead editor of the ResourceSync Specification (ANSI/NISO Z39.99). His research has been supported by the Library of Congress, NASA, Sloan Foundation, and the Andrew Mellon Foundation.

Peter Broadwell (co-PI), is the Academic Projects Developer at the UCLA Digital Library. He is an active researcher in digital archives and digital humanities and has taken a leading role in several forward-looking projects involving the application of advanced information technologies to library collection development, scholarly collaboration and communication, and multimedia analysis. Recently, he has coordinated with researchers and library technologists in several countries to support and develop the UCLA NewsScape, a massive, searchable online archive of international television news.

Katherine Skinner (co-PI), is the Executive Director of the Educopia Institute, a not-for-profit educational organization that builds networks and collaborative communities to help cultural, scientific, and scholarly institutions achieve greater impact. She is the founding program director for the MetaArchive Cooperative, a community-owned and community-governed digital preservation network founded in 2004 that now has more than 50 member institutions in four countries. She has served as the PI on multiple projects on digital news preservation issues, including "Chronicles in Preservation" (NEH 2011-13) and "Chronicles II" (NEH, 2014-15). She has hosted, facilitated, and supported many community-based initiatives and events on digital preservation, including the Aligning National Approaches to Digital Preservation (ANADP) events and the MetaArchive Cooperative and BitCurator Consortium communities.

6. Communications Plan

The key message to tell about the Dodging the Memory Hole 2016: Saving Online News forum is that born-digital journalism on the Internet is disappearing at an alarming rate and the DtMH community invites those interested in preserving online news to join forces at this event to help solve this crisis.

Target Audiences

Our experience from the first two DtMH events is that librarians, archivists, scholars and other public-sector stakeholders are more readily reached, more motivated and often have better access to travel funds than those in the private sector. Clearly, we do not want to take those working at memory institutions for granted; they are and continue to be primary champions for this cause. There are congruent segments of public sector that are interested in working in this area and we value and continue to cultivate those connections. This is especially true in the case of journalists at smaller news enterprises, including those serving minority and underserved communities, which are facing severe financial hardships and have little or no access to digital preservation resources. In the case of technologists, there are some specialized groups that seem to have a natural affinity for working in this area. For example, many of the programmers who write the code for interactive objects at news organizations are highly motivated to find ways to keep their creations "alive" and accessible for as long as possible.

Method

Outreach will involve efforts before, during and after the DtMH 2016 forum itself. Once funding is confirmed, messaging will be directed at attracting attendees from stakeholder groups and inviting graduate students to apply for scholarships to attend the forum. Under the direction of the PI, a design team will refine a graphic identity that can be used for print and online communications. The Reynolds Journalism Institute communications team will build event signup and overview pages on the RJI website, email previous attendees, generate announcements in the JDNA News and other RJI newsletters and list serves, write press releases and share information on Facebook, Twitter (#DtMH2016) and LinkedIn. A significant amount of effort will be expended trying to reach interested journalists and technologists through targeted messaging. Particular emphasis will be given to reaching minority and underserved communities through collaboration with the

American Society of News Editors and direct outreach from RJI, UCLA and Educopia to their contacts in local, campus, regional, state and national print, broadcast and online-only enterprises. Strategic communications will be focused on national, state and diversity-oriented journalism associations such as the National Association of Black Journalists and National Association of Hispanic Journalists. UCLA will give extra attention to reaching news outlets, especially for minority and underserved communities, in Los Angeles and southern California. Additional messaging will be directed at trade media (Editor & Publisher, Poynter Institute, Nieman Lab, Columbia Journalism Review), educational organizations (Association for Education in Journalism and Mass Communication, Journalism Education Association) and newsletters read by journalists (LION Publishers, MediaShift, American Press Institute)

Outreach to potential candidates for student scholarships will involve sharing the call for applications using email and social media communications targeted at communities in library science, archives, museum studies, journalism and humanities programs in the United States. Information about the scholarship program will be included in other forms of outreach messaging distributed before the deadline for submitting applications. In addition to disseminating information about the scholarships through major organizations (i.e. American Library Association, Association of College and Research Libraries, Society of American Archivists, Special Libraries Association), the academic sector (Association for Library and Information Science Education, Coalition to Advance Learning in Libraries, Archives and Museums, 11 iSchools 22) will receive targeted announcements.

Streaming events offer another layer of engagement for building awareness of the need for born-digital news preservation and sharing what has been accomplished to provide context for the work ahead.

Educopia staff will assist with the technical production and delivery of two 30-60 minute webinars. PIs will amplify marketing messages to academic institutions, many of which are likely to be receptive to the DtMH message. Prior to the event, stakeholders and potential attendees will have the opportunity to learn more about the upcoming DtMH 2016 forum through attending one of two browser-based webinars. These first two presentations will provide background information about digital preservation and the challenges facing born-digital news, especially content published online. Learning from the previous two Dodging the Memory Hole events will be shared so that participants, novice and experienced, can be up-to-date and feel prepared for the next level of community conversation at UCLA. By increasing the level of knowledge around born-digital news preservation and DtMH, the comfort level of webinar attendees will be enhanced, increasing the probability that they will attend the forum in person. The second webinar, to be held after the forum, will share context in compressed form so that more of the hour can be devoted to reporting and analyzing the short-term outcomes from DtMH 2016. All webinar programs will be recorded and made available for on-demand streaming from the Educopia and RJI websites.

In addition to streaming of live and recorded webinars, speakers and panel presentations from DtMH 2016 will be captured on video and made available on the JDNA website to document and provide access to forum proceedings. Video will allow those with a preference for visual and/or auditory learning styles improved understanding of transactions from the event.

²⁰ http://www.alise.org/

²¹ http://www.coalitiontoadvancelearning.org/

²² http://ischools.org/

Dodging the Memory	Hole 2016 N	Vational For	um Grant /	The Curato	rs of the Un	iversity of l	Missouri	
	Schedul	le of Compl	etion - Cal	endar Year 2	2016			
	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016
Hotels confirmed								
Venues confirmed								
Student hired								
Speakers/panels confirmed								
Registration open								
Student scholarship announcement and selection								
Student Scholarship projects								
Secure caterers								
Book event shuttle								
Book speaker travel								
Order conference promo giveaways								
Marketing & design								
Email and social marketing								
Promotional insert ready for ASNE (or other key event)								
Prep speakers for UCLA presentation (AV requirements, etc.)								
Design event signage and program								
Purchase event supply (lanyards, name badges, binders etc)								
Webinar planning and production								
Webinar events								
Finalize catering orders								
Print event signage and program								
DtMH 2016 Event						Oct 13-14		

Confirm vendor payments				
Process travel reimbursements				
Compile survey results				
Final report				

	Dodging the Memory Hole 2016 National Forum Grant / The Curators of the University of Missouri									
	Schedule of Completion - Calendar Year 2017 (conference dates based on 2016 events)									
	Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017 Jul 2017 Aug 2017 Sep 2017 Oct 2017 Nov 2017 Dec 2017						Dec 2017			
DLF Forum										
SAA 2017										
Online News Assoc.										
ALA 2017										
Grant concludes										

DIGITAL STEWARDSHIP SUPPLEMENTARY INFORMATION FORM

Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded research, data, software, and other digital products. The assets you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products is not always straightforward. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and best practices that could become quickly outdated. Instead, we ask that you answer a series of questions that address specific aspects of creating and managing digital assets. Your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions

If you propose to create any type of digital product as part of your project, complete this form. We define digital products very broadly. If you are developing anything through the use of information technology (e.g., digital collections, web resources, metadata, software, or data), you should complete this form.

Please indicate which of the following digital products you will create or collect during your project (Check all that apply):

Every proposal creating a digital product should complete	Part I
If your project will create or collect	Then you should complete
Digital content	Part II
Software (systems, tools, apps, etc.)	Part III
Dataset	Part IV

PART I.

A. Intellectual Property Rights and Permissions

We expect applicants to make federally funded work products widely available and usable through strategies such as publishing in open-access journals, depositing works in institutional or discipline-based repositories, and using non-restrictive licenses such as a Creative Commons license.

A.1 What will be the intellectual property status of the content, software, or datasets you intend to create? Who will hold the copyright? Will you assign a Creative Commons license (http://us.creativecommons.org) to the content? If so, which license will it be? If it is software, what open source license will you use (e.g., BSD, GNU, MIT)? Explain and justify your licensing selections.

A.2 What ownership rights will your organization assert over the new digital content, software, or datasets and what conditions will you impose on access and use? Explain any terms of access and conditions of use, why they are justifiable, and how you will notify potential users about relevant terms or conditions.
A.3 Will you create any content or products which may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities? If so, please describe the issues and how you plan to address them.
Part II: Projects Creating or Collecting Digital Content
A.1 Describe the digital content you will create and/or collect, the quantities of each type, and format you will use.
A.2 List the equipment, software, and supplies that you will use to create the content or the name of the service provider who will perform the work.
A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to create, along with the relevant information on the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

B. Digital Workflow and Asset Maintenance/Preservation
B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).
B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance (e.g., storage systems, shared repositories, technical documentation, migration planning, commitment of organizational funding for these purposes). Please note: You may charge the Federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the Federal award. (See 2 CFR 200.461).
C. Metadata
C.1 Describe how you will produce metadata (e.g., technical, descriptive, administrative, or preservation). Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, or PREMIS) and metadata content (e.g., thesauri).
C.2 Explain your strategy for preserving and maintaining metadata created and/or collected during and after the award period of performance.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of digital content created during your project (e.g., an API (Application Programming Interface), contributions to the Digital Public Library of America (DPLA) or other digital platform, or other support to allow batch queries and retrieval of metadata).
D. Access and Use_
D.1 Describe how you will make the digital content available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).
D.2 Provide the name and URL(s) (Uniform Resource Locator) for any examples of previous digital collections or content your organization has created.
Part III. Projects Creating Software (systems, tools, apps, etc.)
A. General Information
A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) this software will serve.

A.2 List other existing software that wholly or partially perform the same functions, and explain how the tool or system you will create is different.
B. Technical Information B.1 List the programming languages, platforms, software, or other applications you will use to create your software (systems, tools, apps, etc.) and explain why you chose them.
B.2 Describe how the intended software will extend or interoperate with other existing software.
B.3 Describe any underlying additional software or system dependencies necessary to run the new software you will create.
B.4 Describe the processes you will use for development documentation and for maintaining and updating technical documentation for users of the software.
B.5 Provide the name and URL(s) for examples of any previous software tools or systems your organization has created.

<u>C. A</u>	ccess and Use
source software licen	We expect applicants seeking federal funds for software to develop and release these products under an opence license to maximize access and promote reuse. What ownership rights will your organization assert over the vare created, and what conditions will you impose on the access and use of this product? Identify and explain the se under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software ses). Explain any prohibitive terms or conditions of use or access, explain why these terms or conditions are liable, and explain how you will notify potential users of the software or system.
C.2 [Describe how you will make the software and source code available to the public and/or its intended users.
C.3	dentify where you will be publicly depositing source code for the software developed:
	Name of publicly accessible source code repository: URL:
Part	IV. Projects Creating a Dataset
1.	Summarize the intended purpose of this data, the type of data to be collected or generated, the method for collection or generation, the approximate dates or frequency when the data will be generated or collected, and the intended use of the data collected.
	Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

3.	Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).
4.	If you will collect additional documentation such as consent agreements along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.
5.	What will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).
6.	What documentation (e.g., data documentation, codebooks, etc.) will you capture or create along with the dataset(s)? Where will the documentation be stored, and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?
7.	What is the plan for archiving, managing, and disseminating data after the completion of the award-funded project?
8.	Identify where you will be publicly depositing dataset(s):
	Name of repository: URL:
9.	When and how frequently will you review this data management plan? How will the implementation be monitored?

Original Preliminary Proposal

Laura Bush 21st Century Librarian Program; National Forum Grants: "Dodging the Memory Hole 2016: Saving

Online News"

Dates: Fall 2016

Location: UCLA Research Library

URI: www.rjionline.org/events/dtmh2016

Hashtag: #dtmh2016

Theme: Online news preservation; why, who, how?

University of Missouri Libraries in collaboration with the Donald W. Reynolds Journalism Institute, UCLA Library and the Educopia Institute requests \$65,000 to host a national forum consisting of cross-sector stakeholders to advance the knowledge and practice of preserving online born-digital news content.

Executive Summary: Providing access to news archives continues to be a popular and vital function of libraries. Recent efforts to provide online access to news resources have largely focused on print or other analog content that has been digitized. At the same time, newspapers, broadcasters and online-only news organizations are converging on digital platforms to publish their born-digital articles, video, graphics and data. Libraries and other memory institutions must coordinate their efforts now to address the ever-growing need to collect, preserve and provide access to online news. Online news preservation efforts face a unique set of social, legal and technological obstacles, which requires gathering knowledgeable stakeholders to advance and sustain these efforts.

Problem Statement: Yahoo, Huffington Post and Buzzfeed: today's top 10 news websites include notable Internet brand names such as these in addition to more familiar legacy broadcast networks and newspapers. The number of U.S. adults who access their newspaper solely online increased by 129 percent between 2010 and 2014. Today, a growing number of newspapers, radio stations and television broadcasters are converging on an assortment of online channels to deliver their content: desktop, mobile, tablets, podcasts and and an array of social media platforms. Born-digital journalism is more prolific and accessible than ever before, but a growing body of evidence shows that it is also less likely to survive for more than a few years. Existing web-archiving activities are not capturing much of this content due to copyright restrictions, paywalls and the immense volume of journalistic content generated during today's 24/7 news cycle.

Overcoming these obstacles to preserving born-digital news content requires highly-trained professionals who have the background knowledge and cutting edge skill set with which to address them. The special requirements involved in online news preservation go beyond typical web archiving scenarios and much work remains to be done to develop best practices in this compelling new platform at the intersection of journalistic content. This conference will advance awareness

Proposal: In response to this crisis, we propose to convene the third annual "Dodging the Memory Hole" (DtMH) conference on preserving born-digital news content at the University of California, Los Angeles (UCLA) in the fall of 2016. Inspired by the opportunities available through access to rich historical news media collections as well as the growing need to avert the catastrophic loss of such materials due to the ongoing transformation of the news landscape, this series gathers library archivists, researchers, news journalists, and media preservation professionals to discuss challenges and formulate plans of action for preserving and providing access to at-risk online news content.

The first DtMH forum was organized by the Reynolds Journalism Institute (RJI), University of Missouri Libraries and the Educopia Institute (Educopia), hosted by RJI at the University of Missouri (MU) in November 2014. The second DtMH event was hosted by the Charlotte Mecklenburg Public Library in Charlotte, North Carolina in May 2015, again organized by Educopia and RJI. Both meetings featured keynote presentations on high-profile news preservation case studies by journalists and archivists, as well as breakout planning sessions and status reports on ongoing news preservation efforts at public libraries, educational institutions, news enterprises and private foundations. The first event, attended by approximately 80 people, maintained and grew the existing BDNP network from MU's 2011 News Archive Summit

¹ Pew Research Center's State of the News Media 2015 report: http://www.journalism.org/2015/04/29/digital-news-audience-fact-sheet/

² Today's Newspaper Audience - Print & Online: Intersect Media Solutions: http://intersectmediasolutions.com/sites/default/files/docs/WhoReadsNewspapers.pdf

event, assessed and built consensus around priorities for action and established a Google Group to support seven DTMH Leadership Teams identified at the Missouri event. The second event was deliberately smaller with about 60 attendees – about two-thirds from the previous event – participating in nine action sessions, with each leadership team measuring its progress over the previous six months. The North Carolina event also generated teams in two new leadership areas. For the 2016 event on the west coast, we expect around 100 participants, a slightly higher number to previous meetings in the series, with roughly the same concentrations of archivists, journalists, technologists, and researchers. Among key questions to be addressed at DtMH 2016 will be: 1) how to better facilitate cooperation and knowledge sharing between news technologists and digital preservation experts in memory institutions; 2) how technology platforms such as content management systems (CMSs) can be adapted to work with existing digital preservation infrastructure. 3) how to better prepare students and entry-level librarians and archivists for the digital preservation needs of journalism in the 21st Century. 4) which specific projects can we identify that will serve to advance online preservation practice today? **Conference Format:** The anticipated schedule of the two-day conference will feature a keynote panel discussion involving archivists, academic researchers, and journalists. Attendees will be asked to register, but no admission fee will be required. Notable attendees who have committed to speak, participate in panels and/or present case studies of their work include professionals from online news outlets such as Scott Klein from ProPublica and web archivist Jefferson Bailey from the Internet Archive. Other possible participants include: Dan Cohen (DPLA), Gary Price (InfoDocket), Helen Hockx-Yu (Internet Archive), and Tim Groeling (UCLA Communication Studies), Ben Welsh (LA Times), Francis Steen (UCLA Communication Studies), Herbert Van de Sompel (LANL), as well as representatives from the California Digital Library, Yahoo! News and Google News, local newspapers, researchers from the UCLA NewsScape and SoLoGlo projects to preserve web-based, TV and social news, and independent/public television and radio news producers from Los Angeles and the Bay Area. The event will open with a "vision"-oriented panel, which will be complemented by the presence of a second "implementation" panel composed of developers and analysts involved in managing the technological details of preserving and making accessible the content under discussion.

Other case study presentations as well as shorter lightning-style updates about ongoing projects (including those initiated at previous meetings) will then alternate with breakout "action" sessions in which attendees who are interested in particular topics will meet in smaller groups to develop and refine agendas for advancing specific pressing issues in online news preservation. Special attention will be given to allow news producers from small or minority communities a forum to speak to the issues and needs at play in preserving their online cultural heritage.

Student involvement: Ten scholarships will be available to graduate students enrolled in library/information science, journalism or humanities programs in the United States. Selection of scholarships will be based on availability of funding and the student's two-page letter of interest which should include a proposal for what they can bring to the conference and a proposed outcome that may be included in part or whole in the final white paper. Qualified individuals from minorities and other under-served groups will be encouraged to apply. The PIs will distill the forum's contributions and discussions into a white paper for distribution to the general public.

Estimated Budget and Project Directors

For this 2-day forum, the total budget for IMLS will be approximately \$65,000 (\$50,000 direct costs plus \$15,000 F&A). These funds will cover travel expenses, and lodging for 12 invited speakers and 10 selected student scholars. Further expenses include transportation and catering for an expected attendance of 100 people, marketing and outreach and final report. Even though not required for this proposal, RJI will cost share a total of \$10,000 and MU/RJI, UCLA and Educopia will devote staff time to plan and manage the conference. MU/RJI will be the lead institution on this joint project with a total of six directors: Edward McCain (Digital Curator of Journalism, MU Libraries/RJI) will be the PI, Todd Grappone and Sharon Farb (UCLA Associate University Librarians), Martin Klein and Peter Broadwell (UCLA scientists), as well as Katherine Skinner (Executive Director, Educopia) will be Co-PIs.